AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete) — Amendment Number: _____ — DOCUMENT CODE: 3

2. COUNTRY/ENTITY: CAMEROON

3. PROJECT NUMBER: 631-0033

4. BUREAU/OFFICE: AFRICA [06]

5. PROJECT TITLE (maximum 40 characters): SUPPORT TO PRIMARY EDUCATION

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 06 DD 30 YY 90

7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4): A. Initial FY 84 B. Quarter 2 C. Final FY 88

8. COSTS ($000 OR EQUIVALENT $1 = 300)

A. FUNDING SOURCE	FIRST FY 84 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	1780	1467	3247	10016	19961	29977
(Grant)	(1780)	(67)	(1847)	(8958)	(4754)	(13712)
(Loan)	(-)	(1400)	(1400)	(1058)	(15207)	(16265)
Other U.S. 1.						
Other U.S. 2.						
Host Country	-	5690	5690	-	73118	73118
Other Donor(s)						-
TOTALS	1780	7157	8937	10016	93079	103095

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1) EH	600	630	630	-	-	13712	16265	13712	16265
(2)									
(3)									
(4)									
TOTALS				-	-	13712	16265	13712	16265

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 660

11. SECONDARY PURPOSE CODE:

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	NA						
B. Amount							

13. PROJECT PURPOSE (maximum 480 characters)

To improve the quantity and quality of primary school teachers in the North and Northwest Provinces, and increase the skills of the personnel responsible for supporting primary school teachers, e.g., primary school directors, inspectors, TTC staff and faculty.

14. SCHEDULED EVALUATIONS: Interim MM 09 YY 85 / MM 06 YY 87 — Final MM 09 YY 89

15. SOURCE/ORIGIN OF GOODS AND SERVICES: [X] 000 [X] 941 [X] Local [X] Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY — Signature: [signature] — Title: Acting Director USAID/Yaounde — Date Signed: MM 03 DD 30 YY 83

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

"SUPPORT TO PRIMARY EDUCATION"

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iii. ABBREVIATIONS USED*

A&E	Architectural and Engineering
Bac	Baccalaureat (equals GCE A Level) - High School Diploma
BEPC	Brevet d'Etudes du Premier Cycle (equals GCE O Levels) - Junior High School Diploma
CAPI	Certificat d'Aptitude Pedagogique d'Instituteur (equals Grade I teacher) - Highest primary school teacher certification
CAPIA	Certificat d'Aptitude Pedagogique d'Instituteur Adjoint (equals Grade II teacher) - Second level primary school teacher certification
CAPME	Certificat d'Aptitude Pedagogique de Maitre d'Enseignement (equals Grade III teacher) - Third level primary school teacher certification
CEPE	Certificat d'Etudes Primaires et Elementaires (equals FSLC) - Primary School Diploma
CNE	National Center of Education
DGA	Department of General Administration, MINED
DGRST	Delegation Generale a la Recherche Scientifique et Technique (General Delegation for Scientific and Technical Research)
DPNE	Department of Primary and Nursery Education, MINED
ENI	Ecole Normale d'Instituteur (same as TTC Grade I) - trains teachers to Grade I level
ENIA	Ecole Normale d'Instituteur Adjoint (same as TTC Grade II) - trains teachers to Grade II level
ENS	Ecole Normale Superieure - School which trains TTC Directors and faculty, primary school inspectors and directors, and secondary school teachers
FSLC	First School Leaving Certificate (equals CEPE) - Primary School Diploma
GCE O LEVEL	General Certificate of Education, Ordinary Level (equals BEPC) - Junior High School Diploma
GCE A LEVEL	General Certificate of Education Advanced Level (equals Bac) - High School Diploma
GURC	Government of the United Republic of Cameroon
IPAR	Institut de Pedagogie Appliquee a Vocation Rurale

	Institute in charge of developing a practical, ruralized primary school curriculum
IGP or Inspectorate	Inspectorate General of Pedagogy, MINED
MINEP	Ministry of Economic Affairs and Planning
MINED	Ministry of National Education
MINEQUIP	Ministry of Equipment
PIC	Project Implementation Committee
Probatoire	An exam taken before the last year of high school in the francophone system. Only those who pass may continue the last year.
Planning Division	The Division of Planning, Guidance and School Equipment, MINED
Student-Teacher	A student being trained at a Teacher Training College to become a teacher
TA	Technical Assistant
TE	Technical Expert
TTC	Teacher Training College

* a fuller explanation of the education terms can be found in Annex G.1. The Education System in Cameroon.

iv. Participants in Project Design

A. USAID-HIRED DESIGN TEAM MEMBERS

William M. Rideout Jr., Ph.D., Team Leader
Professor, University of Southern California
Primary School Teacher Training Specialist
May 14 - August 6, 1981

Judith Brown, Ph.D.,
Anthropologist/Sociologist
May 5 - June 29, 1981

Andre Girard
Professeur Agrege, Univeristy of Montreal
Educational Administrator
May 23 - July 15, 1981

Douglas Windham, Ph.D.,
Professor, State University of New York, Albany
Educational Economist
May 16 - June 23;
July 16 - July 30, 1981
October - October , 1981

Richard Dewey
M.I.T.
Librarian
May 23 - June 22, 1981

James Miller
Professor, University of Illinois
Architect
July 1 - August 6, 1981
January 16 - January , 1982

Dee F. Baldwin
Librarian, University of Florida
September 1 - 22, 1981

B. Ministry of National Education Project Design Committee Members

1. Mr. Beling-Nkumba,*	Chairman, Director of Primary and Nursery Education, ENS graduate (equivalent of Masters) National Inspector, 30 years experience.
2. Mr. Ntoko Ntube,*	Chief of Service of Pedagogy and Training, ENS graduate (equivalent of Bachelors). Licensed High School Professor. 20 years experience.
3. Mr. Mballa,*	Director of IPAR, Yaounde. ENS graduate (equivalent of Masters). National Inspector. 30 years experience.
4. Dr. Boma,*	Director of IPAR, Buea. Doctorate in rural economics. years experience in education.
5. Dr. Tchegho,*	Chief of Service of Planning. Doctorate of the third cycle (considered to be between a U.S. Masters and Doctorate) in demographic statistics - 10 years experience in education.
6. Mr. Tsala,*	National Inspector for the Inspectorate General of Pedagogy. ENS graduate (equivalent of Masters). 25 years experience.
7. Dr. Ebode,*	Director of Studies, ENS Doctorate of the third cycle in psychology. 7 years experience in education.
8. Mr. Bello	Chief of Service of Construction and Equipment. Graduate of technical trade training school (equivalent of Bachelors). Technical High School Professor. 10 years experience.
9. Mr. Malanjou	Assistant in charge of planning, Service of Construction and Equipment. (Equivalent of Associates degree in engineering). 10 years experience.
10. Mr. Ali Kirna	Provincial Delegate to the North Province National Inspector. ENS graduate (equivalent of Masters). 20 years experience.
11. Mr. Johnson Mensah	Provincial Delegate to the Northwest Province. Bachelors degree in English Literature. Licensed High School Professor. 10 years experience.

* Members of Sub-Committee for in-service training

C. People Interviewd in the North Province

1. Office of the Delegation

Mr. Kirna, Delegate
Mr. Hamadou, Assistant Delegate

2. Normal School for Instructors

Mr. Mamadou Amadou Farikou, Director, ENI, Garoua
Mr. Jaquet, until 1981, and Mr. Marc A. Yonkeu, as of 1982, ENIA, Pitoa
Mr. Eteta'a, Director until 1981, and Mr. A.M. Ngouem, as of 1982, ENIA, Maroua

3. Others

Mr. Kwebo, Inspector of Primary Education, Mokolo

D. People Interviewed in the Northwest Province

1. Bamenda TTC

Mr. Wanzie, Principal
Mr. Awasom, Discipline Master
Mr. Fomgang, Teacher
Mr. Fobasso, Finance and Plant Management

2. Delegation Office

Mr. Francis Mensah, Delegate
Mr. Nyama Nyasa, Assistant Delegate
Mr. Nchamu Kon, Pedagogic Advisor for Primary Education
Mr. T.T. Tumenta, Inspector

3. Others

Mr. Nsai, Secretary of Catholic Education

E. Ministry of National Education, Yaounde

Mr. Mazou, Secretary General
Mr. Ndzino, former Director of Department of Primary and Nursery Education
Mr. Mekougou, Chief of Studies, Planning Division
Mr. Ekambi, former Assistant Director of Primary and Nursery Education
Mr. Mbom, Inspector General of Education
Mr. Etongo, Inspector General of Education
Mr. Etongo, Director of Planning, Guidance and School Equipment
Mr. Farikou, Director of General Administration and Budget

F. Others

Mr. Bebbe Njoh, Director, National Center of Education
Mr. Sappho Ndongo, Director, Superior Normal School, Yaounde
Mr. Nson, Researcher, National Center of Education
Mr. Awuro Matthew, Chief of Service of Civil Service Personnel

G. USAID Participants

Rudolph Thomas, Project Officer, Human Resources Division
Kathy Radimer, Project Officer, Human Resources Division
Stanley Handleman, Chief, Human Resources Division
Kat Le Blanc, Financial Analyst, Controller's Division
Claudio Fortunato, Engineer, Project Development and Evaluation Division
Raymond Rifenburg, ex-Chief, Project Development and Evaluation Division
Randal Thompson, Project Development Officer, Project Development and Evaluation Division
Ray Martin, Chief, Health, Nutrition, Population Division
Cam Wickham, Program Economist, Program Office
Thomas Baranyi, Chief, Supply Management Division
Janet Schulman, Assistant Program Economist, Program Office
Julie Owen, Project Officer, Human Resources Division
Samuel Scott, Chief, Project Development and Evaluation Division

PART I. SUMMARY AND RECOMMENDATIONS

A. Grantee/Borrower and Executing Agencies

The Grantee/Borrower will be the Government of the United Republic of Cameroon (GURC) represented by the Ministry of Economic Affairs and Planning. The Ministry of National Education will be the executing agency.

B. Recommendations

1. That a grant in the amount of $13,712,000 over the five-year period commencing October 1983, be authorized to the Government of Cameroon for implementation of the technical assistance aspect and related commodity procurement, in-country training, participant training, library books and periodical procurement, and maintenance grant components of the Support to Primary Education Project as described in Chapter Two of this project paper. A loan, on standard development loan terms in the amount ot $16,265,000 should be authorized to the GURC to help finance the construction and commodity procurement aspect of the project. The GURC contribution to the project will amount to more than $73,118,000 (approximately 70% of the total cost).

2. That the requirement for procurement of AID-financed goods and services from Geographic Code 941 (U.S. and approved developing countries) be waived to permit procurement from Geographic Code 935 (U.S. and Free World) source to allow the GURC to purchase with AID funds:

a) $415,000 of books, journals, and periodicals purchased with grant funds

b) $105,000 of vehicles for Teacher Training College (TTCs) purchased with loan funds

c) $300,000 of electric appliances and equipment, maintenance kits and in-service training materials for the TTCs and the Department of Primary and Nursery Education with loan funds.

Detailed explanation and justifications for these waivers are contained in Annex I.3, Procurement Plan.

C. The Project

The Support to Primary Education Project proposes to increase the number of children receiving a higher quality of primary school education in the North and Northwest provinces by increasing the number of qualified primary school teachers and improving the performance of personnel who provide support to these teachers.

In order to achieve its objectives, the project will provide the following:

a) Technical expertise to upgrade: 1) pre-service and in-service training for primary teachers, 2) training of TTC faculty and administrators and, 3) training of inspectors.

b) Expansion and equipping of five TTCs to lodge and train students. This will include construction of TTC administrative blocs, infirmaries, dormitories, and workshops.

c) Vehicles for school inspectors and for teacher trainees.

d) Appropriate materials and supplies required to improve the teaching program at the TTCs.

Funding of the project will be of three types. 1) The loan will finance the construction at the five teacher training colleges of faculty rooms, classrooms, science laboratories, domestic science laboratories, workshops, administrative blocs, dormitories, dining rooms, kitchens, laundry facilities, infirmaries and libraries, as required to complete the sites (see Annex G.2). The loan will also finance furniture and equipment for these facilities and vehicles for each TTC and divisional inspector. 2) The GURC will finance the architectural and engineering work for the construction, as well as salaries for MINED personnel related to the project, land required for TTC expansion, training related expenses (participant and instructor travel, and facility costs), and maintenance costs. 3) The grant will assist in financing training for 5,620 primary school teachers, 42 inspectors, 40 TTC administrators, 61 TTC professors and 320 primary school directors. The grant will also provide for 33.8 person years of long-term U.S. training (15 Masters'), 10 person months of short-term training, supplies and materials for libraries and classrooms, building and equipment maintenance support, and technical assistance.

D. Summary Findings

The Mission project committee has reviewed the technical, economic, social, financial, administrative, engineering and environmental analyses for the project (see Part Three and corresponding Annexes). In each case, the project was found feasible and beneficial.

E. Legal Criteria

The project meets all applicable criteria (see Annex B). Planning and costing requirements of Section 611 a) of the 1961 FAA are considered satisfied (see Mission Director's Certification, Annex B). With respect to the host country contribution requirement, GURC inputs to the project are estimated to be 69% of the total cost. (See Summary Cost Estimate and Financial Plan Part I, and detailed versions, Annex H.)

F. Project Issues

There are two sets of issues. The first, raised in the PID, can be reviewed in Annex D. The second evolved during Mission development of the PP. They are:

1. Are the additional number of teachers to be trained as a result of the project needed? Over the past two years, primary school enrollment in Cameroon has increased by 5%. However less than 50% of all primary school teachers have had any professional training and of these, 33% have had only a primary education plus rudimentary professional instruction. Despite this lack of qualified teachers, the Government of Cameroon is aiming for a 4% per annum primary school enrollment increase during the period of the Fifth Five Year Plan (1981-86). This calls for 11,974 new teachers by 1986/87, based on a student/teacher ratio of 50/1. At present, teacher training colleges are graduating approximately 1,100 teachers a year, leaving a shortage over the plan period of 6,500 new teachers. The above justifies the need for the 2,600 teachers this project will train, teachers who will constitute 20% of the 11,974 the Fifth Plan calls for.

2. Will primary school teachers attend a voluntary in-service training program?

Approximately 32% of the primary school teachers in the North, and 13% in the Northwest are unqualified. Government officials periodically remind these teachers they will lose their jobs once qualified teachers become available. This warning and the salary increase awarded to teachers who become qualified encourage teachers to apply for professional teachers exams. Thus, in the Northwest, for example, 562 teachers sat for the various professional teacher exams in 1980. In-service training which enables teachers to pass this exam and become qualified and better paid promises to be well attended.

3. Why should AID assist a country with an education system based partly on French and British models?

The GURC is eager to transform an education system arbitrarily imposed by its colonial past into one which meets the nation's growing needs. In 1978, the GURC sent a delegation of high level MINED officials to the U.S. to see what elements of the U.S. educational system might be adapted to Cameroon. After this trip, the GURC made known its desire for U.S. assistance in education by requesting the Agricultural Education project, which began in 1982. Assistance to primary education was first discussed in 1980 when the PID evolved and joint project development resulted in this PP.

The U.S. system of education emphasizes practical learning through subject matter and teaching methods which stress inquiry and problem solving. This is an approach particularly suited to the new curriculum developed in Cameroon which breaks radically with the lock-step system of earlier European education which, paradoxically, Europe has largely discarded.

4. Why is the Project LOP funding double the amount estimated in the PID?

The three major reasons for the doubling of LOP funding are inflation due to a delayed project implementation, a significant under-evaluation of construction costs in the PID, and a higher number of students than that estimated in the PID.

a) Inflation

The PID assumed a project start-up date of mid FY-1981 for both grant and loan-funded activities. Technical assistance is now expected to begin in FY-1984, at best, and construction activities will not begin before late FY-1984. Given current inflation rates - about 12 percent, this means adding a minimum of 25.4% to technical assistance costs and 40.45% to construction costs. This factor in itself brings the funds cited in the PID up to nearly $20,000,000.

b) Construction costs

Even taking inflation into consideration, proposed project construction costs are double those estimated in the PID. The construction line-time in the PID was the Mission's best estimate of the cost of new and renovated facilities. It is now obvious that these costs were under-estimated. The PP contains the estimate of an experienced institutional facilities designer who spent approximately seven weeks in-country on two separate trips analyzing needs, developing site sketches, and researching costs. Thus, the figure in the PP, based on an expert's assessment of the work to be done, is a more appropriate appraisal of the construction cost.

In addition to these two considerations, a cursory comparison of the project descriptions in the PID and PP, and their estimated costs, reveals the more carefully defined and refined project paper has added or expanded elements to assure a comprehensive solution for problems identified. For instance, the expansion of U.S. long-term training, in-service training for primary school teachers and support staff (TTC administrators, school inspectors), and facilities for curricular improvement (labs, libraries, shops) has increased costs.

5. Should project implementation be delayed until the primary education reform is implemented?

The Ministry of Education has taken its first significant steps toward the implementation of its reform by completing a new primary school curriculum which it will carefully introduce and test during the next few years. The preparation of teachers to teach this curriculum should then begin now in order to assure the successful implementation of Cameroon's educational reform. Refer to Annex G.9 for examples of the new curriculum and evaluations of its implementation.

6. Why is USAID putting most of the project's resources in the Northern province?

The Northern province is the largest in the country and with a scattered population but concentrated in a few cities and towns. It has the lowest rate of primary school enrollment (29%). Furthermore, 27% of the 6-11 year age group live in the North.

To cope with the special problems of the North and to catch up with the more advanced provinces in the provision of education, the GURC has established four teacher training colleges which serve differing functions and populations. In order to reach these diverse populations and to assure that all parts of the province have access to a greater number of more qualified teachers, it is crucial the project assist all four teacher training colleges.

Specifically, the Maroua and Ngaoundere TTCs are both special, compensatory programs designed to recruit northerners to the teaching profession. Because there are few highly educated northerners, these programs accept primary school graduates and, with three years of training, make them Grade II teachers. Maroua accepts students from the northern part and Ngaoundere from the southern part of the province. Without such special programs, it is unlikely any significant number of northerners would be able to enter teacher training colleges.

The students at the Pitoa TTC, the oldest and most successful in the province, have their BEPC and come from all over the country. They receive one year of training and are posted as Grade II teachers. This training program is comparatively efficient for it accepts many candidates, is relatively inexpensive, and quickly provides teachers to the field.

Garoua is the only Grade I TTC in the province. While the GURC someday hopes to have only Grade I teachers, urgent need and lack of funds and qualified candidates prohibit this. Yet it is desirable for at least the larger schools to have one or more Grade I teachers to assist and serve as models for the others. The Garoua TTC provides such examples. It accepts students with a BEPC, a Probatoire, or Baccalaureat and trains them to become Grade I teachers.

All teachers trained at these TTCs must remain in the North for at least three years. Yet even this requirement and these four programs fail to provide sufficient numbers of teachers. In the MINED's 1980/81 report on the province, five of the six departments list lack of sufficient teachers as an urgent problem, and this even in areas known to resist education. With time, resistance will wane and demand will increase. The capacity of all four TTCs to prepare qualified primary school teachers, therefore, will become even more critical

G. Budget Summary

The following table depicts the source and application of all project resources--both financial and in-kind.

G. SUMMARY COST ESTIMATE AND FINANCIAL PLAN

($000)

	USAID				GURC		TOTAL	
	GRANT FUNDS		LOAN FUNDS					
	FX	LC	FX	LC	FX	LC	FX	LC
INPUTS								
Technical Assistance	4431	1787	-	-	-	-	4431	1787
Personnel	-	127	-	-	-	45072	-	45199
Land	-	-	-	-	-	800	-	800
Construction	-	-	-	8692	-	820	-	9512
Commodities	639	150	723	598	-	-	1362	748
Training	794	719	-	-	-	123	794	842
Other Costs	-	176	-	-	-	1214	-	1390
Contingency	586	295	72	929	-	-	658	1224
Inflation	2508	1500	263	4988	-	25089	2771	31577
TOTAL PROJECT COSTS	8958	4754	1058	15207	-	73118	10016	93079
% of project costs	8.7	4.6	1.0	14.8		70.9	9.7	90.3

PART II: BACKGROUND AND DETAILED PROJECT DESCRIPTION

A. BACKGROUND

1. INTRODUCTION

a) Education and Development

Overall national development hinges on the ability of individuals in all strata of society to play constructive roles. The ability to do this, in turn, depends on access to education. An education system which is inefficient and low in quality can retard a country's economic and social development. "Economic development involves much more than capital and infrastructure formation, expanding economy and rising GNP; it requires the full mobilization of a country's human resources as well. Efficient use of capital resources is essential to expanding productivity and improving human welfare, but it is the people who shape and energize a nation's development."[1]

b) Rationale for Investment in Primary Education

The most recent work which deals with the issue of primary education and economic development is the World Bank Staff Working Paper of June, 1980, a summary of which states, "primary schooling increases productivity in all sectors of the economy ... and the economic returns to investment in primary education are in many countries considerably greater than those arising from other levels of schooling. In addition, it has other important socio-economic effects: it reduces fertility, improves health and nutrition, and promotes significant behavioral and attitudinal changes at the level of both the individual and the community which are helpful to the process of economic development. The evidence shows that the benefits of expanding primary schooling to cover all of the eligible age group are very considerable, even when school quality is low. It further shows that subsequent efforts to raise school quality by upgrading teachers and school resources are likely to result in high economic returns in most poor countries. Lending strategies which give primary schooling a central place appear well justified; such approaches would be more conducive to growth-with-equity than most available alternatives."[2]

Studies support the case of investment in primary education specifically in terms of increased agricultural productivity which depends upon combining resources in new ways as well as using resources more

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[1] George Psacharopoulos and K. Hinchcliffe, Returns to Education: An International Comparison. San Francisco: Jossey-Bass, Inc. 1973.

[2] World Bank, Primary Schooling and Economic Development: A Review of the Evidence. Washington, D.C., 1980.

efficiently. A recent World Bank report concluded that the importance of learning increases as agricultural innovations are introduced, since farmers must learn to keep up with new practices if they are to realize productivity gains from these innovations. In 1979, the World Bank issued a report based on 20 independent studies which concluded that, after controlling for all major variables including size of land holding, farm productivity was at least 7% higher where the farmer had at least 4 years of primary schooling.

c) Primary Education and Teacher Training

As the evidence for investment in primary education grows, it becomes important to decide where to invest within primary education. Typical choices include building schools, supplying textbooks and materials, modifying curricula, or improving and/or increasing the number of teachers. Although individual country requirements differ, the fact is that the largest percentage of the education budget is allocated to teacher salaries. Recent experience shows that investment in teachers has the highest social returns since teachers provide the greatest leverage for assistance to students. Teacher qualifications, experience, amount of education, and knowledge are positively related to student achievement. Hence, efforts to improve the condition of LDC education systems rightly focus first on the teacher.

However, with the rapid expansion of LDC school systems, adequately trained teachers are lacking. The lack and poor preparation of teachers results in educational inefficiency reflected in high rates of student drop-out and repetition. (11.4 years are required to produce one completer in Francophone Cameroon's six year program).

Improving efficiency in learning implies improving the quality of the school, especially teacher preparation. This can occur via improved pre- as well as in-service training. The World Bank emphasizes that though upgrading teacher performance by improved teacher training may increase the unit cost per student, the gain from waste reduction should compensate for the increase.

2. PRIMARY EDUCATION IN CAMEROON

a) Overview

Primary schools in Cameroon continue to emphasize preparation for secondary school even though 50% of those who enter primary school have dropped out by the fourth grade.

In addition to problems such as high drop out and repeater rates which are common to African countries, Cameroon has others which are more unique. Eleven years after West (Anglophone) Cameroon voted to rejoin Cameroon

in a Federated Republic, a national referendum endorsed President Ahidjo's proposal that a unitary state replace the federation. West Cameroon became 2 provinces of the 7 created nationwide, and the government took steps to unify the country's bureaucratic and institutional structures and procedures. A major objective of this effort is to harmonize 2 different educational systems which, nevertheless, still remain divided not only by language, but also by heritage in terms of educational philosophy, school structures, examination systems, curricula and the role of private education. The chart on the following page illustrates the structures of these two systems, which are described in greater detail in Annex G-1, the Education System in Cameroon.

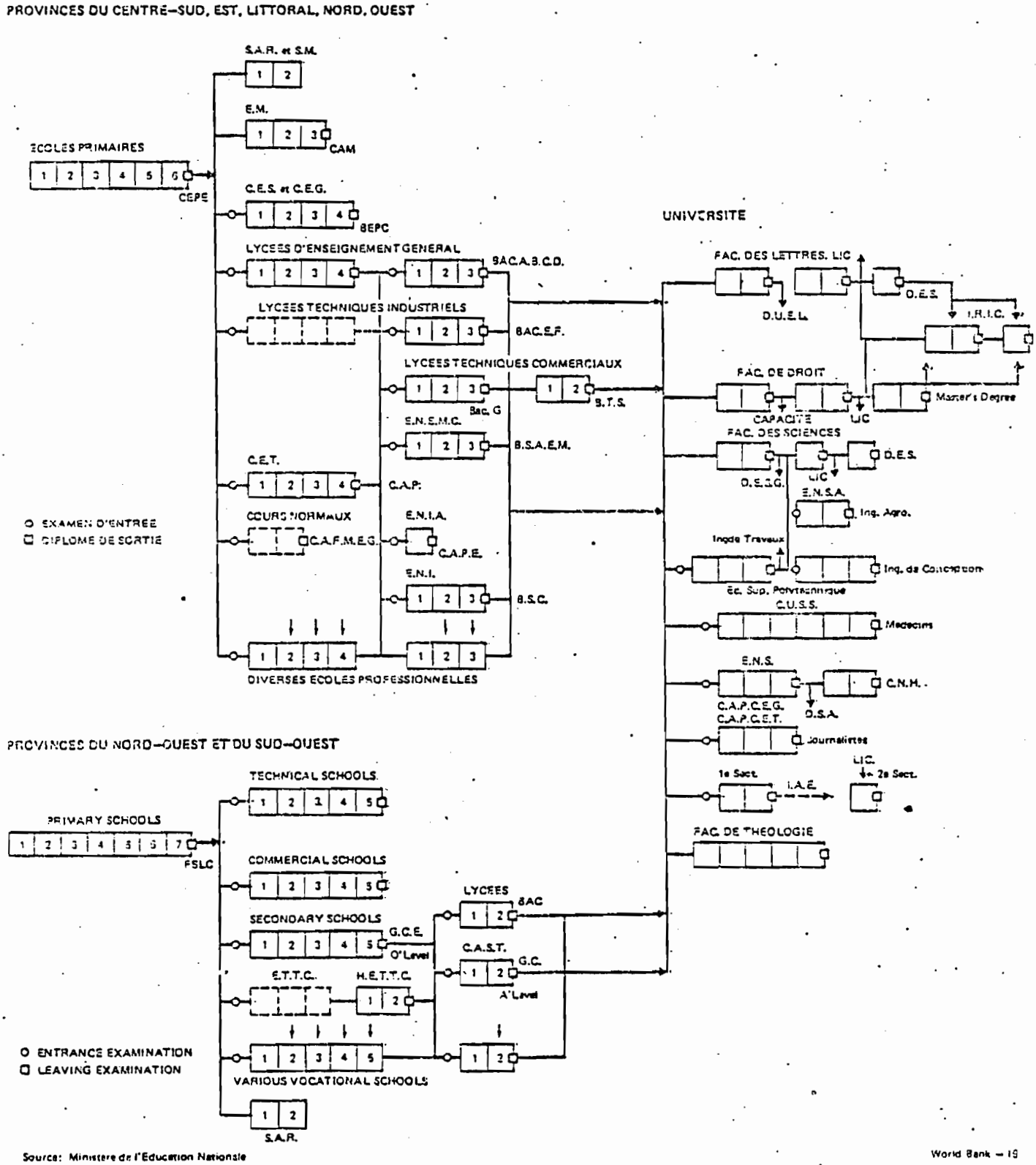
Over each of the past two years, primary school enrollment has increased by 5%. However, less than 50% of all school teachers have had any professional training, and of these, 33% have had only a primary education plus rudimentary professional instruction. Despite this lack of qualified teachers, the Government of Cameroon is aiming for a 4% per annum primary school enrollment increase during the period of the Fifth 5 Year Plan (1981-86). This calls for 11,974 new teachers by 1986/87, based on a student/teacher ratio of 50/1. At present, teacher training colleges are graduating approximately 1,100 teachers a year, leaving a shortage over the plan period of 6,500 new teachers. These projections exclude any remedial effort to improve or replace the 47.6% unqualified teachers already in the system.

b) TTC Programs

A cornerstone of Cameroon's primary education is its 15 teacher training colleges (TTCs) offering a total of 20 different programs. With a total enrollment of 1,677 in 1978/79, these schools, distributed throughout the country, averaged 99 students each. The TTCs are divided into 2 categories: Grade I TTCs (Ecole Normale d'Instituteurs - ENI) and Grade II TTCs (Ecole Normale d'Instituteurs Adjoints - ENIA).

Grade I teachers are roughly equivalent to high school graduates. The Grade II teachers, the minimum level for a qualified teacher, vary between having completed 3 to 5 years at the secondary level. Historically, there was a teacher training program for Grade III teachers, which is no longer offered. Recently graduated Grade III teachers acquire that designation by passing the Grade III professional examination. Thus, while older Grade III teachers may have had formal pedagogical training, younger ones have not. Grade IV teachers are professionally unqualified and receive this rating because of recognized teaching services rendered when other teachers have not been available. Often, those who become Grade IV teachers have originally served as volunteers (bénévoles), e.g., they have received compensation from parents rather than from the government. If these volunteers serve well and continue to be needed, the provincial school inspectors may recommend that the government assume responsibility for their salaries, at which point they are classified at Grade IV. While the Ministry of National Education has adopted a policy to abolish this procedure as of 1981/82, the desperate need for teachers, especially in the rural, isolated and/or frontier regions, may require postponement of its enforcement.

CAMEROUN
STRUCTURE OF THE EDUCATION SYSTEM
STRUCTURE DE L'ENSEIGNEMENT



Source: Ministere de l'Education Nationale

World Bank – 19

c) The Primary Education Reform

In addition to attempting to expand the primary system to change the national statistic that 50% of the population above the age of 4 and 61% of the active population above age 14 have never been to school, since the 1960s, the GURC has also been committed to a general reform of education to "harmonize" the Francophone and Anglophone systems into one model responsive to the needs of Cameroon's largely rural, agricultural economy and culture. The most difficult and challenging part of the reform has been at the primary level. This was started in 1967 with the creation of 2 (1 Anglophone, 1 Francophone) IPARS (Institut de Pédagogie Appliquée à Vocation Rurale) to develop and implement a new primary school curriculum. Former President Ahidjo himself, from the beginning of the reform movement, determined major directions. Over the past 14 years, elements of the reform have entered the primary curriculum. Reform related activities have field tested the rural component (practical approaches to improving life and productivity in the countryside) in West Cameroon more than elsewhere, and have produced and distributed some 40 tons of teaching materials related to handicrafts, home economics, agriculture, and social and community activities. This reform will also include harmonizing the Anglophone and Francophone primary systems with a 6-year primary cycle (in conformity with the existing Francophone system) and a 7-year secondary cycle (in conformity with the Anglophone).

In short, the reform, with its related institutions, policies, and components, is in place. Still being considered is the pace at which the reform will be fed into the primary education system.

Serious teaching problems will occur as the reform increases the emphasis on practical skills and knowledge. To prepare teachers to present the new curriculum, the GURC is considering the establishment of special orientation programs, and has pilot tested courses in Buea, and will do so at Garoua in 1983. These are stop-gap programs, however, and cannot substitute for a professional teacher training program.

Another gap is in terms of the course offerings for TTC faculty in the area of education administration, i.e., class scheduling, teacher supervision, and materials acquisition and distribution. While this is an especially critical problem for those who become inspectors, it also concerns TTC graduates who will become school directors or work in small schools which require they be responsible for a substantial amount of school administration. At present, the only way a teacher learns about educational administration is through experience.

3. PRIMARY EDUCATION IN THE NORTH AND NORTHWEST

The French-speaking North and the English-speaking Northwest Provinces have the lowest primary school enrollment levels in Cameroon 29% and 48% respectively, as compared to 85% for the nation. The Government of Cameroon has a keen appreciation of the potentially destabilizing effect of regional

isolation and unbalanced growth, and is committed to correcting these inequalities. Major obstacles to its doing so for primary education in the North and Northwest Provinces are:

a) Low School Enrollment: The remoteness of these provinces from the main centers of Cameroon, and in the predominantly Moslem North, resistance to education, contribute to low enrollment rates.

b) Shortage of Teachers: In the Northwest, qualified teachers are scarce. The ones available prefer to remain in the urban areas. Thus, Bamenda, the provincial capital of the Northwest, has a student/teacher ratio of 20/1 while in the rural areas the ratio is 70/1 or higher. To remedy this, the government is trying to recruit candidates for TTCs from rural areas, with the expectation they will return to teach in these areas. However, there is a lack of individuals in rural parts of the country with enough training to enter the TTCs.

In the North, there are even fewer people eligible to enter the TTCs. Most teachers come from the southern provinces. Harshness of living conditions, as well as differences in religious and other cultural preferences, lead them to seek every opportunity to leave the North, via transfer to other provinces, or to other ministries.

c) Weakness in Primary School Management: Examination of primary school inspector, TTC administrator and teacher performance discloses numerous administrative deficiencies.

The Inspector is an important individual in the provincial primary school system because he supervises school management and classroom activities, provides pedagogic assistance to teachers, and serves as a communication link between students, teachers, and the provincial delegation.

It is difficult to find an equivalency for the inspector in the American system; perhaps the closest comparison would be to compare the divisional inspector to a school superintendent and the sub-inspector to a "super" principal responsible for overseeing from 10-100 schools. The divisional inspectors are supposed to visit the schools for which they are responsible at least once a year. However, their other administrative responsibilities, the fact that it takes at least 1 full day to conduct the kind of administrative and pedagogical inspection required, the distances involved, the poor roads, lack of public transportation and government vehicles, make it patently impossible for them to do their job.

TTC Administrative Staff is underemployed, and, by and large, unsupported by the national government. Without any formal training, it heavily relies upon "standard operating procedures." When these fail, implementation stops, a report is prepared which goes to the provincial capital, then to Yaounde, and this process absolves the TTC Director of responsibility. It is acknowledged by Ministry officials that the slowness in processing and responding to requests makes the existing administrative model for handling problems dysfunctional.

Flexibility, initiative, and imagination are often lacking in academic program administration. Even where physical plants are adequate, there is often underutilization of classroom space and rigid and impractical class scheduling. Useful activities, such as field work required to prepare teachers to provide relevant training to primary school children, receive low priority, if not total neglect.

d) The Physical Condition of the TTCs: A final problem which interacts with and compounds many of the others is the condition of the TTCs in the North and the Northwest. These are inefficient, under-financed, poorly equipped and, with the exception of Garoua, inadequate even for the present limited enrollments. Their problems range from lacking facilities, such as libraries and workshops, to basic infrastructure, i.e., water, electricity or functioning sewage systems. It is apparent that earlier construction has left a great deal to be desired and building maintenance is virtually non-existent. At each of the sites there are gross problems which illustrate dramatically the need for closer supervision and control.

In Bamenda for example, in a building that is approximately 2 years old, the roof has fallen because supporting vertical columns were left out; at Ngaoundéré the septic tank is built uphill from the toilets and roofs leak badly; at Pitoa, the major classroom complex was built so that when heavy rains come they blow into the rooms and force occupants to vacate; at Garoua, funded by the IBRD as a model school, there is evidence of poor workmanship, possibly because the architect responsible for visiting the construction site at least twice a month never did so; and at Maroua, ignored was the fact that the entire area is low lying and hence, swampy during the rainy season. Furthermore, the incompatibility between building design and Cameroonian life style is glaring. TTCs have European type kitchens, though most cooking takes place in a traditional manner with wood. This means either cooking on an open fire in a lean-to near the kitchen, or attempting to cook with wood fires in the kitchen which becomes unbearably smokey.

The maintenance situation, preventive as well as corrective, is unfortunate. Sewage systems (with the exception of Ngaoundéré's which is still unused) are breaking down; pit toilets substitute, and bathing facilities are primitive. Even in Pitoa, the best maintained school of the five, the roots from trees planted near sewer lines have broken the pipes and the same thing may happen in Garoua. Residential, rather than institutional specifications have guided construction. This has resulted in buildings unable to tolerate heavy use, and, except for Pitoa and Bamenda, buildings are dirty, and rooms are in disrepair, with broken windows, tiles, paneling and furniture.

In summary, the TTC facilities are fast deteriorating and unable to handle even limited enrollments; they could not begin to accomodate effectively any increase in TTC students. Future facility renovation and expansion must be designed according to user needs, and with materials which are both affordable and available to the TTCs and which TTC maintenance staff are trained to care for.

4. OTHER DONOR ASSISTANCE

The World Bank is completing the design of a primary teacher training initiative which is one component of a four part project to be submitted to the GURC for approval in June, 1983. This initiative, targeted for the Central South and Littoral provinces, aims to increase the quantity and improve the quality of primary education through expansion and improvement of teacher training colleges and construction of nearby demonstration schools.

From the beginning, USAID and the World Bank have collaborated on the design of their respective projects. Indeed, the World Bank chose the geographic location of its project on the assumption that USAID would be working in other areas. Collaboration should prove increasingly valuable during project implementation.

5. CONCLUSION

As indicated, this project will concentrate in the North and the Northwest. These areas were chosen because their development continues to lag significantly behind the rest of Cameroon. Supporting primary education in these regions makes sense for several reasons: it is cost effective. Primary education in Cameroon has a recurrent per student cost of $32 in the public system, versus $235 for secondary education and $1,870 for university training. It is accessible. Even though only 29% to 48% of the school age population in these 2 regions now have an opportunity to attend schools, primary education is by far the most practical, since most children lack any opportunity to go beyond the primary level. Primary education is conducive to economic progress and social development and research increasingly substantiates that "modernity of outlook toward activities ranging from voting to family planning, saving and working depends most on the factor of

educational level.[3] Furthermore, the GURC is concerned that remote schools at least can compete with those on the other sides of the frontiers - a concern especially in the Northwest Province where its political implications are obvious.

The GURC has studied its primary school education problems and needs. As the World Bank notes, the time is now ripe for moving from studies to implementation. This project supports such momentum. It seeks to establish a primary education system as a sound basis for general economic and social development in the North and Northwest, for eventual replication in other areas of Cameroon, as well as Africa.

B. DETAILED PROJECT DESCRIPTION

INTRODUCTION

The classroom teacher is key to the success of any education reform. In support of Cameroon's national educational reform (see Background), this project's main emphasis is on institutional development for the improvement, support, and increase of primary school teachers. Five teacher training colleges are the institutions which will benefit most directly from project-funded technical experts, participant training, infrastructure repair and expansion, as well as teaching materials and equipment. Exhibit II B a follows. It has three parts which explain these project elements: i) geographic spread; ii) problem/solution summary; and iii) organizational structure.

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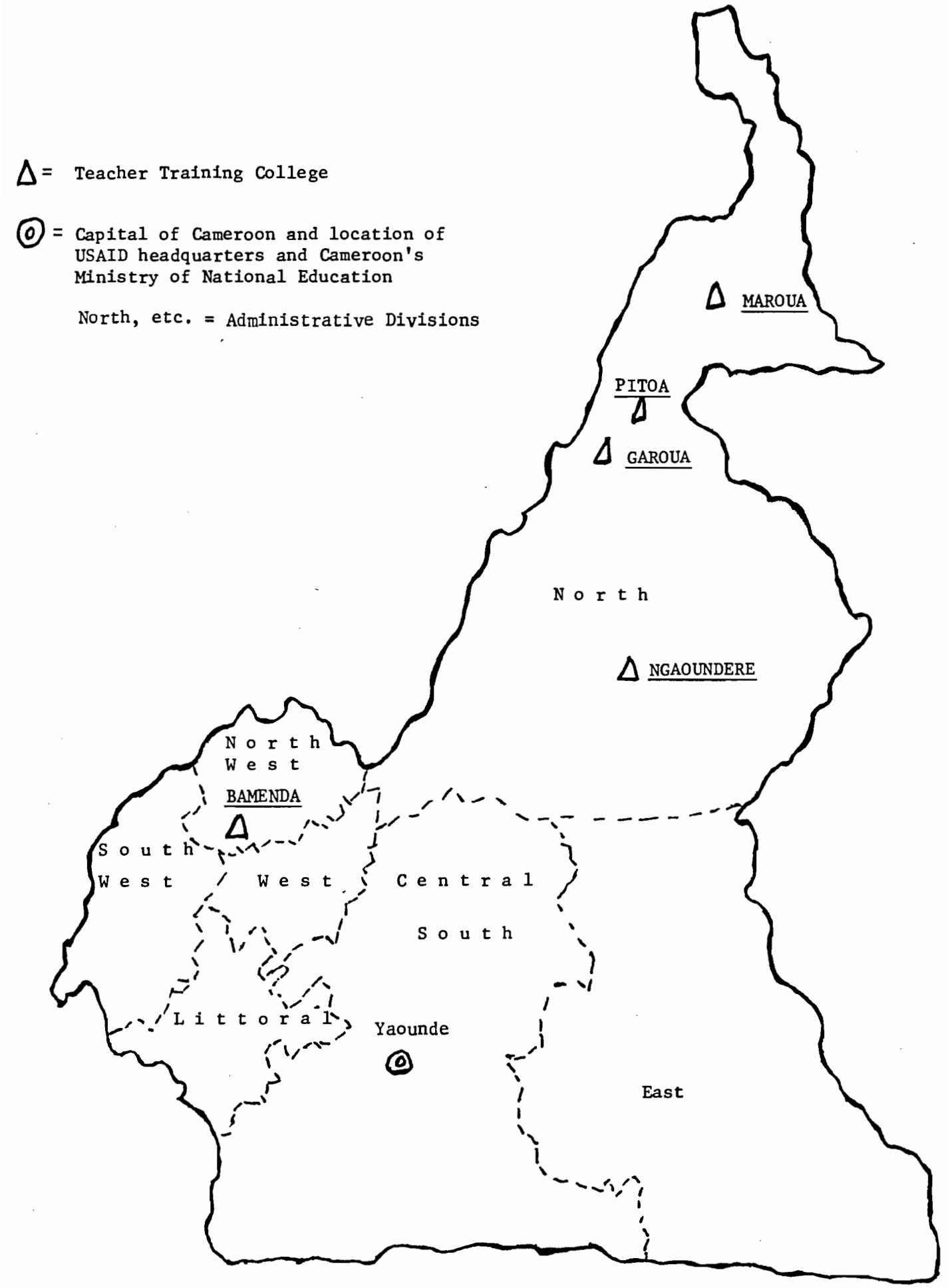
[3] World Bank, World Development Report, 1980, op. cit. pp 47-48.

Map of CAMEROON which shows location of Teacher Training Colleges to be strengthened by USAID Support to Primary Education Project No. 631-0033.

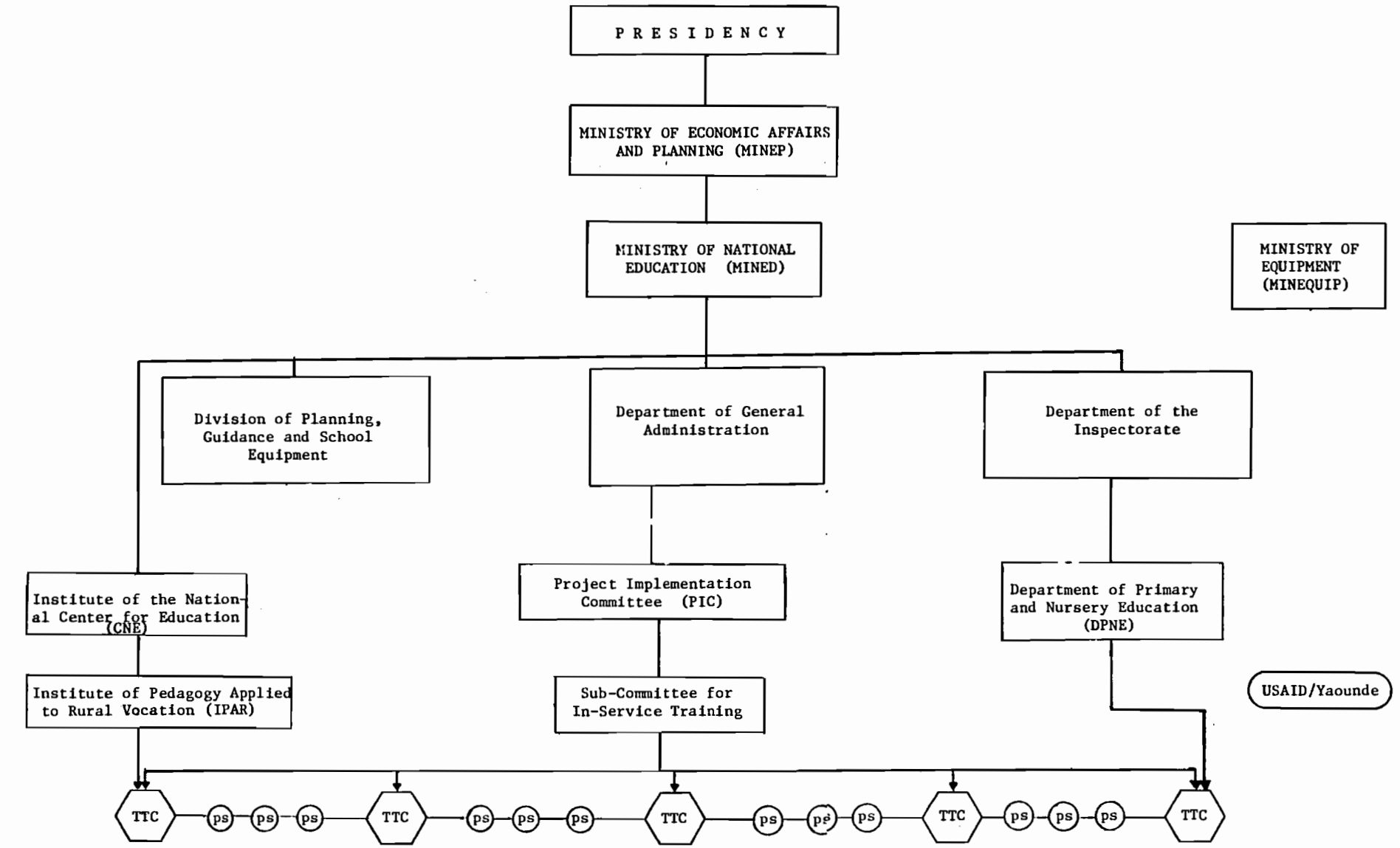


Linkages between problems preventing the efficient delivery of primary education in the North and Northwest provinces, solutions (outputs) this project offers, and means (inputs) this project will use for these solutions.

N.B.: The major problem this project addresses is the current wastage and inadequate coverage of Cameroon's primary education system, especially in the North and Northwest provinces. The component of the problem this project will address are the needs of inadequately trained and supported primary school teachers.

PROBLEMS	SOLUTIONS (project outputs)	MEANS (project inputs)
1. Inadequate professional preparation of TTC faculty. This affects all primary school teachers who graduate from TTCs.	In-service workshops to increase skills of TTC faculty who a) never have had access to adequate pre-service training and b) require in-service training to keep current their knowledge and skills.	Project technical advisors will work with TTC directors and faculty, and the sub-committee for in-service training on the design and implementation of these workshops.
2. Lack of professional training of TTC staff (administrators and support personnel) and primary school inspectors. Results in wastage of time, effort, materials and money at TTCs and in primary schools.	In-service training to improve TTC staff and inspector skills in administration, pedagogy, and supervision.	U.S. technical advisors with their counterparts will design and implement these sessions. Project sponsored Cameroonians with Masters degrees in educational administration and management will assume responsibility for these programs.
3. Primary school directors lack skills in administration and pedagogy, which results in inefficient school management.	In-service training to improve the administrative and pedagogical ability of primary school directors.	U.S. technical advisors will work with the sub-committee on in-service training to design and implement these programs on a continuous basis.
4. Primary school teachers now teaching have poor professional preparation.	In-service training programs to upgrade the knowledge and skills of underqualified teachers.	U.S. technical advisors collaborating with Cameroonian field personnel and the sub-committee on in-service training will design and implement these programs.
5. Pre-service TTC programs for future primary school teachers are irrelevant and outmoded.	Revised pre-service training curriculum, with greater emphasis on practical teaching methods. Overhaul of system of practice teaching.	Technical advisors will work with TTC staff and faculty, and the sub-committee for in-service training on improving this phase of training. U.S. trained Cameroonians will contribute to this process
6. TTC faculty and students lack libraries to do professional research and lesson preparation	A system of equipped and staffed libraries servicing all project TTCs.	Construction and equipping of TTC libraries, and provision to maintain and keep current their collections.
7. The limited size, poor maintenance, and inadequate equipping of TTCs prevents them from a) meeting student learning needs and b) enrolling numbers of students necessary to supply adequate regional coverage by primary school teachers.	Renovation and expansion of TTC facilities and provision of equipment.	Technical advisors and funds for infrastructure, facilities, and equipment.

KEY INSTITUTIONS TO SUPPORT TO PRIMARY EDUCATION PROJECT (631-0033)



TTC = Teacher Training College
ps = Primary School

Exhibit II B a iii - 1 : Key Institutions/Organizational Structure

Exhibit II B a iii - 2: Roles of Key Institutions

The key institutions in the organization chart above will collaborate in the following roles on project implementation:

- The Ministry of National Education (MINED), calling on a range of its divisions and institutes, will be the agency responsible for the execution of all project components except construction.

- The Project Implementation Committee (PIC), composed of representatives from each of the institutions participating in the project, will make and review decisions on a gamut of project concerns, from dates for in-service training programs to MINED policies and procedures. In sum, the PIC will be responsible for coordinating, monitoring, and directing all aspects of the project.

- The Sub-Committee for In-service Training, also composed of representatives from concerned institutions, will be particularly responsible for making in-service training proposals.

N.B. The project will create the two above committees. Members of the first committee collaborated closely with USAID/Yaounde on project design.

- The Department of Primary and Nursery Education (DPNE) has the main administrative responsibility for most project activities. It currently is responsible for the: administration, as well as curriculum and pedagogical supervision of all public schools; planning for new primary schools; administration of teacher training colleges; and preparation and coordination of courses and conferences. DPNE collaborates on the above with other MINED divisions such as the IPARs, the National Center for Education, the Inspectorate, and the Department of General Administration.

- The Institutes of Pedagogy Applied to Rural Vocation (IPARs) are under MINED direction and charged with working on the reform of primary education structures, syllabuses, and teaching methodology. The IPARs will participate in developing project in-service and pre-service training programs.

- The CNE (Centre National d'Education) is also an institute under MINED direction. Its mission is to plan and coordinate educational reforms at all levels by conducting studies, research and evaluations related to Cameroon's educational system. The CNE will contribute to this project by working with the PIC, the Sub-committee for In-service Training, the IPARs, and the Inspectorate on pre and in-service training programs.

- The Department of the Inspectorate in MINED, in collaboration with the IPARs, the CNE, the DPNE, technical advisors the PIC and the Sub-committee for In-service Training, will upgrade programs to prepare inspectors to monitor application of teaching methods developed through this project.

Exhibit II B a iii - 3: Roles of Key Institutions (continued)

- The Department of General Administration in MINED is responsible for allocating the Ministry's financial resources to different departments, and for defending MINED's budget before the Ministry of Finance. It also is responsible for determining such things as how many new teachers MINED can afford to train and pay, and how many it can promote via in-service training programs. This department, in addition, judges whether or not MINED can cover in-service training program expenses (transportation of teachers to training sites, participant per diems, etc.). Thus, this department will play a practical role in the project as it advises DPNE just what pre and in-service training costs MINED can afford.

- The Service of Construction and School Equipment in MINED's Planning, Guidance, and School Equipment Division, is responsible for the project's construction component. In cooperation with USAID and through the services of a U.S. Educational Facilities Planning firm, the construction service will present to the Ministry of Equipment (MINEQUIP) a thorough description of its needs for the five TTC sites. MINEQUIP will then contract with an Architectural and Engineering (A & E) firm for the preparation of the bid documents. To assure the meeting of stated needs, the Construction Service, together with MINEQUIP, USAID, and an American architect, will review each stage of the A & E work through design, development and final submission for approval. MINEQUIP, the Construction Service, and USAID will jointly approve final bid documents before the advertisement of construction plans for bidding.

A panel of the Presidency, MINEQUIP, Construction Service, and USAID representatives will open and evaluate bids at the Presidency, following which USAID will approve a host country contract, or contracts, for the construction of the five TTC sites. After contractor selections, MINEQUIP will be responsible for overseeing construction. MINEQUIP has a representative in each geographic division for this purpose. The Service of Construction and School Equipment will be responsible for the procurement of project commodities (e.g., furniture and equipment) and for new educational facilities.

1. Project Goal:

The project's goal is to improve the quality of life of Cameroonians living in the North and Northwest provinces. Its sub-goal is to increase the number of children receiving a primary education in the North and Northwest and to assure that this education prepares children to play productive roles in their culture and economy.

2. Project Purpose

In support of the above goals, the project purposes are to: (1) increase the quantity and quality of primary school teachers in the North and Northwest Provinces and (2) improve the skills of the personnel responsible for supporting these teachers (e.g. primary school directors, divisional inspectors, teacher training college staff and faculty).

3. Project Outputs:

To improve the quantity and quality of primary school teachers and of personnel responsible for supporting these teachers, the project will institute a variety of pre-service and in-service training programs, will develop a system of TTC libraries, and will expand and improve TTC facilities.

There will be seven project outputs:

Output No. 1: In-service training programs for faculty members at 5 Teacher Training Colleges:

To enable Teacher Training College professors to educate and improve their professional skills and knowledge, the project will establish an in-service training program as a permanent component of the teacher training and support system. This program will have two parts:

(1) Day-long workshops, initially organized and given by U.S. technical experts, will occur at each TTC at a frequency agreed upon by TEs and TTC staff. The technical expert will collaborate with teacher training staff and faculty to diagnose which needs workshop programs should address. It is expected that lectures and demonstrations on the development of teaching materials, lesson planning and teaching will prove useful.

(2) Two-week training programs will take place during each Easter recess at the TTCs in Garoua and Bamenda for faculty of all 5 TTCs. These programs will begin in the project's second year. The MINED sub-committee for in-service training with the U.S. technical experts team will determine specific program content after consulting TTC faculty. General professional areas to be covered are: child development, teaching methods, curriculum development, lesson planning, and the design and fabrication of teaching aids.

Output No. 2: In-service training programs for TTC Staff and Divisional Inspectors:

In-service training programs for TTC staff and divisional inspectors will be offered at the Garoua and Bamenda TTCs by the project's second year. These sessions will focus first on school administration, then on pedagogy and teacher supervision.

The MINED sub-committee for in-service training and the technical experts team will determine program content. Technical experts, professors of the Ecole Normale Supérieure, national inspectors, DPNE officials, provincial delegates and/or sub-delegates, and other MINED officials with expertise in school administration, will conduct these sessions. By project completion, Cameroonians with U.S. Masters degrees in educational administration and management will direct and help to implement the program.

Output No. 3: In-service training program for primary school directors

As a component of the teacher-support system, an in-service training program for school directors will assure that they have those administrative and pedagogical skills necessary for efficient management. These programs will take place in department headquarters rather than at TTCs, and will be of two types: (1) will serve full-time school directors (with no teaching responsibilities) as well as directors of schools with more than 500 pupils; (2) will be for all other directors. Beginning in the project's second year, two week training sessions will be offered during Easter vacation. The two groups will alternate, so that each director receives training every other year. Sessions will deal with such subjects as school administration, teacher supervision, disciplinary procedures, lesson plan preparation, and teacher counseling and evaluation. By project completion, school directors who have earned M.A.s in educational administration and management will direct these programs.

Output No. 4: In-service training programs for primary school teachers

At present, the only in-service training primary school teachers receive are occasional one day workshops given by divisional inspectors once or twice a year. To increase the teaching skills and raise the qualifications of primary school teachers, the project will establish a regular in-service training program. Sessions will occur annually for four weeks at each TTC during summer vacation beginning mid-July of every year. Teachers will be grouped according to the levels they teach (e.g. years 1 and 2, 3 and 4, and 5 and 6) and grade of qualification (Grade I, II, III or IV). 50% of the 200 are expected to pass qualifying exams as a result of this training.

Sessions should emphasize such topics as child development, pedagogy, curriculum development lesson planning, the design and fabrication of teaching aids, manual arts and practice teaching.

This program will avoid theoretical lectures and focus on concrete improvements in teaching. Standardization of the primary curriculum will enable each TTC to teach the same course. At the beginning of the project, the TEs will work with the TTC directors, staff, and faculty to organize the training programs. By the end of the project, the TTC staff and faculty will be in charge of the program, with personnel from IPAR, the Inspectorate, and DPNE helping to teach.

Output No. 5: Pre-service programs for primary school teachers

Pre-service training for teachers will be a longer, more intense version of in-service training.

Outputs 4 and 5 are the heart of this project, to which all other outputs are ancillary, and to which all inputs lead. Thus the usefulness of libraries, and training for primary school support staff (inspectors, directors, etc.) will be measured by the classroom performance of primary school teachers, in turn measured by the learning of their students, as reflected in standardized examinations and dropout, repetition and promotion rates. See Table C.2 for anticipated enrollments and graduates for pre-service teacher training programs.

Output No. 6: A system of equipped and staffed TTC libraries

The project will provide each TTC with a newly constructed library, with a capacity to accommodate approximately 60% of the student body and 5,000 books. Each library will have a reading room, work and circulation area, and office space. Furniture, air conditioners, initial collections of 1,500 books and periodicals, as well as funds to augment and update collections, will also be provided.

To supervise and maintain these libraries, the project will establish a system with a central office in the Inspectorate General of Pedagogy in the Ministry of National Education in Yaounde. Three librarians (U.S. trained MLS graduates) and two bilingual clerks will staff the central office, and the other two will assure the proper functioning of TTC libraries, which will include training for TTC staff to run the libraries on a daily basis.

Output No 7: Improved and expanded Teacher Training College facilities

The project will loan-finance the following construction, remodeling and renovation of the five TTCs in the North and the Northwest.

TABLE C.2

PRESERVICE TEACHER TRAINING PROGRAMS
ANTICIPATED ENROLLMENT AND GRADUATES

INSTITUTION		84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
ENROLLMENT											
GAROUA	ENI	300	300	300	300	300	300	300	300	300	300
MAROUA	ENIA	210	210	210	210	270	270	270	270	270	270
NGAOUNDERE	ENIA	220	220	220	220	220	220	220	220	220	220
PITOA	ENIA	70	70	70	70	200	200	200	200	200	200
BAMENDA	ENI	40	40	40	40	80	80	80	80	80	80
BAMENDA	ENIA	180	180	180	180	240	240	240	240	240	240
TOTAL		1020	1020	1020	1020	1310	1310	1310	1310	1310	1310
GRADUATES											
GAROUA	Annual	100	100	100	100	100	100	100	100	100	100
	Cumulative	-	200	300	400	500	600	700	800	900	1000
MAROUA	Annual	70	70	70	70	90	90	90	90	90	90
	Cumulative	-	140	210	280	350	440	530	620	710	800
NGAOUNDERE	Annual	110	110	110	110	110	110	110	110	110	110
	Cumulative	-	220	330	440	550	660	770	880	990	1100
PITOA	Annual	70	70	70	70	200	200	200	200	200	200
	Cumulative	-	140	210	280	350	550	750	950	1150	1350
BAMENDA ENI	Annual	40	40	40	40	80	80	80	80	80	80
	Cumulative	-	80	120	160	200	280	360	440	560	640
BAMENDA ENIA	Annual	60	60	60	60	130	130	130	130	130	130
	Cumulative	-	120	180	240	300	430	560	690	820	950
TOTAL	Annual	450	450	450	450	710	710	710	710	710	710
	Cumulative	-	900	1350	1800	2250	2960	3670	4380	5090	5800

a) New Facilities

- Libraries with a capacity for approximately 60% of the student body at each TTC. Includes stacks, reading room, work area, and office and circulation area.

- Faculty rooms for 15 faculty members at Garoua, Maroua, and Ngaoundéré and for 16 at Bamenda.

- Classrooms for 40 students each; 4 at Pitoa and Bamenda, 1 at Ngaoundéré, and 5 at Maroua.

- Science laboratories for 40 students each with wall counters, sinks and a teacher's demonstration table at Pitoa, Ngaoundéré, Bamenda, and Maroua.

- Domestic science laboratories for 20 students with sewing, kitchen and child care sections at Ngaoundéré Bamenda, and Maroua.

- Shop/Maintenance workshops for 20 students to serve as a manual arts workshop maintenance center, and storage area for agricultural tools at Ngaoundéré, Bamenda, and Maroua.

- Administrative Blocks to accommodate 3 additional staff at Bamenda and Garoua (total of 9 staff at each), 7 staff at Pitoa and Maroua, and 2 additional staff at Ngaoundéré.

- Dormitories designed to accommodate 40 students grouped by 4 single beds with storage area, toilets showers, and laundry facilities. Dormitories for 80 students at Garoua, 130 at Pitoa, 220 at Maroua, 100 at Ngaoundéré and 300 at Bamenda.

- Dining rooms designed to serve also as assembly halls large enough to seat the entire student body. Additions to accommodate another 100 students at Garoua and 115 at Ngaoundéré. A new building for 320 at Bamenda and for 220 at Maroua.

- Kitchens to accommodate gas and wood stoves, dish washing food preparation and serving, and storage space. New facilities for Maroua and Bamenda and additions for Garoua and Ngaoundéré.

- Laundry rooms to wash bed linens for all TTC's except Ngaoundéré.

- Infirmaries at Maroua, Ngaoundéré and Bamenda.

b) Remodeling of existing facilities

- Faculty room at Pitoa.
- Domestic science laboratories at Pitoa.
- Shop/Maintenance workshop at Pitoa.
- Administration Blocks at Garoua and Bamenda
- Dining room at Pitoa
- Kitchen at Pitoa.

c) Renovation of existing facilities in squre meters of floor area

	GAROUA	PITOA	MAROUA	NGAOUNDERE	BAMENDA
CLASSRM.	0	288	New	0	84
ADMIN.	98	New	New	0	150
DORMS	180	120	New	60	New
DINING	136	300	New	0	New
KITCHEN	126	150	New	100	New
OTHER	0	356	0	40	0
TOTALS	540m^2	1214m^2	New	200m^2	234m^2

TOTAL FLOOR AREA REMODELING/RENOVATION - APPROXIMATELY 220m^2

d) Dismantling of existing facilities

- 2 buildings in Pitoa.

e) Equipment and furnishings

Equipment and furnishings will be provided for 5 libraries, 5 faculty rooms, 14 classrooms, 4 science laboratories, 5 domestic science laboratories, 5 shops/maintenance workshops, 20 dormitory units, 4 kitchens, 5 laundry rooms and 5 infirmaries.

f) Site development

Included in the loan component are costs for site development such as entry roads, parking, walkways, grading and filling, new or extended water systems, and reconstructed plumbing and sewage disposal systems.

In addition to the loan-financed construction, AID will grant-finance the following:

- 28 person-months of construction technical assistant services. This technician will arrive in country two months before construction begins to oversee the construction, renovation, and remodeling of facilities. He will also develop a maintenance plan for the TTCs and will work with the staff at each TTC to assure its implementation.

- A maintenance kit for each TTC.

- Part of the maintenance budget during the first year the buildings are occupied and 25% during the second year.

4. Project Inputs:

a) Overview:

Project inputs include technical assistance U.S. training, infrastructure development, and equipment and materials.

Technical Assistance will place experts in the Teacher Training Colleges and their supporting institutions to work with Cameroonian counterparts for the improvement, support, and increase in the number of primary school teachers. (See Annex G 6, Job Descriptions/Qualifications, for more information on role of technical assistance.)

Long and Short Term Training will enable Cameroonians to continue and improve upon the work of technical experts. Fifteen Cameroonians will receive training at the Masters Degree level in the United States in curriculum development, library science, educational administration, evaluation, and other project related subjects. Month-long observational tours to the U.S. will expose approximately ten Cameroonians to new ways of working in education.

Infrastructure Development (the construction of dormitories, libraries, and science laboratories) at the teacher training colleges, as well as equipment and vehicles, will complement technical assistance and long and short term training.

b) Specific Project Inputs:

Following are project inputs including an analysis of GURC expenditures.

U. S. G O V E R N M E N T:

U S A I D G R A N T

a. Technical Assistance: Total $ 6,218,000

The Team Leader will provide four-and-one half years of technical assistance. Situated in the Department of Primary and Nursery Education (DPNE), this person, with the Director of DPNE and the Project Implementation Committee, will coordinate project activities. The team leader will help to develop policy guidelines for the project's implementation, as well as a detailed work plan.

Each TTC will have a full-time U.S. technical expert in teacher training for four years (except Garoua and Pitoa, which will share one). They will be the most field oriented Americans in the project and crucial to assuring project inputs reach the beneficiaries intended. Their conterparts will be the TTC directors, with whom they will review and revise the teacher training curriculum, help plan for relevant teaching materials, work on course offerings and class scheduling, and set up revised practice teaching systems.

A Construction Expert will work within the MINED Division of Planning, Guidance, and School Equipment for about 2 years and four months. This expert will collaborate with the USAID/Engineer, the Planning Division, the Ministry of Equipment, the A&E firm and the Presidency to assure that the construction contract meets AID requirements and standards. With the Planning Division and the TTC directors and technical expert, this person will oversee project construction. In addition, this person will develop a maintenance and repair program for each TTC, and train staff to implement it.

The Administration Technical Expert will be responsible for providing logistical support for the technical assistance team, and for procuring all project commodities.

The Library Science Expert will guide the development of the library system. Working for six months in the Inspectorate General of Pedagogy at the beginning of the project, this person will collaborate with PIC, MINED, and TTC members to determine library system needs. Later, this person, in the United States will: gather quotations for the core book collection, furniture, equipment, and supplies; conduct a search for cataglogue copy; and arrange summer training programs for the Masters in Library Science (MLS) candidates. Subsequently, this expert will return to Cameroon for a one month TDY to make recommendations to the PIC, revise work as needed, and assist in ordering library commodities, and in establishing selection criteria for Library Assistants. After MLS graduates return to Cameroon, this person will come back to Cameroon at intervals to collaborate with librarians in setting up library programs, as well as in-service training sessions.

An Institutional Design Consultant will come to Cameroon for two months early to assure A&E work is completed, and assist the mission engineer in a review of plans and specifications to assure that they meet AID requirements and standards.

An Evaluation Consultant will work for one month in Cameroon during the first year of the project to design and set up evaluation and baseline study systems in coordination with the DPNE and USAID.

BREAKDOWN OF TECHNICAL ASSISTANCE COSTS:

29.81 person years of long-term technical assistance (29.56 person years based in Cameroon and .25 person years based in the U.S.) ..... $6,004,000.

	Person Months
Team Leader	54
Maroua TE	52
Pitoa and Garoua TE	52
Ngaoundéré TE	52
Bamenda TE	52
Administrative TE	40.8
Construction TE	36

9 person months of short-term technical assistance in Cameroon	$98,000
10 person months of evaluation team	$116,000

b. Personnel: $127,000

27.8 years of local support personnel

- Bilingual secretary for Team Leader and Admin. TA	53
- Administrative assistant for Team Leader and Admin. TA	53
- Chauffeur for Team Leader and Admin. TA	53
- Staff assistants/secretaries for TTC TAs	175

c. Commodities: $789,000

Commodities for Technicians		$285,000
- 7 vehicles and spare parts	$105,000	
- 7 sets furniture/appliances	147,000	
- Office furniture/equipment	8,000	
- Supplies	25,000	
Commodities for TTCs		$504,000
- Library books/periodicals	$415,000	
- Library supplies	30,000	
- Maintenance Kits	13,000	
- In-service training materials	46,000	

d. Training: $1,513,000

Training: During the project implementation, Cameroonians will study how to improve teacher training and support systems. To this end, there will be:

1) Observational Tours: There will be two observational tours, each for one month, to enable a total of approximately 10 officials to visit U.S. teacher training colleges, primary schools, and educational research institutes. Participants will also meet with experts in educational administration.

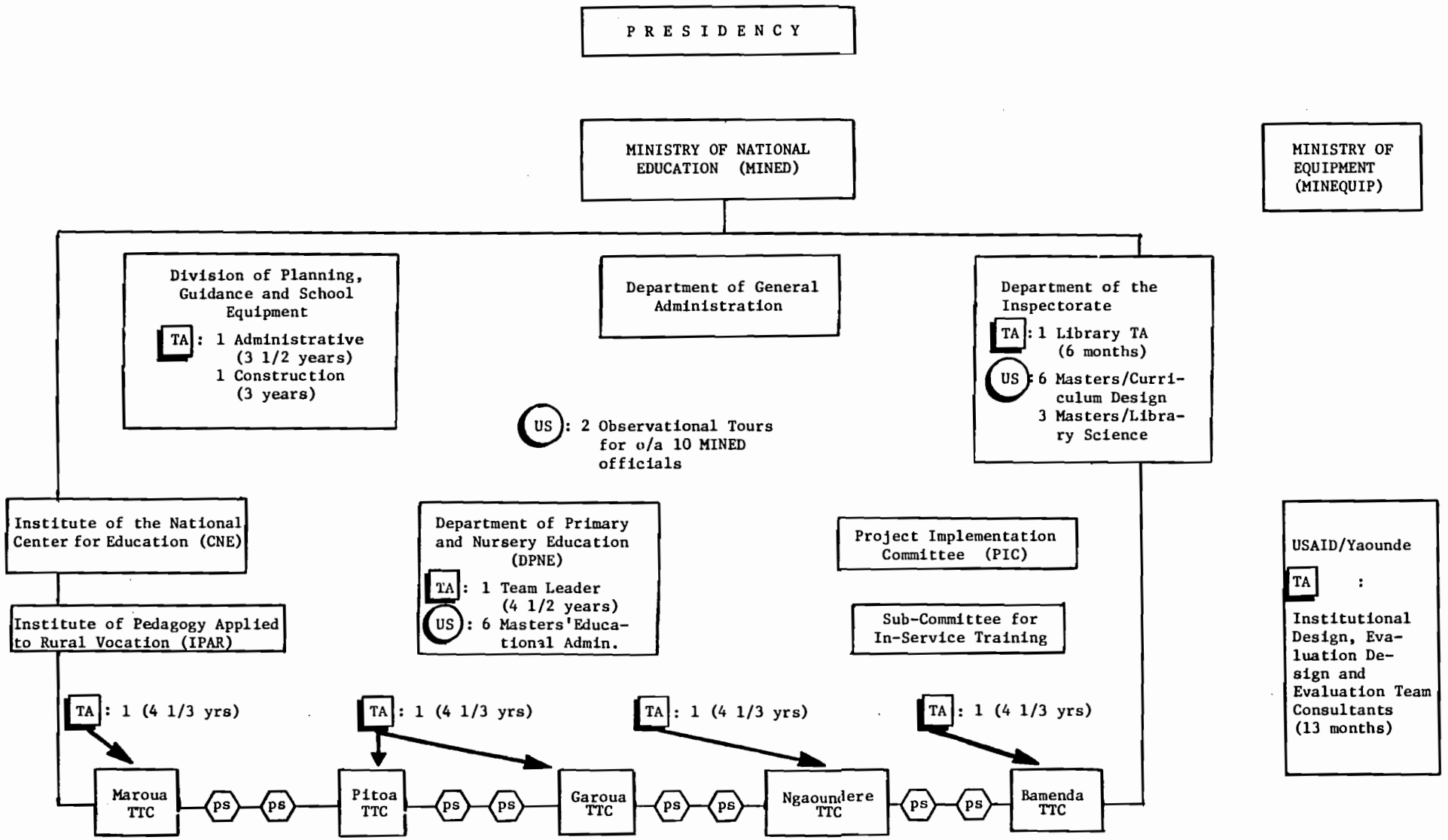
2) Degree Training: Fifteen Cameroonians will complete long-term studies in the United States to the Masters level. Twelve will enroll in Masters of Education programs, and six of these will specialize in educational administration, to later return to MINED's Department of Primary and Nursery Education. The other six will specialize in curriculum design, and return to the Inspectorate. Three Cameroonians will earn Masters degrees in library science for later application within the Insepctorate TTC libraries.

These participants will return to Cameroon by the third year of the project to collaborate closely on implementation with the PIC, the sub-committee on in-service training, and technical experts, and to eventually direct project activities.

It is expected this project's combination of on-the-job technical assistance and U.S. training will give Cameroonians the know-how necessary to assure primary education prepares children for productive roles in their home environment.

The following chart outlines where technical experts and U.S. trained participants will work on the project.

LOCATION AND DURATION OF TECHNICAL EXPERTS, AND LOCATION OF U.S. TRAINED CAMEROONIANS FOR SUPPORT TO PRIMARY EDUCATION PROJECT (631-0033)



TA = Technical Advisor
US = U.S. trained Cameroonian
TTC = Teacher Training College

Budget

Long-term U.S. Training $750,000

- 13.5 person years training in educational administration (6 participants).
- 13.5 person years training in curriculum development and evaluation (6 participants)
- 6.8 person years training in library science (3 participants)

Observation tours in the U.S. - 10 person months $ 44,000

In-Service Training Programs $717,000

- TTC faculty (122 p.m.)	$28,000
- Primary school directors (320 p.m.)	64,000
- TTC staff and divisional inspectors (164 p.m.)	36,000
- Primary school teachers (3.340 p.m.)	581,000
- Library assistants (10 p.m.)	10,000

. Other Costs: $176,000

Vehicle Operating Cost $116,000

Maintenance Incentive ..... $ 60,000

Contingency: $881,000

Inflation: $4,008,000

Total AID Grant $13,712,000

U S A I D L O A N

a. Construction: $8,692,000

New Construction ..... $ 7,387,000
Renovation/Remodeling 219,000
Site Development 1,086,000

b. Commodities: $1,321,000

Furniture and Equipment for TTCs ..... $ 803,000
Furniture and Equipment for Libraries 198,000
21 vehicles for TTCs and Divisional Inspectors 320,000

c. Contingency: $1,001,000

d. Inflation: $5,251,000

Total AID Loan ..... $ 16,265,000

G U R C C O N T R I B U T I O N

Personnel: $ 45,072,000

Student Salaries	$14,026,000
TTC Staff and Faculty salaries	3,571,000
New Teacher Salaries	26,073,000
Upgraded Teacher Salaries	718,000
MINED staff salaries	572,000
Library staff salaries	112,000

Land: $800,000

Additional land acquired at Maroua, Garoua and Ngaoundéré.

Construction: $820,000

A&E work.

Training: $123,000

Participant Travel	$ 75,000
Instructor Travel	44,000
Facility Costs	4,000

Other Costs: $1,214,000

Vehicle Operating Costs	$ 396,000
Facility Maintenance	$ 400,000
Utilities	$ 418,000

Inflation: $ 25,089,000

Total GURC Contribution $ 73,118,000

PART III. PROJECT ANALYSIS

A. Design Methodology

This project evolved with close USAID/GURC collaboration. Consultation with Cameroonian officials on primary education began as early as November 1978. In April 1980, MINED established a committee to work with USAID on the project. In January 1981, this committee increased in membership and status and became the Project Design Committee for the Support to Primary Education Project. A sub-committee was formed in June, 1981 to address issues concerning the in-service training programs and the library system.

These committees have made recommendations such as lengthening the Ecole Normale Supérieure program for primary school directors and inspectors to include training in school administration. In addition, committee members took trips to the North and Northwest provinces where they discussed primary education problems with provincial and departmental officials, and TTC staff.

In sum, the design process has been a project of GURC/USAID collaboration, including open discussion of difficult issues, and joint decision-making.

B. Technical Feasibility

The Support to Primary Education Project will work with an existing educational system to expand its capacity and improve its performance. Most technical feasibility issues are (1) whether the education system will be able to sustain project initiated training programs, and (2) whether the construction and renovation activities for expanding the system satisfy USAID engineering and constructing criteria. The following analysis summarizes discussions of these issues, discussions which are available in full in the annexes indicated below.

1. TTC and Related Training Programs

Cameroonians played key roles in designing training programs in-country pre-service and in-service ones, as well as participant programs in the U.S. For instance, the current educational system provides limited in-service training, such as day-long workshops where inspectors expose teachers to new curriculum and pedagogy. The Project Design Committee decided to use this project to expand such workshops into longer training programs for introducing project and educational reform innovations, and to use TTCs during vacation periods for training sites. The MINED is prepared to pay for the faculty and facilities, transport and other costs for this training. In sum, the participation of the host country in the design of project training programs has tried to assure such programs will be relevant in Cameroonian specific educational needs, and sustainable by host country resources. Annexes G.11, Administrative Analysis, and G.12, Technical Feasibility, elaborate on Cameroon's capacity to carry out the training programs this project proposes. Part II B, Detailed Project Description, describes these training programs.

In terms of on-the-job training by U.S. technical experts, Cameroonian counterpart officials will collaborate with USAID in the selection of experts to assure they have both the technical and interpersonal skills for preparing Cameroonians to manage project initiatives. Annex G.6., Job Desciptions and Qualifications for Technical Experts, describes the role of expatriates in this project.

2. Construction

The TTC sites at Pitoa and Bamenda are large enough to support the new facilities this project envisages. At Garoua and Ngaoundéré, the boundaries have already broadened to allow for proper distancing of roads from buildings. In Maroua, a site of 20 hectares is waiting for the construction of a completely new TTC. With proper landscaping and drainage, all sites are suitable for the proposed structures.

Both the Ministry of Education and the Ministry of Equipment will participate in the design and construction process. MINED's Division of Planning, Guidance and School Equipment can provide draftsmen and a civil engineering technician. The Ministry of Equipment will furnish construction engineers. However, the time these experts can give to any one project is limited. Therefore, to assure thorough technical backstopping, the project will provide supplementary assistance.

USAID will help MINED in finalizing a master plan study through the intervention of a U.S. institutional planner. The GURC, however, will be responsible for A&E project work, for which it has already budgeted funds. There are firms capable of executing A&E plans and preparing contract documents. Among these are American firms with branch offices in Cameroon. There are also construction firms capable of project building, some of which may be American

In addition, a construction technical expert, engaged few months before the beginning of construction, will review the construction contract documents in concert with AID rules and regulations. This person will remain throughout the construction process to assure satisfactory completion of work. This added assistance will enable the appropriate GURC Ministries to implement project construction.

C. Administrative Feasibility:

This section summarizes the administrative capabilities of institutions and experts responsible for project implementation. Refer to Annexes G.11 (Administrative Feasibility) and G.6 (Job Descriptions), as well as Part II B (Detailed Project Description) for more detail.

Although several institutions are involved in the project, two have ultimate implementation authority, the Ministry of Education and USAID/Yaounde.

Turning to MINED, it is important to note Cameroon is one of the most stable countries in Africa. From independence in 1960 until November 1982, one President, Ahmadou Ahidjo governed the country. Over two decades, Ahidjo developed a bureaucratic structure, recently tested and proven effective during the nation's transition to its second President, Paul Biya. Leadership, therefore, is comparatively stable and the Ministries all exist on a legal basis. Hence, the Cameroonian political and legal context within which the project will function provides a firm foundation for implementation.

Turning to USAID, USAID/Yaounde has gained considerable project implementation experience since its arrival in Cameroon in 1960. It now has a direct hire staff of over 20 and convenient access to REDSO/Abidjan resources. The appointment of a direct hire U.S. project officer, a mission project committee, and a Cameroonian assistant project manager, should strengthen project implementation.

D. Social Soundness Analysis

1. Beneficial Effects of the Project

This project will enhance the lives of thousands of people concerned with primary education, namely:

Primary School Teachers: During the five year life of the project approximately 800 unqualified teachers will benefit from in-service project training, and 2,510 new teachers will have access to pre-service training. Thus, the project will provide approximately 21% of the 11,974 primary school teachers called for by 1986-87 in Cameroon's Fifth Five Year Plan.

To unqualified teachers, the project will make available summer in-service courses. These will increase teacher chances of passing professional exams and receiving concomitant salary increases. Priority will go to rural teachers who, during the school year, lack access to professional contacts and organized courses.

The project will train new teachers by improving and expanding TTC facilities. Though primary school teaching is one of the less popular careers in Cameroon, candidates for this training are certain to be available because (1) the government encourages graduates to follow this profession and (2) the scarcity of job opportunities forces graduates to accept such employment.

TTC Faculty and Administrators: TTC faculty and administrators will benefit from U.S. technical experts in residence at the TTCs. These experts will lead in-service training programs and workshops for TTC staff, and be available for informal professional discussions. This interaction should enhance the skills of TTC staff.

Primary School Directors, Administrators, and Inspectors: Primary school directors, administrators and inspectors will also benefit from the project. 7 departmental primary school inspectors will receive project vehicles for regular visiting of rural schools. 42 primary inspectors and 10-20 education directors of private voluntary schools (Christian/Moslem will have access to short in-service courses which focus on skills for improved administration. Other courses will help directors of a total of 785 public and 370 private primary schools improve their pedagogical and administrative skills. Though this in-service training is unlikely to result in salary increases for participants, it will provide attractive government paid transporation and per diem.

Primary School Children: Through this project primary school children will benefit from improved teaching and school administration. Assuming over its five year life that the project will provide in-service training to 800 teachers and pre-service training to 2,510 teachers, and that each teacher will work with a class of 50 children, the project will benefit some 75,500 primary school pupils. Project trained primary school inspectors, directors, and administrators will also improve the lot of primary school students.

Rural Communities: While pockets of resistance to modern schooling do remain, most communities are demanding primary education, as is evidenced by sharply increased enrollments countrywide. For instance, between 1974-79, primary school enrollment annually increased by over 5% in the North and by over 4% in the Northwest.

Nevertheless, remote rural villages continue to prove difficult teaching posts. In the Northern Province, water and food are often scarce. Some schools are as much as a three day walk from transportation, markets, and medical care. Housing and school buildings are often inadequate; teachers and pupils lack books and supplies. Thus, classes are huge (sometimes over 100) and often combine several grades with pupils who have neither texts nor materials. School inspectors rarely, if ever, visit, which contributes to a feeling of isolation and abandonment. Professional advancement exams are difficult to apply for, let alone pass. These conditions discourage many teachers, who finish by deserting the rural communities to which they are posted.

The project cannot solve all these problems, but it will help teachers cope better with life in rural communities. Specifically, the project will provide additional teachers for the reduction of large classes. Further, TTC training will include practice teaching in rural areas to condition students for village service. Training will also include manual skills for construction of desks, schoolrooms, and latrines with local

materials, all of which should encourage teachers to work with pupils on the upgrading of school environments. In-service courses, and more frequent and better supervision from upgraded directors and inspectors, will increase teacher contributions to rural communities.

Women: Cameroonian law already guarantees women equal opportunies for schooling and employment. Nevertheless, female primary school students and teachers are in the minority in both the North and Northwest provinces. The reasons are several. Boys always have outnumbered girls at all levels of schooling. Moslem parents are particularly reluctant to educate their daughters. Thus, in the final year of primary school, the male/female ratio is 3:2 in the Northwest and 4:1 in the North. Given this trend, it is not surprising the pool of women candidates for TTCs is much smaller than that of men. At present, TTC students are about 90% men (except in the Northwest, where the most recent class has equal numbers of men and women, but all live off campus). The Northern TTCs have dormitory space for men, but little, if any, for women. And women constitute only 20% of the teachers in the Northwest and less than 12% in the North.

Some school administrators argue that training women teachers is futile, because once married, women must teach near their husbands' work, which is nearly always urban. Thus marriage often precludes women's serving at rural posts, which need teachers the most. In addition, many believe unmarried women are incapable of handling difficult rural posts unless assigned to home villages.

This cultural bias in favor of males as primary school pupils and teachers is likely to remain strong for a long time particularly in the North. This project cannot aim to reverse these tendencies, but it will provide more opportunities for women teachers. For instance, project constructed TTC dormitories for women should encourage more women to attend TTCs, as should project initiatives to recruit rural women for TTC programs, and reassignment to home villages or surrounding areas. In addition, under this project every consideration will be given to women in the selection of candidates for U.S. short and long term training

In sum, it is expected that as a result of this project, more women will enter primary school teaching.

Additional information relevant to this project's social soundness appears in Annex G.3, Social Soundness Analysis.

E. Engineering Analysis:

The USAID/Yaounde General Engineering Officer and the architect/planner assigned to the project design team have visited the project sites several times. They have worked closely and frequently consulted with the Division of Planning, Guidance and School Equipment of the Ministry of National Education. Their visits, studies, and consultations with the GURC have resulted in recommendations for a program of construction to meet project needs. Details on the proposed construction program appear in Annex G.2, Facilities Design and Construction.

F. Financial Analysis and Plan

1. The Determinants of Financial Absorptive Capacity

The long term financial viability of the present project depends primarily upon the ability of the GURC to absorb the incremental costs generated by the project both during the project and after project completion. This ability, in turn is related primarily to the government's revenues, its growth and stability. The willingness of the GURC to absorb these costs, on the other hand, will be indicated by the budgetary allocations to MINED within the GURC budget. Ultimately, of course, these will be determined by the continued strength of the Cameroonian economy. Trends in these major macroeconomic variables are examined in depth in Annex H, Economic and Financial Exhibits. The most important conclusions to be drawn from them, from the perspective of the present analysis, are summarized below.

Cameroon has experienced a sustained, strong and broadly based expansion in economic activity since achieving independence in 1960. It has managed to do so while maintaining an extraordinarily high degree of financial stability. This is due in large part to the combined effects of a high level of investment, sound fiscal management, and a continued attractiveness for foreign assistance and investment.

In looking forward to the next decade, the variety of agricultural exports., the evolving strength of the oil industry, a gradually increasing domestic manufacturing capacity and the GURC's continued strong emphasis upon agricultural development allow for continued optimism. USAID/Cameroon projects an average annual rate of four percent in the GDP throughout the current five year plan, which terminates in 1986.

2. GURC Finances

During the period 1974-1981 non-petroleum revenues rose at an average annual rate of 23 percent. Budgetary expenditures during the same period increased by an average of 20 percent. The result was a fiscal surplus for most of the period. This surplus has, of course, allowed an expanded government budget.

Budgeted revenues and expenditures have increasingly underestimated the GURC's total income and expenditures in recent years. This is due to the GURC's policy of playing in low key its income from petroleum. To avoid the economic distortions and dislocations that so frequently result from the coming on stream of sizeable export earnings from petroleum - neighboring Nigeria and Gabon being just two examples - the GURC has not permitted the publication of any official information about the dimensions of the petroleum industry. Gradually, however, much information has become available through unofficial sources. From a modest beginning in 1977, production has recently fluctuated between 100,000 and 118,000 barrels per day, or about 5.1 to 5.9 million tons per year. By the end of 1983 production could be as high as 140,000 b/d, or 7.3 million tons per year. Even with the recent decline in OPEC's reference base price to below $30 per

barrel, and excluding the million or so tons consumed domestically, the GURC's annual revenues would still amount to approximately one billion dollars.

3. GURC Expenditures for Education

Education has consistently been the largest single functional item in the GURC budget outside of the general public services category. As a percent of total budgetary expenditure, education has recently accounted for between 17.0 and 18.5 percent.

Within the budget of MINED, the primary item of expenditure is salaries. The general personnel category represented 86 percent of total ministry expenditures for both the 1979/80 and the 1980/81 fiscal years. Unfortunately, the budget format does not allow for separation of teacher salaries by level, either in the aggregate or by province.

4. Recurrent Costs

Three major types of recurrent cost effects will result from the project. They are the support costs and salary effects for the preservice, inservice and participant training programs; the increased maintenance and replacement costs created by the construction activities; and the effect of the loan component upon the debt service requirements of the GURC. Because of the extended period of time over which these effects may be expected to accrue, the following discussion will concentrate upon the fiscal years between 1984/85 and 1993/94.

a) Preservice and Inservice Training and Maintenance Costs

The preservice and inservice training programs effects will be of three main types; effects on the cost of student stipends, effects on faculty and staff salaries, and effects on the wages paid to graduates. Table 4.4 summarizes their effects over the ten year period. The assumptions upon which the estimated costs are based together with a detailed description of each line item for each of five schools appear in Annex H. It should be noted that only the incremental costs that arise directly from the proposed project are included.

Maintenance expenses for buildings and vehicles also appear in Table 4.4. Replacement costs will be limited to the need to replace the original eleven vehicles which were purchased in the first year of the project.

b) Debt Service Costs

The annual cost of serving the loan portion of the project amounts to approximately $325,000 during the 10 year grace period. Annual payments will increase to about $830,000 when repayment of the principal begins in 1995/96.

c) Long Term Recurrent Costs

Because of the cumulative nature of the teacher output process, and the fact that the TTC program outputs will only reach their new levels in the final year of the project period, the lower recurrent costs in the first years of implementation are somewhat deceptive. Between 1989/90 and 1993/94 the incremental costs to the GURC for the new and upgraded teachers salaries increase from $3.6 million to $10.8 million. Other recurrent costs show no such dramatic increase.

5. Absorptive Capacity

As indicated in the discussion of GURC finances, there are good reasons for a generally sanguine perspective of GURC revenues over the next five years. The educational finance section demonstrated that the GURC has a strong record of sustained support for education.

The 1982/83 budget for MINED of $160.6 million allows for absorption of the project's costs with little difficulty. Assuming a constant budget in real CFAF over the five year project period - which is extremely conservative - total GURC costs for the project would amount to 9.1 percent of the total MINED budget i.e., 73.1 million/$803 million. It is obvious from this figure that the absorption of project costs - even accounting for the 42 million of costs for which the GURC would be obligated even without the project - requires continued growth for the MINED budget in real terms. A more realistic growth rate would be ten percent per year in real terms. This would result in a 1984/85 to 1988/89 MINED budget equal to $960 million. The effect of the project would only be 7.61 percent.

The continuing increase in personnel obligations reflected in Table 4.4 does raise the need for the GURC to consider carefully its long term teacher development strategy. The concurrent programs proposed for funding under the 4th IBRD loan would result in personnel obligations equal to or larger than those created by this AID project. A major factor in all this is the relatively high salary levels for students and teachers alike within the GURC public service.

In conclusion, absorption of recurrent costs will require continued growth in the economy with resultant GURC and MINED real budgetary increases. The expected levels of such increase, combined with a program of moderate salary increases, should allow for absorption of the project-generated costs with no effect upon other MINED activities.

6. Financial Planning

The following Tables (F.1 to F.4) provide a breakdown of estimated project costs and financial contributions to be made by the GURC and AID.

TABLE F.1

USAID GRANT-FUNDED EXPENDITURES BY FISCAL YEAR

($000)

	FY 84	FY 85	FY 86	FY 87	FY 88	TOTAL
TECHNICAL ASSISTANCE						
Long-Term TA	736	1266	1950	1256	796	6004
Short-Term TA	15	33	35	15	-	98
Evaluation Team	-	-	58	-	58	116
TOTAL	751	1299	2043	1271	854	6218
PERSONNEL						
Support Staff	5	27	31	32	32	127
COMMODITIES						
Vehicles/Spare parts	105	-	-	-	-	105
Furnishings/Appliances	147	-	-	-	-	147
Office Funriture/Equipment	8	-	-	-	-	8
Supplies	2	6	7	6	4	25
Library books/Periodicals	-	244	57	57	57	415
Library Supplies	-	-	10	10	10	30
Maintenance Kits	-	13	-	-	-	13
Training Materials	-	8	8	15	15	46
TOTAL	262	271	82	88	86	789

TABLE F.1 con't

	FY 84	FY 85	FY 86	FY 87	FY 88	TOTAL
TRAINING						
Long-Term U.S.	167	333	250	-	-	750
Observation Tours, U.S.	-	22	22	-	-	44
Workshops:						
TTC Professors	-	7	7	7	7	28
School Directors	-	16	16	16	16	64
Admin. Inspectors	-	9	9	9	9	36
Teachers	-	87	94	200	200	581
Seminar - Yaounde	10	-	-	-	-	10
	177	474	398	232	232	1513
OTHER COSTS						
Vehicles Operations	7	22	28	30	29	116
Maintenance Incentive	-	-	-	40	20	60
	7	22	28	70	49	176
COSTS BEFORE CONTINGENCY AND INFLATION	1202	2093	2582	1693	1253	8323
Contingency (19%)	120	209	253	169	125	881
Inflation (12% compounded)	159	585	1147	1067	1050	4008
TOTAL EXPENDITURES	1481	2887	3987	2929	2428	13712

TABLE F.2

USAID LOAN-FUNDED EXPENDITURES BY FISCAL YEAR.

($000)

	FY 84	FY 85	FY 86	FY 87	FY 88	TOTAL
CONSTRUCTION						
Site Development	-	108	489	329	160	1086
New Construction	-	739	3324	2217	1107	7387
Renovation/Remodelling	-	22	98	67	32	219
	-	869	3911	2613	1299	8692
COMMODITIES						
Furniture/Equipment	-	-	803	-	-	803
Library furn/equip	-	-	198	-	-	198
Vehicles	-	320	-	-	-	320
	-	320	1001	-	-	1321
COSTS BEFORE CONTINGENCY & INFLATION	-	1189	4912	2613	1299	10013
Contingency (10%)	-	119	491	261	130	1001
Inflation (12% compounded)	-	332	483	1647	1089	5251
TOTAL EXPENDITURES	-	1640	7586	4521	2518	16265

TABLE F.3

GURC EXPENDITURES BY FISCAL YEAR

($000)

	FY84/85	FY85/86	FY86/87	FY87/88	FY88/89	TOTAL
PERSONNEL						
Student stipends	2665	2665	2665	2665	3366	14026[1/]
TTC Faculty and staff	650	650	728	728	815	3571[1/]
New Teachers salaries		2382	4765	7380	11546	26073[3/]
Upgraded Techers salaries	-	-	-	239	479	718[3/]
MINED staff	-	-	118	217	237	572[1/]
Library staff	-	-	21	45	46	112[3/]
TOTAL	3315	5697	8297	11274	16489	45072
LAND	800	-	-	-	-	800[1/]
CONSTRUCTION						
A&E Work	820	-	-	-	-	820[2/]
TRAINING						
Participant travel	13	33	29	-	-	75[2/]
Instructor travel	-	11	11	11	11	44[3/]
Facility costs	-	1	1	1	1	4[3/]
TOTAL	13	45	41	12	12	123
OTHER COSTS						
Vehicle maintenance & operation	20	29	98	117	132	396[3/]
Facility maintenance	60	60	60	100	120	400[3/]
Utilities	52	52	52	131	131	418[3/]
TOTAL	132	141	210	348	383	1214
COSTS BEFORE INFLATION	5080	5883	8548	11634	16884	48029
Inflation (12% compounded)	610	1494	3453	6666	12866	25089[4/]
TOTAL EXPENDITURES	5690	7377	12001	18300	29750	73118

NOTES: 1/ - In kind costs, already incurred by or projected by GURC.
2/ - New, non recurring costs
3/ - New recurring costs
4/ - Not necessary fpr GURC budgetary purposes, but needed for comparability with USAID contribution.

TABLE F.4

COSTING OF PROJECT INPUT/OUTPUTS

($000)

	PROJECT OUTPUTS								
	In-service training programs				Pre-Service training teachers		TTC facility		
	TTC Professors	TTC Admin. staff & inspectors	Primary school Directors	Primary school teachers	Students	Graduated teachers	Improve-ments & expansion	TOTAL	% of project costs
USAID GRANT FUNDS									
Technical assistance	629	628	629	628	2211	396	1097	6218	6.0
Personnel	12	12	12	12	44	9	26	127	0.1
Commodities	34	36	38	41	548	20	72	789	0.7
Training	116	122	169	691	363	42	10	1513	1.4
Other costs	12	11	12	11	40	7	83	176	0.2
Contingency	80	81	86	138	320	47	129	881	0.9
Inflation	291	292	320	604	1119	176	1206	4008	3.9
TOTAL	1174	1182	1266	2125	4645	697	2623	13712	13.3
USAID LOAN FUNDS									
Construction	408	408	408	408	1631	1631	3798	8692	8.4
Commodities	80	128	80	80	271	223	459	1321	1.3
Contingency	49	54	49	49	190	185	425	1001	1.0
Inflation	207	222	207	207	811	795	2802	5251	5.1
TOTAL	744	812	744	744	2903	2834	7484	16265	15.8
GURC FUNDS									
Personnel	2550	1369	181	718	14026	26073	155	45072	43.7
Land	-	-	-	80	80	80	560	800	0.8
Construction	41	41	41	41	164	164	328	820	0.8
Training	23	23	23	18	29	5	2	123	0.1
Other costs	68	127	68	118	202	142	489	1214	1.2
Inflation	193	219	133	2360	3533	18242	409	25089	24.3
TOTAL	2875	1779	446	3335	18034	44706	1943	73115	70.9
TOTAL PROJECT COSTS	4793	3773	2456	6204	25582	48237	12050	103095	100.0
% of Project Costs	4.6	3.7	2.4	6.0	24.8	46.8	11.7	100.0	

G. Economic Analysis

The economic analysis of social investment programs in areas such as primary education presents special problems in that the project outputs and the resultant benefit streams are extremely difficult to monetize. Indeed, the more competent and responsible the analyst the less willing he or she will be to engage in processes which result in a "quantification of the unknowable". However, project judgments require the maximum amount of quantitative, even if not monetary, data on project benefits, outcomes and costs.

The appropriate compromise is: (1) to detail to the extent possible the nature and incidence of the project benefit stream; (2) to link project outputs to benefits and evaluate the efficiency of this linkage; (3) to specify all project costs - direct and recurrent - in terms of probable incidence and amount; (4) to review the nature of internal efficiencies, i.e., the fit of inputs to outputs; and (5) to examine the overall incentive configuration of the project (subsidies, salaries, assignment policies, etc) and the degree of congruence of the incentives with desired project outcomes and eventual benefits. Each of these factors are examined below.

Cost Benefit Analysis

The possibility of employing cost/benefit analysis to determine the project's rate of return was examined in depth. The use of the procedure had to be rejected. The necessary data were simply not available. Virtually no attempt has even been made to estimate the rate of return to primary or any kind of education in the country. Indeed, such basic data as primary school enrollment figures are seldom available sooner than 18 months after the school year begins. Even when they do become available the data are inaccurate, inconsistent and incomplete.

The preliminary steps which were taken prior to rejection of the cost/benefit approach did, however, prove to be extremely useful. Starting with projected project costs, a number of benefit streams were derived which resulted, in turn, in net benefit streams yielding an IRR of 15 percent. This is generally the minimum pay-off acceptable for demonstrating that a project warrants Agency support. Reductions in repetition and dropout rates were then simulated to determine the likely range of magnitude that improvements in these internal efficiencies could have upon the stream of benefits necessary to generate the required 15 percent IRR. The exercise determined that reductions in repetition and dropout rates could not be expected to contribute more than a modest 10 to 15 percent of the required benefits. Even if the project resulted in the complete elimination of repetition and dropout in the two target provinces within a decade, that is, by 1993/94 - an exceedingly ambitious undertaking - it would result in no more than 22 percent of the benefits required. It should be noted, however, that the project is designed to affect a much wider variety of factors which influence internal efficiency.

Improvements in the administration of the TTCs and in the primary schools, for example, should also result in substantial improvements in the internal efficiency of the entire system of primary education in the two provinces. They would be extremely difficult to quantify, however. Even if they were half as large as those that would result from the complete elimination of repetition and dropout, fully two-thirds of -the benefits necessary to produce an IRR of 15 percent would still have to come from other sources.

The other important source of benefits, of course, are those which are external to the educational system itself. Such externalities represent a variety of benefits that accrue to the individuals who are affected by the system of primary education. The benefits may arise in the form of higher productivity of farmers or workers, improved health resulting from better hygenic and nutritional practices, or the increased psychic satisfaction obtained from any of the activities.

Using a range of rates of return for individuals derived from studies from other LDCs, some of which were African, the amount of potential benefits arising from the project was estimated These estimates produced highly positive results. Indeed, if the project were to result in a permanent increase in individual productivity for the graduated primary school students in the two provinces along the magnitude of from 20 percent annually with the existing system of education to 25 percent with the project a fairly modest increase, incidentally - an IRR of 15 would be easily surpassed. And this would not take into account any spread effects to those not directly receiving instruction.

Thus, while data considerations prevented a sufficiently definitive cost benefit analysis from being performed, the project would certainly appear, judging from prospective returns, to lead to acceptable results.

Cost Effectiveness Issues

This form of economic analysis involves primarily a quantitative estimate of costs and a qualitative evaluation of benefits. The project's costs are presented in the financial analysis section of this paper. The benefits include improved TTC facilities, more teachers, increased teaching quality, and eventually more children receiving a better quality education. The latter is, of course, the basic rationale behind the project. Studies by the IBRD and other development specialists have shown that a primary education program that provides training in literacy, numeracy, and life and environmental sciences can reduce infant mortality, fertility, and general morbidity, improve local participation in political and social activity, and increase access to and use of information, provide a means for women and the rural poor to improve their status and social equity,

increase agricultural and general productivity, and increase employment and training options. One may assume that a long-term result of the project would be direct economic gains for those taught in the schools. It is important to note, however, that a project such as this creates necessary but not sufficient conditions for realization of the economic benefits ascribed to the project. Many of the factors leading to such gains are not within the control of the project. Nonetheless, given the generally prosperous economic forecasts for Cameroon and the GURC's evidenced commitment to a regionally-based economic development strategy, the confidence which one can place in the project's economic benefits is reinforced.

1. Project Benefits

To whom do the benefits accrue and what are the linkages between benefits and project outputs ? The benefits are divisible into four main categories:

(a) Affected Institutions
(b) Affected Personnel
(c) Students and Their Families
(d) The GURC and Cameroonian Society as a Whole

(a) Affected Institutions

Since the project uses institutional support as the major vehicle for its attempt to promote primary education, the initial impact will be upon these organizational structures. The TTC's are, of course, the major institutional beneficiaries. They will receive new facilities, refurbishment and expansion of present facilities, vehicles, equipment and furniture. In addition, the Inspector General of Pedagogy will receive three MA graduates and the Department of Primary School Inspectors will receive a vehicle for each inspector. In-service training will be provided to inspectors and sub-inspectors to upgrade their administrative capabilities.

(b) Affected Personnel

Affected personnel include TTC students, faculty and staff, primary school teachers, directors and inspectors and the five participants trained to the MA level in the U.S. A larger number of TTC students will benefit from the higher level of training that they will receive as a result of upgraded facilities and faculty. The TTC faculty and staff will benefit from the improved facilities and from the in-service training they will receive. Unqualified teachers will benefit from the in-service training program both in terms of greater competence and the opportunity for a higher public service classification and a higher salary. The primary school directors and inspectors will benefit from their improved administrative skills, as well as the mutual support that they will be able to provide each other through enhanced communication. Finally, the five individuals trained to the master's level will benefit through increased competence, responsibility and salary.

c) Students and Families

The ultimate beneficiaries will be the students who attend primary schools in the two provinces and their families. The 210 additional teachers produced by the project will, assuming that each of them teaches an average of 50 students, result in an additional 13,000 receiving instruction each year. If the goal of the project is realized, these students will have greater access to primary schools, face lower student/teacher ratios, experience higher retention and lower dropout rates, have better qualified teachers, and receive a more relevant and practical education.

d) The GURC and Cameroonian Society as a Whole

In social investment projects, the justification for project activities depends ultimately upon the benefits generated for the society. Cameroon as a whole obviously receives the sum of the individual and institutional benefits discussed above. There are, however, three very special forms of benefits which the project will generate.

1) The project will facilitate the GURC's efforts to modify the inherited colonial model to one better adapted to Cameroonian reality.
2) The programs of in-service and expanded pre-service teacher training will be useful in the subsequent design of extensive training programs for implementing the national primary education reform plan.
3) The GURC and Cameroonian society will benefit from the increased allocative and distributive improvements in the local economy which result from increased and more relevant education within the two provinces.

2. Project Costs

Project costs are discussed in detail in the financial analysis section. It is only necessary to emphasize here that the proposed project does not appear to involve any substantial negative externalities. Because the major effect of increased quantity and quality of graduates will be to raise skill levels in rural economic activities, there should be fewer problems than are normally found in educational expansion projects of producing adverse labor market effects for other levels of school leavers or for uneducated or less educated sectors of the population.

3. Project Alternatives

Cost-effectiveness discussions are meaningful only in terms of alternative ways the project budget could be expended and to evaluate the relative effectiveness of these expenditures in terms of the stated goals of wider access, higher rates of retention, and better quality of primary school graduates. The major opportunities foregone by investing in the project appear to be:

a) Direct financing of primary school buildings, facilities, and equipment;

b) A restriction of financing to construction activities at ENS and the TTCs;

c) A concentration of funding on activities designed to improve the planning and implementation capacity of the MINED;

d) Direct financing of literacy and numeracy skill acquisition through a nonformal education program.

As data in the background section indicates, the primary education problem in the North and Northwest is not created by an aggregate shortage of classrooms. While there is a distributional problem - areas of growing parental demand may not have an adequate number of facilities - the major constraint on improvements in the quantity and quality of primary education is teacher supply. In addition, school construction in the North and Northwest involves a large degree of local effort. It appears favorable for the long-term development of educational policy to maintain this type of local participation. Certainly the forms of schools which exist are extremely rudimentary, but they are not at great variance with the indigenous styles of housing and the schools are similar in construction to those found in other nations in the region. A program which only expanded classroom construction would simply aggravate the present imbalance between facilities and teacher supply and do little to improve the actual quality of classroom experience and increase the number of students.

It is possible to question the balance between construction expenditures and the financing of training and technical assistance. One alternative to the project would be to restrict financing to construction activity at the major sources of teacher supply. Increasing the capacity of the ENS would lead eventually to more teaching staff for the TTCs in the North and Northwest. Increased construction at these same TTCs would lead to a greater production of qualified teachers.

Again, however, facilities and equipment are only a part of the teacher training problem for the North and Northwest. Institutional administration, planning, and curricular revisions are all required if the investments in construction are to be meaningful. A program which would finance only construction (or even construction plus maintenance) would simply establish one necessary condition - but a far from sufficient one - for the attainment of the project's goals.

The last two alternatives deserve special consideration because both represent activities which are valuable in themselves, but also are complementary to the project activities. The operation of the MINED is beset by all of the problems of coordination and management that one would expect in a rapidly evolving bureaucratic structure with a wide range of functions and high social (and political) visibility. There is a need for improvement in the MINED's management and planning skills. To an important degree the success of the project, both during implementation and in the long term, will be dependent in part upon the administrative capacity of the MINED's participating units.

The USAID is considering a program of assistance to the MINED's planning unit. Assuming that both the Agricultural Education project and the Support to Primary Education project become operational, the USAID should seriously consider expanding the assistance program to include participant training and increased technical assistance to improve this unit's management and operational skills. However, this should not be viewed as an alternative to the project. It would not impact directly on the regional, institutional, and individual benefits the project is designed to promote. It would, however, facilitate these benefits and implementation of the project will increase the need for administrative and technical improvement in the MINED generally and the planning unit specifically.

Other management/administrative reforms within the MINED lie outside the scope of USAID's present priorities and are properly a matter for GURC initiation. Yet the administrative capacity of the MINED is one of the largest question marks in regard to the project's success. Normally, financial absorptive capacity is the crucial issue in project design. As the preceeding financial analysis shows, however, in this case it is not a dramatic issue (except in terms of the GURC's willingness to absorb the recurrent cost effect).

The final alternative to be considered is that of a non-formal educational program. The potential benefits of a literacy/numeracy program for adults and young school leavers are substantial. The justification for preference at this time for a program which emphasizes investment in the formal education system are the following.

First, the GURC investment in primary education is substantial and increasing. The present state of teacher preparation is a major barrier to the efficient utilization of these expenditures. To the extent that the project can aid in the rationalization of the primary education budget, it will have had a major program impact. The rationalization should be accomplished primarily through the project's impact upon the quality of teachers and the implementation of a primary curriculum which assures graduates of the primary education cycle of skills relevant to local occupational alternatives as well as to higher levels of education. The assistance to Departmental Inspectors is especially important in this regard.

Second, by working within the formal primary education system, the project gains leverage for the USAID expenditures. As the figures in the financial analysis section have shown, the USAID contribution will elicit a significant increase in expenditure from the GURC. Thus USAID is able to credit a multiple effect for every dollar expended. Because of the fixed governmental commitment to formal education, there is little chance the GURC could fund participation in a nonformal program to a significant level. However, USAID should continue to explore the possibility of assistance to nonformal education, either as an extension to the present USAID nonformal education project or as a complement to the Support to Primary Education Project.

A third factor justifying USAID support to formal primary education is the GURC's expressed desire to reform the primary education system and to implement an applied practical curriculum. This break with the French elitist model is a significant event for Francophone Africa and has great relevance for the lives of rural people in Cameroon. It is these groups which have been most poorly served by the traditional curriculum. Admittedly, assistance at the higher levels of education might provide greater opportunities for influencing the formation of the nation's leadership elite. Politics aside, however, the long-term economic and societal effect of the project is potentially more profound than would be any alternative activities at higher educational levels.

Part IV: IMPLEMENTATION ARRANGEMENTS

A. Introduction

Successful implementation of this project hinges upon the collaborative assistance approach and cooperation between the Government of Cameroon, USAID, and U.S. experts. Part II, Exhibit II B a iii 1-3 of this paper describes the GURC organizational and institutional structure responsible for elaborating and monitoring the implementation sequence on an annual basis. The Technical and Administrative Feasibility Section of Part III of this paper, as well as Annex G 8, explain the contributions expected of USAID and U.S. experts during project implementation. Details on implementation sequencing and scheduling are located in Annex I.

B. Administrative Arrangements

1. The Government of Cameroon

a. The Ministry of National Education (MINED). MINED is the government agency responsible for project implementation. The Minister of Education has appointed the Project Implementation Committee and the sub-committee for in-service training, to assume responsibility for coordination. decision-making, and the development of in-service training programs.

Within MINED, the Department of Primary and Nursery Education, the Planning, Guidance, and School Equipment Division, and the Inspectorate will have implementation responsibilities.

The Project Implementation Committee will be the major monitoring unit within MINED.

b. The Ministry of Equipment and the Office of the Presidency
The Ministry of Equipment and the Office of the Presidency, in collaboration with MINED's Planning, Guidance, and School Equipment Division, will be responsible for overseeing and monitoring the architectural and engineering work, contractor selection, and all construction activities.

c. The Institute of Pedagogy Applied to Rural Vocation (IPAR)
Both IPAR/Yaounde and IPAR/Buea, especially active in curriculum development, will take part in project implementation through membership in the sub-committee for in-service training.

d. The National Center for Education. The National Center for Education will also take part in project implementation through its membership in the sub-committee for in-service training.

2. USAID/Yaounde

USAID, along with the Project Implementation Committee, will have major responsibility for monitoring project activities and for evaluating the performance of the project's technical assistance team. The USAID project officer, a direct hire AID employee, will be responsible for overall project administration. A staff, including an engineer, a procurement specialist, a controller, and a Cameroonian assistant project manager, will work with this person.

C. Technical Assistance Plan

The total technical assistance package contains 29.81 person years of long-term technical assistance, 19 person months of short-term technical assistance, including 10 person months for an evaluation team, and 27.8 person years of local support personnel. Annex I, the Implementing and Planning Exhibits, indicate timing of assistance.

The long-term technical experts who will provide assistance include:

1. The team leader who will be assigned to the Department of Primary and Nursery Education for 4.5 years;
2. The administration technical expert who will be assigned for 3 years to MINED Dvision of Planning, Guidance and School Equipment;
3. Technical experts at Teacher Training College sites. Garoua and Pitoa will share an expert throughout the project, Ngaoundere and Maroua will each have an expert in the first two years of the project, but will share one during the remainder of the project; Bamenda will have its own expert throughout the project;
4. And a construction expert assigned to the MINED Division of Planning, Guidance, and School Equipment for 2.3 years.

Short-term technical assistants include:

1. a library advisor who will spend six months in Cameroon and one month in the United States;
2. an institutional design consultant who will work two months;
3. an evaluation consultant who will work one month in Cameroon at the start of the project to set-up the evaluation design and baseline study system; and
4. an evaluation team composed of five short-term consultants who will spend one month in Cameroon in Year Three and Year Five conducting a formative and summative evaluation, respectively.

D. Training Plan

A total of 10 person months of short-term training and 33.8 person years of long-term training are included. Refer to Annex I, Implementing and Planning Exhibits for further details.

1. Short-term training

Two observational tours will be organized for MINED officials, one in year 1 and one in year 3. Five officials will travel to the U.S. for one month visiting teacher training colleges, primary schools, educational administration experts, and educational research institutes. The contractor will be responsible for these tours.

2. Long-term training

This project will train fifteen people to the Masters level. Three wil be registered in Masters of Library Science Programs. The other twelve candidates will be enrolled in Masters of Education programs. Six will specialize in educational administration and will be posted to DPNE after graduation. Six will specialize in curriculum design and be posted in the Inspectorate after graduation.

The Ministry of Education is responsible for the selection of the MA candidates. The Minister will make the final selection decision. USAID/Y must approve all candidates.

DS/IT is responsible for placing the candidates in appropriate programs and monitoring their progress. The candidates will receive language training and educational and cultural orientation, probably at Georgetown University, before beginning their studies. The Team Leader will be responsible for working with DS/IT to arrange appropriate summer experiences for the Masters of Education candidates. The library TA will assist in arranging summer experiences for the Masters of Library Science candidates.

E. Construction Plan

A detailed discussion of the construction program is presented in Annex G.2 Educational Facilities and Design, which includes a schedule for dates and responsibilities.

The construction has two main components, the Architectural and Engineering services and the Construction.

1. Architectural and Engineering work

The groundwork for assuring the A&E services for this project could begin before the project agreement is signed. Throughout the entire sevices the A&E firm will frequently consult with the Ministry of Equipment, Ministry of Education, and USAID to be sure that the work meets hos country needs and USAID requirements. An American institutional design consultant, who will elaborate the master plans, will also be present to review the plans with the Ministry of Education and Ministry of Equipment at the end of each phase.

a) The planning, or front-end phase.

This phase includes project programming, site surveys, schematic designs, and, most importantly, a master plan. This work should take approximately nine months.

b) The A&E Phase

This phase includes design development and working drawings and specifications. Including approval times, it should take about 8 months to complete.

2. Construction

AID will finance project construction. Upon A&E work completion, bid documents will go to the Presidency, which will prepare requests for bids and publish them locally and in the Commerce Business Daily. A panel at the Presidency will publicly open bids and review them. It will select a construction firm or firms, and assure contract negotiation, as well as the preparation and issuing of a work order. USAID approval is necessary at each stage of this process. For this project one large and/or several small construction companies may be selected to assure construction begins simultaneously at all five project sites.

Construction will comprise two phases:

a) Program improvement

This will consist of constructing buildings such as libraries, workshops, and science and domestic science laboratories which will improve the quality of the TTC program. These buildings have highest priority and will be started first. They should be completed in 14 months.

b) Program expansion

This will consist of constructing buildings such as classrooms, dormitories, and dining rooms needed to expand the number of students at the TTCs. This construction will have second priority and will begin approximately six months after improvement work has begun. It should be completed within 15 months.

Site development, installing utilities, walkways and roads, and grading will occur throughout the construction process.

The Ministries of Equipment and Education, and a project construction technical expert will monitor project construction.

E. Procurement Plan

A detailed discussion of the commodity procurement plan appears in Annex I.3, Procurement Plan and Indicative Equipment List.

The following is a summary of this discussion:

1. Procurement responsibility:

MINED will be responsible for all local procurement except household furniture and vehicles for the TAs, if any are purchased locally, and construction materials. The contractor or USAID will do all off-shore procurement. Procurement documents will be submitted to USAID for approval.

2. Waivers:

The following source/origin waivers from Code 000 to 935 have been requested. A detailed description of the items to be procured and justifications for the waiver requests appears in the procurement plan.

a) $415,000 for books and periodicals for the libraries

b) $ 90,000 for five twenty-passenger vans with spare parts and tools.

c) $300,000 for equipment, appliances, supplies, maintenance kits, and in-service training materials.

PART V: Monitoring and Evaluation Arrangements

A. Project Monitoring System:

This section describes who the key decision makers are with monitoring responsibility for the project, their sources of monitoring information, and how they will employ the information to improve project implementation. Chart V-A illustrates the project monitoring system.

1. Key Decision Makers:

There are two project-specific groups which must monitor project activities. These include a) the USAID Project Officer, Mission Engineer, and the Project Committee; b) the MINED Department of Primary and Nursery Education, Department of Planning, Orientation and Scholastic Equipment, and the Project Implementation Committee. These groups have the responsibility for assuring that the project is being implemented as designe and for solving problems which arise.

2. Source of Monitoring Information:

a) Reports of Technical Experts

Long term technical assistants are strategically placed in all major project areas and serve as the major source of information regarding the progress made in project activities. TA's will be responsible for submitting to USAID and to the Project Implementation Committee monthly reports during the first year of the project and quarterly and annual summary reports thereafter. [A format will be developed for the monthly reports, so that these reports will elicit very specific information on project activities and outputs, not only on the random events of the reporting period. In addition, the team leader will be required to submit a summary report each year listing project activities for the subsequent year, as well as a workplan for each technical assistant.]

b) Reports of the MINED:

Current, regularly produced MINED reports will be used as a source of project monitoring and evaluation information. These reports include information on number of students who complete primary school, number of repeaters, drop-out rate, enrollment rates, etc. An evaluation consultant will diagnose the current MINED information system and determine how it can best serve to provide feedback for project interventions.

c) Site visits:

USAID Officer and MINED PIC site visits will provide information on project activities. Site visits should assess: primary schools, divisional inspectorates, construction activities at TTC's (team should include Mission Engineer), in-service

training courses, and pre-service training courses.

d) Reports of the Sub-Committee for In-service Training:

This Sub-Committee should submit quarterly written reports to the Project Implementation Committee and USAID on progress in the development and implementation of in-service training programs.

e) Visit Reports of Short-term Technicians:

Each short-term consultant must submit a report to USAID and the Project Implementation Committee describing his/her activities analyses, etc.

3. Use of Monitoring Information:

The USAID project committee and the MINED Project Implementation Committee will discuss in regularly scheduled meetings the information gathered from the above described sources. In addition, special meetings will occur with technical assistants or individuals from MINED, MINEQUIP, or other agencies as needed.

The following chart illustrates the project monitoring system and shows the source and users of monitoring information for each key project component. Column a) indicates the activity about which information is required. Column b) indicates in what form the information is transmitted from the information source to the users. Column c) lists the major users of the information. Column d) lists the source of information, or who is responsible for supplying it; and Column e) lists the center of the activity from which information flows. As shown in the chart, major project components include construction, procurement, pre-service and in-service training programs, repair and maintenance course for TTC library systems and short and long term training and administrative support activities.

B. Project Evaluations:

There will be four project evaluations, scheduled at the following points:

1. Year Two: An in-house evaluation will be conducted by the Project Implementation Committee, USAID project and evaluation officers, and long-term technicians. This evaluation will be conducted as a group process designed to discuss project issues and to determine whether project activities are leading to the desired outputs.

2. Year Three: An external evaluation team will conduct a full scale project evluation to assess progress to date in the achievement of project objectives.

3. Year Four: An in-house evaluation similar to the evaluation conducted during year two of the project will be conducted by the same evaluation team noted in the first evaluation.

4. Year Five: An external evaluation team will conduct a summative evaluation which assesses the project's success in achieving its objectives and also makes suggestions to MINED on how to guarantee that project benefits be sustained.

See Annex I. 4 for details on evaluation strategy and methodology

PART VI. Conditions, Covenants and Negotiating Status

Planning of this project has proceeded to the point that the main issues concerning the project have been addressed and substantively resolved to the satisfaction of the GURC and USAID/Cameroon. The project has been discussed in detail with MINED officials during the formulation of its functional components as described in this PP. The project as described herein has been formally presented to both the MINED and the Ministry of Economic Affairs and Planning (MINEP) and this PP reflects the outcome of the ensuing discussions. Thus the substance of the project, including the following conditions and coventants, has been negotiated and no difficulties are expected in concluding negotiations of the project agreement.

In addition to the standard conditions precedent (legal opinion, specimen signatures, designation of authorized representatives) the following clauses will be required in the project agreement:

A. Conditions Precedent

1. Prior to the first disbursements of funds under the project for each construction activity, or to the issuance of any commitment documents with respect thereto, the GURC shall furnish to AID the following, with respect to such construction activity, in form and substance satisfactory to AID:

i. Detailed plans, specifications and construction schedules with respect to such activity;

ii. A description of the arrangements for providing construction services for such activity, including an executed contract for construction services with a firm acceptable to AID unless such services are being provided by force account; and

iii. A description of the arrangements made for providing engineering supervisory services for such construction activity, including an executed contract with a firm satisfactory to AID unless such services are being provided by agencies of the GURC.

2. Prior to the disbursement of funds for each activity involving the repair and refurbishing of existing MINED facilities, or to the issuances of any commitment documents with respect thereto, the GURC shall furnish to AID the following with respect to such repair and refurbishing activities, in form and substance satisfactory to AID:

i. Detailed plans and budget for such repair and refurbishing activity; and

ii. a description of the arrangements made for supervision of the repair aspects of such activity; and

iii. a description of the arrangements made for providing construction services for such activity, including an executed contact for construction services with a firm acceptable to AID unless such services are being provided by force account.

B. Covenants

1. The GURC agrees that sufficient funds will be budgeted and made available throughout the project to support project operations and to insure the timely provision of adequate maintenance for the facilities to be constructed refurbished and repaired under the project.

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
GOAL: To improve the quality of life of Cameroonians living in the North and Northwest Provinces	The rate of migration from rural to urban areas will not increase during the project. The economic rate of return to primary school students increases from an estimated 20% in 84/85 to 25% as a result of attending a class given by a teacher trained in the project.	1986 and 1996 census reports	GURC financial position will enable project commitments to be realized.
SUBGOAL: To increase the number of children receiving primary education in the North and Northwest, and to assure that this education prepares children to play productive roles in their culture and economy.	Due to the project primary school enrollments will increase by the following percentages: 84/85 → 88/89 North 29% → 50% Northwest 48% → 63% Primary school repeater rates will decrease by the following percentages: 84/85 → 93/94 North 35% → 15% Northwest 19% → 9%	Annual National Education Statistical Reports Annual reports prepared by headmasters, inspectors, and other MINED provincial officials.	The present pace of opening new primary schools will be maintained, e.g., 4.1% annual increase. Community interest in education will continue to rise.

ANNEX A

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Life of Project:
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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	The rate of primary school completers will increase as follows: 84/85 → 93/94 North 10% → 20% Northwest 20% → 60%		
PURPOSE: Increase the quantity and quality of primary school teachers in the North and Northwest Provinces.	Project assisted TTCs increase total enrollments from 1,020 to 1,310, or by 28%, and annual graduates from 450 to 710, or by 58%. Combined project in and pre-service training programs will increase the quality of 3,310 primary school teachers. A total of 75% of TTC graduates will pass qualifying examinations at the class I level within one year of graduation. Primary school teacher classroom teaching methods result in: more student questions asked per class; evidence of student projects illustrating absorption of practical curriculum, projects such as school latrines, vegetable gardens	Review of provincial education reports. On-site visits by GURC and USAID project representatives.	Participants will be receptive to project initiated training programs. Teacher qualifying exams will reflect new methodology.

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $ 27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	and construction of school furniture; more teacher time spent giving individual counseling to students; notebooks showing lesson plans with clear teacher goals, and analysis of how class achieved these goals; visual aids of local materials evident in classrooms; classroom time spent in discussion between teacher and students.		
Increase the skills of the personnel responsible for supporting primary school teachers, e.g.,			The GURC keeps Cameroonians in positions according to project training plan.
primary school directors;	Primary school operating budgets increase by 20% a year.	Provincial education reports.	
	Timely submission of attendance reports to MINED. A total of 85% of all primary schools will submit their annual reports by the end of each calendar year by 1988/89, as opposed to an estimated 5% at present.	On-site visits by GURC and USAID project representatives.	
	Directors spend more time counseling teachers; directors hold more staff meetings; directors meet more often; and school maintenance budgets increase yearly by 20%.		

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
primary school inspectors ;	Inspector visits per school increase. Each visit results in a completed checklist for primary school performance, including maintenance and teaching aids. Inspector holds more workshops for primary school directors under his jurisdiction. Inspector successfully maintains USAID provided vehicle.		
TTC staff ;	TTC staff work full-time, as opposed to present part-time ; project provided facilities are used by faculty and students because staff maintains these facilities.		
and TTC faculty.	Teaching methods evidence: more student questions asked per class; student projects illustrating absorption of practical curriculum, projects such as furniture for TTC classrooms, and gardens for growing TTC vegetables; more faculty time spent giving individual counseling to students; notebooks showing lesson plans with clear teacher goals, and analysis of how class achieved these goals; visual aids made of local materials evident in classrooms; more class room time spent in discussion between teacher and students.		

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $ 27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OUTPUTS:			
1. New in-service training programs for faculty members at 5 TTCs.	a. In-service curriculum developed by 1985. b. 100% of TTC faculty have completed in-service training by project completion (1988).	Data obtained from TTC reports, site visits by GURC and AID representatives and project evaluation team reports.	Though no salary increases for non primary school teachers will result from in-service training, professional motivation, as well as government paid per diem and transport, will attract participants.
2. New in-service training programs for TTC staff and Divisional Inspectors.	a. In-service curriculum developed by 1985. b. TTC staff and primary school inspectors trained in the following quantities: Year: TTC Staff / Inspectors 85: 40 / 42 86: 40 / 42 87: 40 / 42 88: 40 / 42		
3. New in-service training program for primary school directors.	a. In-service curriculum developed by 1985. b. Directors trained in the following quantities:		

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $ 27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Year / Quantity 85 / 40 86 / 40 87 / 40 88 / 40		
4. In-service training programs for primary school teachers.	a. In-service curriculum developed by 1985. b. 200 primary school teachers receive in-service training a year, and 100 of these succeed in passing qualifying examinations.	Data obtained from TTC reports, site visits by GURC and AID representatives and project evaluation team reports.	GURC will continue its policy of providing automatic grade increases to all teachers who pass the annual qualification examinations.
5. Pre-service training programs for primary school teachers.	a. TTCs enroll students and produce graduates in the following quantities: Year / Enrollments / Graduates 1984 / 1,020 / 450 1985 / 1,020 / 450 1986 / 1,020 / 450 1987 / 1,020 / 450 1988 / 1,310 / 710		GURC will assure candidates for the level of enrollments the project envisages.
6. A system of equipped and staff TTC libraries.	a. Each TTC has a library which can accommodate 60% of the student body, and 5,000 books. Library includes reading room,	Data obtained from TTC reports. Site visits by GURC and AID representatives. Project evaluation reports.	U.S. trained library staff works as planned for this project.

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	work and circulation area, and office space. Library equipped with furniture, air conditioners, and initial collection of 1,500 books and periodicals, and funds to update and augment collections. b. By the end of the project, the following library staff will be in place: 3 U.S. trained MLS graduates, in central office in the Inspectorate General of Pedagogy in the MINED Yaounde, with two bilingual clerks, one library assistant at each TTC.		
7. Expansion of TTCs to improve facilities.	By the end of the project, the following indicators will be evident: a. TTC Facilities: each TTC will have: a library, faculty room, appropriate number of classrooms to allow 40 students to a class, science laboratories, shop/maintenance workshop, administrative blocks, dormitories, dining rooms which can also serve as assembly halls, kitchen, laundry	Data obtained from TTC reports, site visits by GURC and AID representatives and project evaluation team reports.	

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	room, and infirmary. The above will be appropriately equipped. b. TTC Site Development: each TTC will have appropriate entry roads, parking area, walkways, water systems, and plumbing and sewage disposal systems.		

ANNEX A

LOGICAL FRAMEWORK

Life of Project:
From FY 84 to FY 88
Total U.S. Funding $ 27,409,000
Date Prepared: 3/28/83

Project Title Number: SUPPORT TO PRIMARY EDUCATION (631-0033)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS						MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
INPUTS								
D.1.a. USAID	D.2.						D.3.a. USAID and Gurc budget and audit reports.	D.4. The project's budgeted funds will be available when needed.
	FY 84/85	85/86	86/87	87/88	88/89	Total		
i. Technical Assistance	751	1299	2043	1271	854	6218	b. Contractor's periodic reports	
ii. Personnel	5	27	31	32	32	127		
iii. Construction	-	869	3911	2613	1299	8692	c. Site inspections and evaluation reports.	
iv. Commodities	262	591	1083	88	86	2110		
v. Training	177	474	398	232	232	1513		
vi. Other	7	22	28	70	49	176		
vii. Contingency	120	328	749	430	255	1882		
viii. Inflation	159	917	5330	2714	2139	9259		
TOTAL USAID	1481	4527	11573	7450	4946	29977		
b. GURC								
i. Personnel	3315	5600	8024	11506	11715	44160		
ii. Land	800	-	-	-	-	800		
iii. Construction	823	-	-	-	-	823		
iv. Training	13	45	41	12	12	123		
v. Other Costs	132	141	210	348	383	1214		
vi. Inflation	610	1470	3343	6799	12276	24498		
TOTAL GURC	5690	7256	11618	18665	28386	71615		

PROJECT CHECKLIST AND STANDARD ITEMS CHECKLIST

CROSS REFERENCES: Cameroon Country Checklist for FY 1983 is up to date. See Health Constraints to Rural Production (698-0408.1) Project Paper approved in January, 1983. Standard Items Checklist has been reviewed and is as follows:

A. GENERAL CRITERIA FOR PROJECT

1. App. Unnumbered; FAA Sec. 653(b); Sec. 671	
(a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project;	Congressional Presentation FY 84
(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that figure).	YES
2. FAA Sec. 611(a)(1). Prior to obligation in excess of $100,000 will there be:	
(a) engineering, financial, and other plans necessary to carry out the assistance; and	YES
(b) a reasonably firm estimate of the cost to the U.S. of the assistance?	YES
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?	N/A. No host government legislative action required.
4. FAA Sec. 611(b); App. Sec. 101. If for water or water-related land resource construction, has project met the standards and	N/A

criteria as per the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1973?

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? — YES

6. FAA Sec. 209. Is Project susceptible of execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. — NO

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to:

(a) increase the flow in international trade; — N/A

(b) foster private initiative and competition; — The project will through the graduation of better educated secondary-school students encourage more private sector initiative and increased competition.

(c) encourage development and use of cooperatives, credit unions, and savings and loan associations; — N/A

(d) discourage monopolistic practices; — N/A

(e) improve technical efficiency of industry, agriculture and commerce; and — Project will improve technical efficiency by providing potential employees with higher literacy and numeracy skills.

(f) strengthen free labor unions. — N/A

8.	FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	U.S. technical assistance will be sought
9.	FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.	The GURC is contributing to the project the maximum amount it is capable of. No excess Cameroonian currency is owned by the U.S.
10.	FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?	NO
11.	FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	YES
12.	FY 79 App. Act Sec. 608. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar, or competing commodity?	N/A

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b); 111; 113; 281a.

Extent to which activity will

(a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions;	The project's goal is to increase the number of children receiving a quality education. Consistant with GURC's desire to promote greater involvement by rural people in the economic growth of the country.
(b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions;	N/A
(c) support the self-help efforts of developing countries;	YES
(d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and	YES
(e) utilize and encourage regional cooperation by developing countries?	N/A

b. FAA Sec. 103, 103A, 104, 105, 106 107. Is assistance being made available: (include only applicable paragraph which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)

(1)(103) for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; (103A) if for agricultural research, is full account taken of needs of small farmers;

(2)(104) for population planning under sec. 104(b) or health under sec. 104(c); if so, extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems and other modes of community research.

(3)(105) for education, public administration, or human resources development; if so, extent to which activity strengthens non-formal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development;

One aim of the project is to assist GURC in reducing the dichotomy between the relatively better urban educational facilities versus those in rural areas.

(4)(106) for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is:

(i) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development organizations;

(ii) to help alleviate energy problems;

(iii) research into, and evaluation of, economic development processes and techniques;

(iv) reconstruction after natural or manmade disaster;

(v) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;

(vi) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

c. (107) is appropriate effort placed on use of appropriate technology? YES

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)? YES

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to the Congress been made, and efforts for other financing, or is the recipient country "relatively least developed?" YES, see Congressional Presentation

f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's The project has identified an inefficient use of human and financial resources resulting from poor elementary school teacher training and primary school curriculums. The GURC recognizes the problem and has sought U.S.G. assistance in carrying out the initial reforms needed.

intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental and political processes essential to self-government.

g. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase or productive capacities and self-sustaining economic growth? YES

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects. Project financial analysis concluded that the GURC is capable of repaying the loan.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan. N/A

3. Project Criteria Solely for Economic Support Fund

a. FAA Sec. 531(a). Will this assistance support promote economic or political stability? To the extent possible, does it reflect the policy directions of section 102?

b. FAA Sec. 533. Will assistance under this chapter be used for military, or paramilitary activities?

STANDARD ITEM CHECKLIST

Has the Standard Item Checklist been reviewed for this Project?

Yes x No _____

ACTION: AID
INFO DCM/RF
CHRON

ANNEX D
Page 1

TELEGRAM

631-0033

UNCLAS FEB 22, 1980 1845

Classification

R 211300Z FEB 80
FM SECSTATE WASHDC
TO RUTADE/AMEMBASSY YAOUNDE 2143
INFO RUTAIJ/AMEMBASSY ABIDJAN 7285
BT
UNCLAS STATE 046600

AIDAC, ABIDJAN FOR REDSO/WA

E.O. 12065: N/A ACTION:IRD cc:PDO cc:PRM cc:Dir/A.Dir

TAGS:
SUBJECT: CAMEROON SUPPORT TO PRIMARY EDUCATION PID REVIEW (631-0033)

1. REVIEW COMMITTEE, INCLUDING MISSION DIRECTOR WILLIAMS, MET ON FEBRUARY 1. COMMITTEE APPROVED PID AND NOTED SPECIFICALLY THAT IT WAS OF EXCELLENT QUALITY AND PARTICULARLY WELL PREPARED.

2. SEVERAL MATTERS WERE NOTED FOR INCLUSION IN THE PROJECT DESIGN AND PP. THESE INCLUDED:

A. A BROADENING OF THE ABSORPTIVE ABILITY ISSUE DISCUSSED ON PAGE 13 OF THE PID TO INCLUDE A DISCUSSION OF THE QUESTION OF THE GURC'S COMMITMENT TO THE DEVELOPMENT OF THE NORTH;

B. DISCUSSION OF THE GURC'S AWARENESS OF THE RECURRENT COSTS ASPECT OF THIS ACTIVITY AND ITS ABILITY AND WILLINGNESS TO ASSUME THEM, IN VIEW OF PAST LIMITATIONS ON SCHOOL MAINTENANCE, FOR EXAMPLE;

C. THE POSSIBLE USE OF AIDP OR OTHER AVAILABLE FUNDING FOR PRE-PROJECT TRAINING SHOULD BE CONSIDERED;

D. LOAN FUNDING PLANNED FOR FY 81 ACTIVITY SHOULD PROBABLY INCLUDE ALL COMMODITIES EXCEPT VEHICLES FOR US PROJECT PERSONNEL;

E. ASSUMPTION 2 OF PAGE 2 OF THE LOGICAL FRAMEWORK, THAT THE PRIMARY EDUCATION BUDGET DOES NOT DECLINE IN REAL TERMS, SHOULD INCLUDE THE ASSUMPTION THAT IT CAN BE MORE EFFICIENTLY USED IN ORDER TO COVER THE ACTIVITIES OF THIS PROJECT WITHIN THE SAME LEVEL OF FUNDING;

F. AN EVALUATION PLAN SHOULD BE INCLUDED, AND THIS PLAN SH...

Classification

BEST AVAILABLE COPY

50151-101

OPTIONAL FORM 151
(Formerly FS-412
January 1975
Dept. of State

TELEGRAM

Classification

SHOULD IJCLUDE A MEANS OF MEASURING STUDENT ACHIEVEMENT TO SEE IF THE PROGRAM HAS BEEN EFFECTIVE;

G. THE ROLE OF WOMEN SHOULD CONTINUE TO BE ADDRESSED AS STATED IN THE PID, WITH PARTICULAR ATTENTION BEING GIVEN TO POSSIBILITIES FOR INCREASING THEIR PARTICIPATION;

H. A SECTION 611A REPORT SHOULD BE PROVIDED BY THE MISSION ENGINEER.

3. THE PID WAS APPROVED, DESPITE A NEED FOR SUPPLEMENTAL INFORMATION TO COMPLETE THE IEE, ON THE BASIS THAT THIS INFORMATION BE SUPPLIED AS SOON AS POSSIBLE. THE DESIRED INFORMATION IS:

A. THE SOURCE AND AMOUNT OF PROPOSED WATER SUPPLY;
B. THE TYPE OF SANITARY SYSTEMS AND OUTFALLS IF ANY;
C. THE SQUARE FOOTAGE OF NEW CONSTRUCTION PER SITE AND THE AREA OF REMODELING;
D. THE AREA OF VIRGIN LAND TO BE DISTURBED;
E. ROADS THAT ARE NEW AND REQUIRE LAND DISTURBANCE;
F. REFUSE DISPOSAL ACCOMMODATIONS.

AFTER THIS INFORMATION IS COLLECTED, THE MISSION SHOULD REVIEW THE IMPACT IDENTIFICATION FORM TO SEE IF IT NEEDS REVISION. RESULTS OF THIS REVIEW SHOULD BE CABLED TO AID/W.

4. PP SHOULD INCLUDE A MANAGEMENT ARRANGEMENT FOR THIS PROJECT TO PLACE A MINIMAL BURDEN ON THE MISSION AND ITS DIRECT HIRE STAFF, WITH DISCUSSION SHOWING WHAT SPECIFIC MANAGEMENT AND SUPPORT WOULD BE REQUIRED FROM THE MISSION.

5. WISH NOTE THAT ON PAGE 15 SUBPARAS A-D PROBABLY SHOULD SHOW PERSON-YEARS, NOT PERSON MONTHS. CHRISTOPHER

Classification

TELEGRAM

INDICATE
☐ COLLECT
☒ CHARGE TO USAID

631-0033

FROM	CLASSIFICATION
AMEMBASSY YAOUNDE	UNCLASSIFIED

E.O. 11652:
TAGS:
SUBJECT: SUPPORT TO PRIMARY EDUCATION PID REVIEW, 631-0033

ACTION: SECSTATE WASHDC

UNCLAS YAOUNDE

AIDAC

AID

CHARGE/RF

CHRON

REF: STATE ~~[illegible]~~ 04600

1. Appreciate thoughtful comments provided reftel.

2. All points raised in reftel to be addressed in PP will be addressed at that time.

3. As per paragraph 3 reftel, Mission Engineer will visit project sites and prepare an interim report to provide supplemental information to complete the IEE.

LORD

DRAFTED BY:	DRAFTING DATE	TEL. EXT.	CONTENTS AND CLASSIFICATION APPROVED BY:
AHRD:RThomas:tae	3/3/80	235	James E. Williams, Director

CLEARANCES:

HRDO:SHandleman(Draft)
PRMO:RRifenburg(Draft)
PDMO:JBWoods(Draft)
A/DIR:PEGilbert(Draft)

05/1800

UNCLASSIFIED
CLASSIFICATION

OPTIONAL FORM 153
(Formerly FS 413)
January 1975
Dept. of State

30153-101

ANNEX E

CERTIFICATION PURSUANT TO SECTION 611(e)
OF THE FOREIGN ASSISTANCE ACT OF 1961 AS AMENDED

SUBJECT: CAMEROON - SUPPORT TO PRIMARY EDUCATION (631-0033)

Having taken into account, among other things, the matenance and utilization of projects in Cameroon previously financed or assisted by the United States, I certify hereby that in my judgment Cameroon has the financial capability and the human resources (when supplemented by the external technical assistance to be provided under the project) to maintain and utilize effectively the proposed Support to Primary Education Project Loan and Grant financial activity.

This judgment is based primarily on the facts developed in the Project Paper for the proposed Loan/Grant activity which discusses in detail the capabilities of the Government of Cameroon and the Ministry of Education and finds them in possession of adequate financial and human resource capability to effectively utilize and maintain the project

Herbert N. Miller
Acting Director,
USAID/Cameroon

3/30/83
Date

ANNEX F

ACTION MEMORANDUM FOR THE ADMINISTRATOR

THRU :

THRU :

FROM : AA/AFR, Francis S. Ruddy

SUBJECT : Cameroon - Support to Primary Education (631-0033)

Problem: Your approval is required to execute a grant of $13,712,000 and a loan of $16,265,000 from the Foreign Assistance Act, Section 104 appropriation, to the United Republic of Cameroon for the Support to Primary Education Project. We intend to obligate $1,847,000 in Grant funds and $1,400,000 in Loan funds in Fiscal Year 1984.

Discussion:

A. Project Profile: The Support to Primary Education Project will assist the Government of Cameroon to increase the number of children receiving primary education in the North and Northwest provinces, and to assure that this education prepares children to play productive roles in their culture and economy. The project will do this by increasing the quantity and quality of primary school teachers in the North and Northwest provinces, and the skills of the personnel who support these teachers, e.g., primary school directors and inspectors, and Teacher Training College staff and faculty. The project will continue for five years, and at its close will evidence improvement in both the quantity and quality of primary education in the North and Northwest provinces.

B. Beneficiaries: The project beneficiaries include approximately 3,310 primary school teachers, 5,390 students in the Teacher Training Colleges, 160 primary school directors, 168 primary school inspectors and 160 TTC staff, 60 teacher training school professors, and 130,000 children of primary school age. These individuals live in the North and Northwest provinces which are the provinces with the lowest primary enrollment rates (29% in the North and 48% in the Northwest).

C. Financial Summary:

1. The total project is $103,095,000, making AID's contribution 29 percent. The Cameroon Government contribution is $73,118,000, or 71 percent.

2. First year and life-of-project AID funding is:

	First Year ($000)		Life of Project ($000)	
	Grant	Loan	Grant	Loan
Technical Assistance	1,393	-	6,218	-
Personnel	5	-	127	-
Commodities	262	-	789	1,321
Training	177	-	1,513	-
Construction	-	1,400	-	8,692
Other Costs	10	-	176	-
Contingency	-	-	881	1,001
Inflation	-	-	4,008	5,251
Total FX	1,780	-	8,958	1,058
Total LC	67	1,400	4,754	15,207
Grant Total	1,847	1,400	13,712	16,265

3. The terms of the A.I.D. loan will follow normal development assistance guidelines of:

   - Interest: 2% percent during the 10-year grace period and 3 percent thereafter.
   - Maturity: 40 years from first disbursement, including grace period of 10 years.

D. Socio-Economic, Technical and Environmental Considerations

1. The project review sessions found the project to be socio-economcally and technically sound.

2. The Initial Environmental Examination recommended a Negative Determination, which was approved by AA/AFR.

3. The plans, specifications and cost estimates for the construction meet the requirements of Section 611 (a) of the Foreign Assistance Act.

4. The Christopher Working Group on Human Rights has not raised any issues with respect to the project.

E. Waivers, Conditions Precedent and Covenants

1. Waiver Requirements: Specific waiver requirements have been identified for the project. These requests for waivers and their justifications can be found in Annex I, Section I.3 .

2. Conditions and Covenants: Conditions precedent (CPs) and covenants are outlined and described on pages 62 and 63 of the Project Paper.

F. Implementation

(This section will be completed at a later date).

G. Committee Action and Congressional Apprisement

(This section will be completed by AFR/PD/CCWAP).

Recommendation: That you sign the attached Project Authorization, thereby authorizing the project and approving the requested waivers.

ANNEX G 1

THE EDUCATION SYSTEM IN CAMEROON

1. General

Cameroon is currently taking steps to harmonize and reform its primary and secondary education system. The goal is to create a uniquely Cameroonian system which will be implemented nation-wide. At this time, however, there are still two systems which basically parallel the French and English school systems in both primary and secondary education.

2. Primary Education

a) General

Students in Cameroon may begin school at age five or six, but it is not uncommon for them to begin at a later age. In addition, many students repeat a class at least once, often more. Due to repeater and dropout rates, it takes an average of 11.5 years to produce a primary school graduate. Thus, primary school classes contain children of a variety of ages.

b) The Anglophone System

The Anglophone primary school system is composed of seven years. Those who complete the seven years take an examination. If successful, they are awarded the First School Leaving Certificate (FSLC). They may then take competitive exams to go on to a general or technical secondary school or certain professional schools. They may also enter a vocational program.

c) The Francophone System

The Francophone primary school system is composed of six years. Those who complete the six years take an exam. If successful, they are awarded the Certificate d'Etudes Primaires et Elementaires (CEPE). They may then take competitive exams to go on to a general or technical secondary school or certain professional schools. They may also enter a vocational program.

3. General Secondary Education

a) The Anglophone System

Students admitted into general secondary schools complete five years of study. They then take an exam and, if successful, are awarded the General Certificate of Education, Ordinary Level, commonly referred to as G.C.E. O Level. They may then take competitive exams to enter general or technical high schools or professional schools.

Students admitted into general high schools complete two years of study, at which time they take an exam. If successful, they are awarded the General Certificate of Education, Advanced Level, commonly referred to as G.C.E. A Level. They may then take competitive exams to enter the University or one of the "grandes ecoles".

b) The Francophone System

Students admitted into general secondary schools (colleges) complete four years of study. At this time they take an exam and, if successful, are awarded the Brevet de Fin d'Etudes du Premier Cycle (BEPC or sometimes simply called Brevet). They may then take competitive exams to enter general or technical high schools or professional schools.

The general high school (lycée) program is three years long. After two years students take an exam, the Probatoire. Successful students may continue on for the last year of study after which they take another exam. If successful, they are awarded the Baccalauréat (Bac). They may then take competitive exams to enter the University or one of the "grandes écoles".

4. Primary School Teachers

There are four basic categories of primary school teachers in Cameroon.

a) Grade I Teachers (Instituteurs - I)

These are the highest level of teachers in the primary system. They often teach the upper level classes. To be classified as a Grade I teacher, one must pass the certifying exam which grants the CAPI (Certificat d'Aptitude Pédagogiques d'Instituteur). To qualify to take this exam, one must either be a graduate of an ENI (or Grade I TTC, see below) or have been a Grade II teacher for at least three years. Approximately 6% of primary school teachers in the North and 10% in the Northwest are Grade I teachers.

b) Grade II Teachers (Instituteurs - IA)

These are the second level of teachers; those who have passed the certifying exam which grants the CAPIA (Certificat d'Aptitude Pédagogiques d'Instituteurs Adjoints). To qualify to take this exam one must either be a graduate of an ENIA (see below) or have been a Grade III teacher for at least three years. Approximately 44% of primary school teachers in the North and 57% in the Northwest are Grade II teachers.

c) Grade III Teachers (Maîtres d'Enseignement General - MEG)

These are the lowest grade of certified teachers. To become a Grade III teacher one must have taught for at least 3 years and must have a CEPE or FSLC and pass the certifying exam which grants the CAPME (Certificat d'Aptitude Pedagogique de Maître d'Enseignement). No training is currently offered to prepare for this exam. There are approximately 11% of primary school teachers in the North and 14% in the Northwest. Grade III teachers have no civil service status.

d) Auxiliary Teachers and Community Monitors

Due to the shortage of teachers in Cameroon it is common practice for either a village of the Provincial Education Delegation to hire untrained, uncertified individuals to teach in village schools. They are paid either by the community or by MINED. Those hired with a BEPC or O Levels are classified as Grade II Auxiliary or Instituteur Adjoint Auxiliare (IAA). Those with a CEPE or FSLC are classified as Grade III Auxiliary or Maître d'Enseignement Général Auxiliare (MEGA). Those hired by the community are classified as community monitors. They have no status in the civil service system but the MINED is currently making efforts to get them into the normal schools and into the civil service. Because of the shortage of teachers in the project provinces, auxiliary teachers are about 33% of primary teachers in the North and less than 1% in the Northwest. Teachers classified as "other" are 4% and 2% of teachers in the North and Northwest respectively.

Primary school teachers may be promoted by taking the certifying exam which would grant them the next grade. To take this exam a teacher need only have taught for three years at the level below the one he or she hopes to attain. There are evening courses in urban centers and correspondence courses, but these are not required in order to take the exams. Exams are given annually by MINED and teachers pay about $10 to take the exam.

5. The Normal Schools

a) Ecole Normale Supérieure (ENS)

ENS is the top teacher training school in the country. All its students have their Bac or G.C.E. A level. It is technically a branch of the University of Yaounde. It trains secondary teachers, normal school teachers, and inspectors. There is a Science of Education program to train the latter two categories. This program is currently two years long, thus the graduates obtain a diploma which is about the equivalent of an American "AA", rather than a "license", which is the equivalent of our Bachelor's degree. The Project Design Committee, however, is proposing that this program be expanded to three and five year programs. The three year program would train ENIA professors and the five year program would train ENI professors and inspectors. The additional time probably would be used to teach administration and management and to emphasize the practical and ruralized aspects of education, as required by the educational reform. ENS students would also be given practical experience as part of their training.

b) Ecole Normale d'Instituteur (ENI) or TTC Grade I

ENIs train Grade I teachers. There are a variety of levels and methods for entering ENIs. All must take competitive exams to enter.

1) Students may enter an ENI with a BEPC or O Level. They then take 3 years of courses. Only the North and East provinces have three year programs.

2) Students may enter an ENI with a Probatoire. They then take 2 years of courses.

3) Students may enter an ENI with a Bac or A Level. They then take one year of courses.

4) Some ENIs are now accepting Instituteurs Adjoints who have had no training and reached that level by examination. These IAs take two years of courses.

5) Some ENIs are beginning technical sections. They take students with the BEPC or GCE O Level and train them for three years, with an emphasis on technical courses (home economics, manual arts, agriculture), rather than general courses.

Students graduating from ENIs receive a "Certificat de Fin d'Etudes Normales" (CFEN). However, they must pass the CAPI exam to become certified Grade I teachers. Nonetheless, those who do not pass are assigned to teach with only a slightly lower salary than those who pass.

c) Ecole Normale d'Instituteur Adjoint (ENIA) or TTC Grade II

ENIAs train Grade II teachers. There are two types of ENIAs with different entrance requirements. Both require a competitive exam.

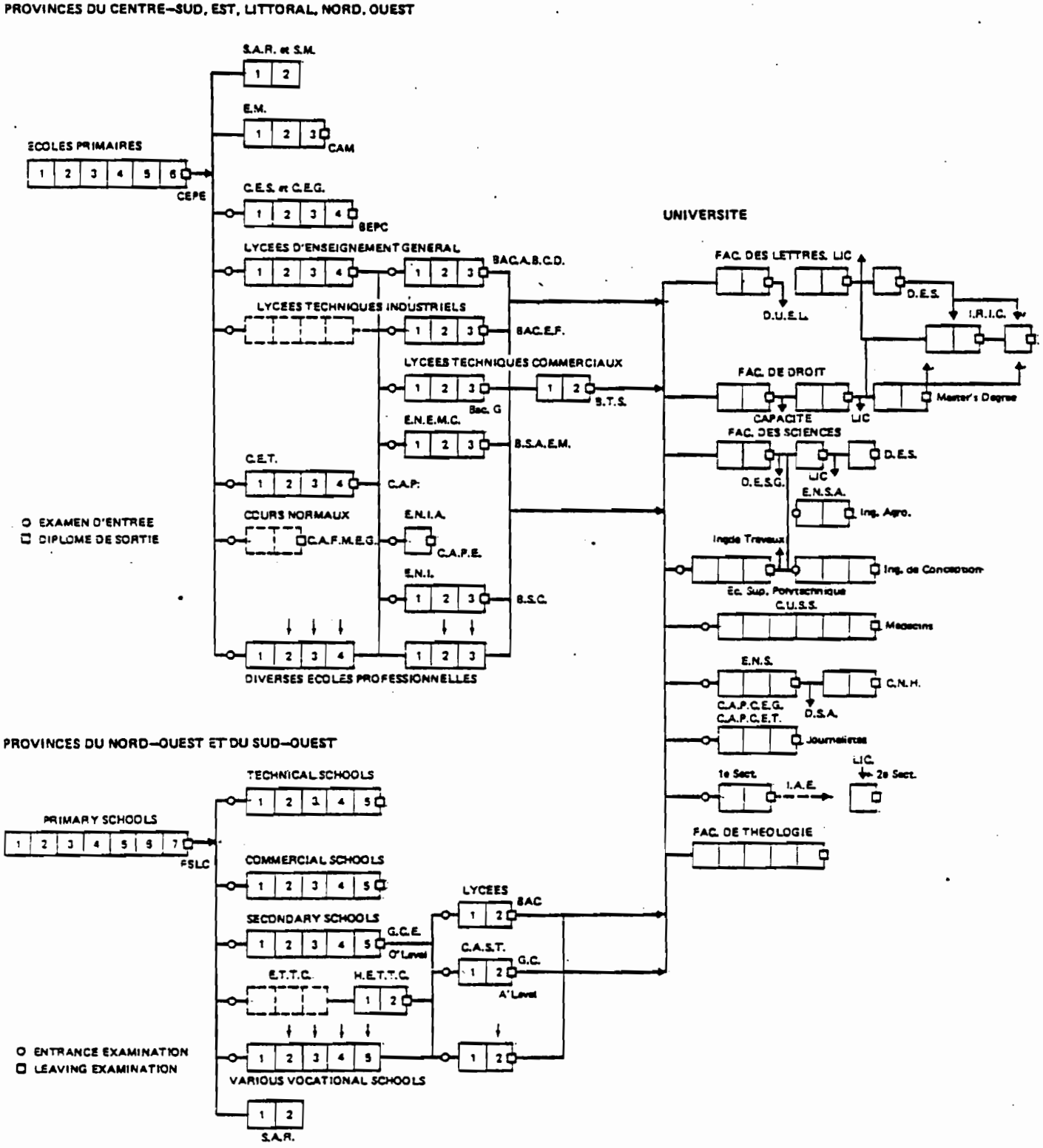
1) Most ENIAs accept students with BEPCs or G.C.E. O Levels. These students are given one year of courses.

2) ENIAs in areas where there is a lack of BEPC holders and where outsiders do not like to teach (i.e., isolated rural areas), have special programs. They accept students with the CEPE or FSLC. The program is three years long.

Students graduating from ENIAs receive a "Certificat Elementaire de Fin d'Etudes Normales" (CEFEN). As with ENI graduates, ENIA graduates must pass the CAPIA exam to become certified. Again, those who do not pass are assigned to teach with only slightly lower salary.

The following charts illustrate the structure of Cameroon's education system.

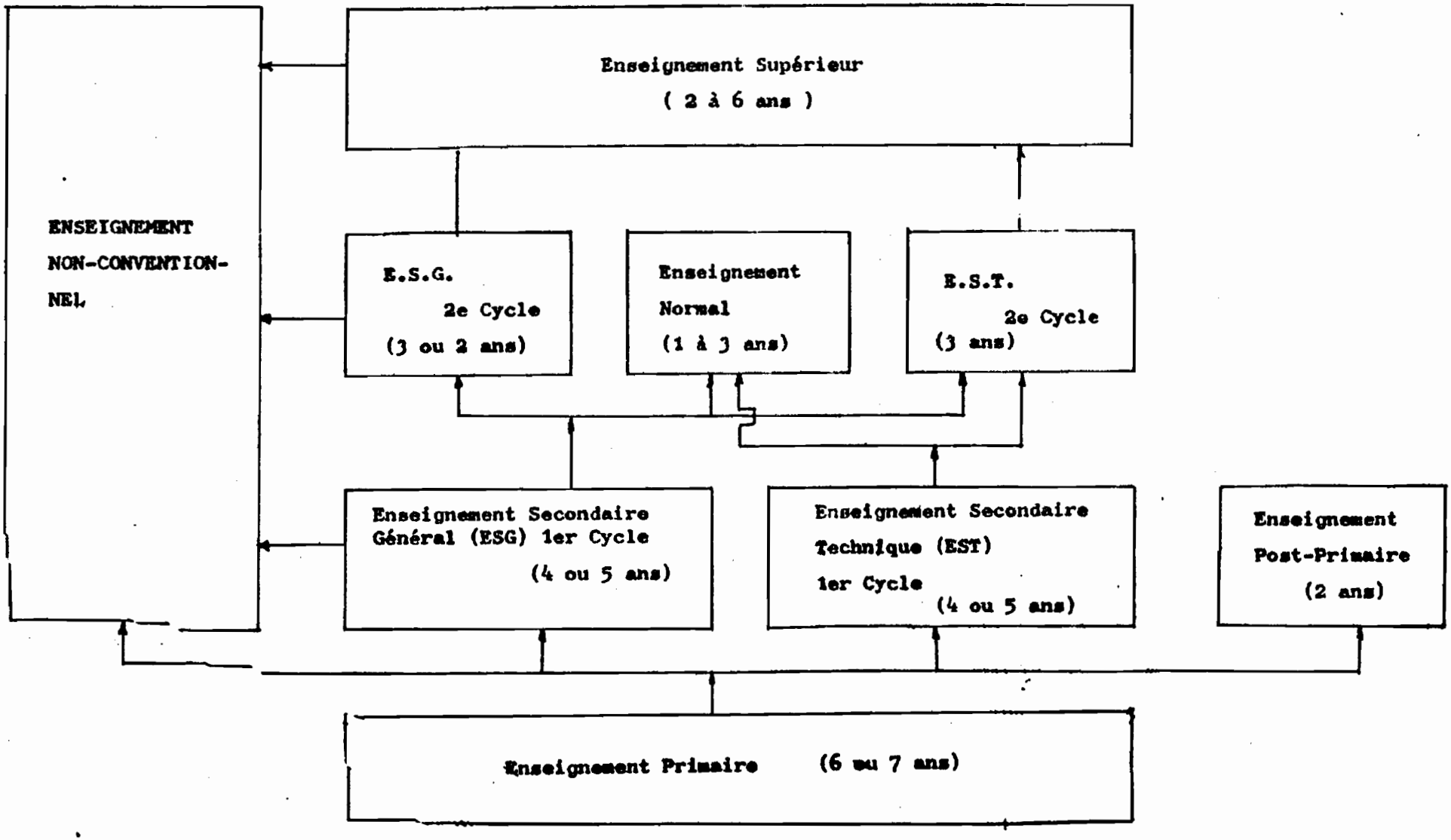
CAMEROUN
STRUCTURE OF THE EDUCATION SYSTEM
STRUCTURE DE L'ENSEIGNEMENT



Source: Ministère de l'Education Nationale

World Bank – 19000

SCHEMA N°121 : Structure du système scolaire conventionnel



SUPPORT TO PRIMARY EDUCATION - Project No. 631-0033

FACILITIES DESIGN AND CONSTRUCTION ANNEX

Table of Contents

01. Physical Development Rationale:

Cameroon Presidential Decree No. 80/195 of 9/6/80 stated the aims of teacher training for the country as follows: "To train a new form of teacher/teaching personnel that would help train children to the quality of life where they are born (rural areas); be able to solve everyday problems of the community; be self-sufficient and economically independent and to serve the needs of the local community socially, culturally, and economically."

The above calls for structural changes at the 5 TTCs this project will strengthen. Building changes must respond to the curriculum and pedagogical needs of the educational reform, as well as to the peculiarities of each site in terms of climate, availability of building materials, and local methods of construction, as well as customs.

The Ministry of Education has prepared a booklet of building space norms for educational facilities: Ref: MINEDUC - "Etude de Normes de Construction pour Collèges d'Enseignement Technique Industriel, Commercial, et d'Arts Ménagers", produced in 1976. This reference is useful for standardization of administrative office buildings, classrooms and specialized facilities. For dormitories and other support facilities for campus living it is necessary to rely on experience and internationally accepted standards. All project TTCs require a site with a minimum amount of land (at least 6-8 hectares), which includes playfields.

The ruralization emphasis of the educational reform, the relatively mild climate at each site, and local traditions and economies, all suggest simple, Spartan, single or double story, single room-width facilities, utilizing local building methods insofar as may be appropriate, and materials which are durable and low in maintenance requirements. Kitchen facilities should cater to local methods of food preparation. Toilets must be large enough and sufficiently durable to withstand the added stress of users who may be unaccustomed to such facilities. Power and water needs should be minimized.

In sum, the fundamental aim of the physical development aspect of the project is to provide simple, rugged, TTC facilities which are conducive to preparing primary teachers to implement the educational reform, and, in this spirit, reflect the realities of living and working in rural Cameroon, yet demonstrate and inspire improvement of these realities.

02. Assumptions:

For a clear understanding of the basis for specific recommendations regarding the expansion of physical facilities of the five teacher colleges, it is necessary to explain the assumptions which guided the decision making process. Some assumptions are usually accepted principles, while others are issues which may or may not have final answers at this time.

1. It is assumed that all five ENI's should be improved to the same essential level of operational quality and state of repair in their existing locations.

2. It is assumed that where additional land must be acquired to provide equivalent development potential, that the GURC will take early steps to do so at Garoua, Maroua and Ngaoundéré.

3. It is assumed that the target total enrollment numbers for each institution recommended in this report are adequate for the short term needs of the provinces. It is assumed that these institutions will need to expand in the future, given the increasing demand for teachers. The practice of forcing an institution to overlaod a dormitory to twice its normal capacity, as at Ngaoundéré, should not happen, however.

4. It is assumed that being asked as specialists to come from outside Cameroon implies that there is a desire that special attention be given to the teacher training program and recognition of a need to build greatly improved facilities.

5. Therefore, it is assumed that GURC policy makers who are jointly involved in planning this project are committed to the implementation of the recommendations of the Project Paper.

6. Lack of time and accurate information precluded a study of alternatives at each location. Instead, it was assumed that one logical plan diagram would provide a sufficiently accurate basis for project cost estimation for each location. It was assumed that budget shifts would be possible from an overestimated site to one that might have been underestimated.

7. Though not precisely true, building costs were assumed to be the same at every location, with the budget total providing the proper average.

8. Similarly, even though not absolutely true, a common outline specification for all buildings was assumed as a basis for cost estimation. Again, averaging should compensate.

Should a number of the foregoing assumptions prove to be untrue, then the recommendations regarding the design and construction of additional facilities could be somewhat incorrect and would require modification.

03. Cost Determination Methodology:

Institutional expansion costs were determined through a seven step process as follows:

1. Assessment of the nature and current condition of existing facilities, and inventory taking at each of the five sites which involved mapping, photographing, tapping existing information, and questioning.

2. Questionnaire interviews to reach an understanding of past development, and to rank problems and needs requiring attention for future development.

3. Understanding and quantifying the new needs for additional facilities to accommodate the increased enrollments was achieved through a study of current utilization and projections.

4. Adopting norms and standards for each building type was necessary to establish building space requirements and total building sizes.

5. Developing a tentative alternative concept diagram campus plan for each school to illustrate the implications of possible land needs, of accessibility and organizational problems, and of utility needs.

6. Adopting a common outline specification for all buildings matching the Garoua model provided a basis for square foot unit costs.

7. Following rules of thumb and experienced judgment provided useful percentages of building costs for site development costs, as well as furniture and equipment costs.

The potential accuracy associated with the foregoing steps was reduced because, in most cases, plans and other information were unavailable at the schools as well as in the Ministry of Education and the Ministry of Equipment. Plans for Garoua were eventually located in the office of Nsangue Akwa, Architect of Douala. Even then, a special order from the Minister of Education was necessary for permission to review the drawings.

In cases where there were no fences, the institutional boundary location was uncertain. In most cases there was not even a record of the boundary dimensions or land holding. Only in one case was topographical information provided, and that proved to be inaccurate. With insufficient time for an instrument survey of each site, it was necessary to utilize information from small-scale geological survey maps (1:50,000) for location and general topography. Location of buildings and their approximate size were provided by the GEO of USAID/Yaounde, who had previously paced off the distances. It should be noted, therefore, that the site plan drawings accompanying this report are only diagrams representing general configuration and approximate dimensions to the scale noted on each drawing. Since costing does not depend upon accuracy in the size of existing buildings, this method was deemed acceptable. A more accurate method would have been unacceptably time-consuming and expensive at this stage of the project.

04. Observations from Institutional Surveys:

The following are summaries of design team observations about the existing physical condition of each of the five Teacher Training Center (TTC institutions.) Each list implies a set of problems and needs that should be addressed whether or not expansion occurs.

04.1 GAROUA

1. Designated library is not functioning. (Lack of books, librarians, money).
2. Insufficient administrative office space. (Due to an expanded administrative staff).
3. No faculty room.
4. Dining room is too small and kitchen needs improvement. (Not designed for wood-burning).
5. Dormitories are too crowded, no room for surveillant, no provision for women students, toilets overloaded.
6. Plumbing systems inoperable, the disposal system is improperly constructed.
7. No sports fields, must share with local high school.
8. Designated laboratories not used as such. (Reasons given were no equipment).
9. Practice teacher observation laboratory is not well used.
10. Workshop is unused. (Reasons given were no materials to work with).
11. Site boundaries are unmarked and undefined.
12. There is no sense of entry and arrival.
13. Campus and buildings are not well maintained.

04.2 PITOA

1. There is no library, only a storage room for books.
2. Administrative office space is inadequate.
3. There is no faculty room.
4. Dining room is too small, kitchen is smokefilled (due to poorly designed wood-burning stove), dishes are washed outdoors.
5. Plumbing systems are not working throughout. (The disposal system is full of roots). Dependent upon outdoor latrines.
6. Circular classroom building is dingy, poorly ventilated, and the rain blows into the building.
7. There is no workshop-classroom.
8. Dormitories are improperly oriented, with poorly designed toilet facilities.
9. Staff residences are built in a low-lying flooding area.
10. No adequate laundry facilities. (Washing is done outdoors).
11. No adequate storage facilities. (Insects/bats a serious problem).
12. There is no sense of campus entrance or arrival.

04.3 MAROUA

1. There is a library room, but it is very small, with just a few books.
2. The Administration building is much too small and a very poor structure, unfortunately located at an odd angle which subjects it to the noisy intersection of several main streets.
3. A new building for the faculty room has just been completed, but has not been occupied.
4. The dining room is too small. A relatively nice kitchen equipped with gas stoves is seldom used. Instead, an open shed with wood-burning open fire is used for cooking.
5. Two classrooms are crowded and dingy.
6. A large multi-purpose classroom with sloping floor, and non-functioning audio visual component is not utilized to its potential.
7. The dispensary is used as a girl's dormitory.
8. The boy's dormitories are overcrowded and dirty.
9. A workshop/storage building is too cluttered to function.
10. The toilet facilities are non-functioning.
11. An addition to the dormitories intended for girls is in a static unfinished state.
12. The whole site is low lying and undrained, particularly the playfields, with water standing on much of it when it rains.

04.4 NGAOUNDERE

1. The buildings are unfortunately sited on the slope of a hill, with two parallel roads at a higher elevation. The roads are both too close to the buildings.
2. There is no sense of entrace to the campus, and no sense of either boundary definition or domain.
3. Building orientation apparently is not best for climate control. The nice climate mitigates the mistake.
4. Buildings are placed too close to each other, and are arranged so that expansion will be difficult.
5. Though yet unused, the buildings are underdesigned (plumbing systems will not function very long without breakdowns).
6. The dormitory is a case in point. The building was designed for 40 students with the number of toilets and bath fixtures about right. Even before occupancy the number of beds has been doubled to 80 by introducing bunk beds, thus overloading by 100% the toilet, bath and laundry facilities.
7. The campus is incomplete with no library, no laboratories, no workshop, no infirmary, and an inadequate faculty room. There is no power to the site, and no telephone service.
8. There are no provisions for women students to live on the campus.
9. Plans prepared by the Ministry of Education for Ngaoundéré illustrate a major reason for the substandard quality of the campus. The plans are not based upon an environmental analysis and there is no evidence of a true master planning exercise. Building design is evidently not based upon an in-depth analysis of user needs. In short, planning and design procedures are too simplistic, are outmoded, and plans are incomplete.

04.5 BAMENDA

1. There is no power or water to the site, though wiring and plumbing have been provided in the buildings. Because of site elevation, city water pressure is insufficient. TTC uses outdoor latrines.
2. The access road is non-functional during very wet seasons because it is unsurfaced and steep.
3. There are no dormitories and no eating facilities, so students must walk up to 5 km to school every day; staff have no housing and must also walk from their homes in the city.
4. The library is seriously inadequate. In addition, a science laboratory, workshop, and infirmary are lacking.
5. Administrative office space is inadequate.
6. The faculty room doubles as a classroom, causing conflicts.
7. Building structural elements are underdesigned, in one instance causing a sagging roof on a new building.
8. The site lacks playfields.

To summarize the above problems, it is apparent: none of the campuses has a proper entrance and arrival; only Garoua has an acceptable walkway system; nearly all plumbing and sewage disposal systems require redesign and re-building; most kitchens require re-design, renovation, and equipping; all institutions need some form of faculty room; some TTCs lack playfields, while others have playfields which call for upgrading; various buildings in all institutions need remodeling and/or rehabilitation; none of the institutions has a properly functioning library study space for students, and none has a functioning workshop facility; none of the institutions has a good dispensary; laundry facilities at most TTCs are inadequate.

05. Summary of Development Recommendations:

The expansion program contemplated for each institution, which, in some cases, more than doubles the existing enrollment, causes an equivalent increase in demand upon present facilities, such as library, dining/kitchen, dispensary, laundry, toilets, and playfields. In most cases an enlarged or new administration building is necessary. In all cases additional classrooms are required along with additional dormitories and other facilities.

The following summarizes the recommended improvements for each institution. The accompanying maps (1:50.000) suggest locations for the institutions; the tentative campus plan diagrams (1:1000) form the basis for cost estimation.

05.1 GAROUA (Plate C)

1. New library and faculty room, central location.
2. Remodel existing Library space for expanded administrative offices.
3. Add two dormitories of 40 each (one for women).
4. Expand dining room to increase capacity to 250, plus staff.

5. Upgrade the existing kitchen, and provide proper wood-burning facilities separate from remainder of kitchen.
6. Add sports fields and agricultural fields either north or east of campus. (Extended campus should total 6-8 hectares).
7. Move road minimum of 30 m away from dormitory, kitchen.
8. Provide new entry road and parking area just south of administration building as originally intended.
9. Remove inoperable plumbing and sewage disposal systems and replace with systems adequately designed for use. Use commercial fixtures and fittings instead of residential ones.
10. Provide additional walkways and utilities as may be required to serve the new buildings.
11. Provide fencing completely around the site.
12. Provide furniture, equipment, and teaching aids as may be required to make operational library, workshop, and other facilities. Assume there is adequate secure storage for equipment and supplies.
13. Add maintenance center as part of workshop facility; provide necessary equipment and supplies to make it operational.

05.2 PITOA (Plate E)

1. New library in central location.
2. New classroom building with four classrooms and lab in central location.
3. Remodel existing circular classroom building for Faculty Room and Domestic Science Lab.
4. New administrative office building.
5. Convert existing substandard office buildings into storage and maintenance center.
6. Dismantle walls of existing two substandard storage sheds and convert one to covered student activity area. The other can be converted to workshop classroom.
7. Add dormitory capacity for 130 students with provision for women (new capacity is dependent upon decision on whether or not to continue boarding Annex School students; if Annex School students cease to board, dormitory space for TTC will become available.
8. Remodel dining room to accommodate TTC students and staff, and remodel kitchen to make it more functional. (Annex School students can use the small dining room.)
9. Provide appropriate laundry facilities.
10. Remove old plumbing and sewage systems, replace with adequately designed systems appropriate for stresses.
11. Provide surfaced walkway system throughout campus.
12. Provide new entry road and parking off main highway, penetrating to central campus. New Administration Building should be located adjacent to arrival point.

13. Provide furniture, equipment, and teaching aids as may be required to make library, classrooms, laboratories, workshops, and other facilities operational.

05.3 MAROUA (Plate G) - New Construction in a new site.

1. Library in central location.
2. Administrative office building near main entrance.
3. Five classrooms, a science lab., and a domestic science lab.
4. Manual arts workshop with maintenance center
5. Multi-purpose hall for capacity 300. (Funds not provided in this project - see note at bottom of p.).
6. Faculty room.
7. Dormitory capacity of 220 students, with provision for women.
8. Dining room to seat all students.
9. Kitchen, providing wood-burning facility separate from remainder of kitchens.
10. Infirmary with separate cubicles for men and women.
11. Central Laundry.
12. Sports fields.
13. Entry road, service roads and parking.
14. Walkway system.
15. Campus utility systems including water supply, underground electric power and telephone, and sewage system.
16. Provide furniture, equipment, and teaching aids as may be required to make library, workshop, and other facilities operational.
17. Since this is a new campus, provision should be made for extra landshaping, site drainage and landscaping.
18. Perimeter fencing should be provided.

05.4 NGAOUNDERE (Plate I)

1. New library and faculty room, central location.
2. Add four new classrooms, a science lab, a domestic science lab and a workshop.
3. Add dormitory capacity for 160 additional students with provision for women students.
4. Increase capacity of dining facilities to serve 200 (And double as an assembly room).
5. Provide wood burning addition to kitchen.
6. Upgrade sports field (grading only has begun).
7. Move main road minimum of 30 m from buildings.
8. Acquire additional land and shift boundary south and west to provide for expansion in those directions as shown on plan.
9. Provide entry road and parking area west of Administration Building.
10. Remodel plumbing systems to serve adequately the heavy stresses that will occur.

11. Provide a walkway system for the campus.
12. Provide additional utilities as necessary to serve the new buildings.
13. Provide fencing around campus.
14. Provide furniture, equipment and teaching aids as may be required to make facilities operational. Make certain adequate secure storage is provided for equipment and supplies.
15. Add maintenance center as part of workshop facility, and provide necessary equipment to make operational.

05.5 BAMENDA (Plates K and L)

1. New library and faculty room, central location.
2. Add four new classrooms, a science lab and a domestic science lab.
3. Add workshop with maintenance center.
4. Add dormitory capacity for 300 students. (Assume 20 non-resident).
5. Add dining and kitchen facilities to accommodate the full 300 students.
6. Add infirmary.
7. Develop new access road, turnaround and parking area near Administration Building. Surface road where grade is steeper than 10%.
8. Provide underground water reservoir of 50,000 gal at low elevation, served by city water supply. Provide water tower of 16,000 gal at top of site with pump system to elevate water from underground tank.
9. Provide transformer and underground power service from edge of site to connect to high tension bulk service supplied by government utility.
10. Provide complete sewage systems for campus.

06. Building Types and Space Norms:

Ref: MINEDUC - "Etude de Normes de Construction pour Collèges ..." as well as patterns already established at TTCs which agree with internationally accepted norms.

The following is a short form facilities program or 'needs analysis' of building types and spaces common to the five TTCs. The "Schedule of accommodation" for each institution is based upon these norms: (increased where enrollments are higher as in Bamenda).

LIBRARY - Since studying in dormitories is apparently not possible, the intention is to provide space in a central library for a study hall. The library is the only building proposed for air conditioning, which should encourage use by students, and preserve reading materials.

	Seating for 120 students	$180m^2$
	Collection/books and periodicals	30
	Administrative office/work space	30
		$240m^2$

FACULTY ROOM - Space for 16 staff near the library. A center for teachers' conferences, for lesson preparation, and for social interaction. A lounge, mailboxes, lockers, and a snack area $50m^2$

CLASSROOMS - Space for 40 students each, $1.75m^2$/student, single loaded exterior corridor, windows on both sides for natural light and cross ventilation. Students remain in one room, teachers rotate. Grouped in clusters of four or more (re. p.39) $70m^2$

SCIENCE LABORATORY - Space for 40 students, $2.5m^2$/student. A single laboratory for teaching science courses. Wall counters around room with sinks, teachers' demonstration table in-front. Classes would rotate into the lab during each week. Group with class-rooms (re. p.41) $100m^2$

DOMESTIC SCIENCE LAB - Space for 20 students, $5m^2$/student. A lab with 3 sectors: sewing, kitchen, child care, with 6-8 students studying together in each sector. Space must be provided for simple equipment and tables for working (re. p. 99) $120m^2$

WORKSHOP - Space for 20 students for training in simple manual arts, and in use of farm tools for agriculture. Should also be the maintenance center for the campus. Requires a workshop area with work tables, simple tools and implements, with a separate room for maintenance center. Storage for tools, materials and maintenance supplies is required $100m^2$

ADMINISTRATIVE BLOCK - Additional administrative staff being assigned to TTCs requires additional space beyond current norm. By removing the faculty room and lounge to a separate facility, and adding two offices, the staff can be accommodated. Comprises: offices for Director, Assistant Director, Econome (Bursar), Surveillant (Dean of students), Director of Studies, Dépot Général (Store keeper), plus space for a secretarial pool, a duplicating and storage area, entry/ reception, and toilets $150m^2$

DORMITORIES	- Designed in units of 40, with students grouped by 4 on single beds (no bunks) in cubicles, having partitions sufficiently low for a Surveillant to view the whole room from one end. Provide entry area, room for Surveillant or Warden, storage room for baggage and trunks, storage for bedding, storage closets for student clothing, toilet, shower and laundry facilities. Design properly oriented with windows on both sizes for natural light and ventilation. Design unit for women students. 8m2/student	320m^2
DINING ROOM	- Could be used also as a multi-purpose hall for various social events, talks, films and entertainment. Standard 1.2m2/student for 220 students, 8 students/table	264m^2
KITCHEN	- Design to accommodate desire and need for wood burning cookers. Two part kitchen, first part with gas stoves, dishwashing, preparation and serving, located next to dining. Second part designed for wood burning stoves, with open walls and proper venting. Provide adequate and appropriate food and utensil storage. Plan of kitchen should be derived from equipment layout according to user needs	160m^2
LAUNDRY	- Though some laundry space is provided in each dormitory, a central laundry is necessary to handle bed and table linens, as well as to supplement dormitory laundries. Deep sinks with hot and cold water, counter space and tables are used for washing. Separate open space for ironing is necessary. Provide large wall openings for good ventilation.	25m^2
INFIRMARY	- Provide space for up to six single beds, each in a cubicle, or curtained area. Provide space for desk, examination table, work counter and cupboard as well as toilet facilities	30m^2

Note:

MULTI-PURPOSE HALL	- Assembly space to seat students and staff for lecture, films, entertainment. Provide with sloping or stepped floor, demonstration area, and projection facilities.

(Cont'd...)

Such a facility exists at Pitoa and Maroua, but low utilization could not justify the expense of a similar facility for the other institutions. The campus diagrams in this report do not include such a facility for Garoua, Bamenda, or Ngaoundéré. It was assumed that the Dining Hall could serve as an assembly space.

However, MINED has requested inclusion of this facility for all of the TTC's, and it is included in the plan for the new Maroua campus. It can be incorporated during the master planning process for any of the campuses.

Moreover, being outside the scope of this project, these facilities would be funded separately by the GURC.

07. Quality of Facilities - Effect upon Costs:

Determining the appropriate quality of facilities to meet the needs of the Cameroon context is a difficult task. On one hand, buildings designed for long range serviceability and relative permanence, without costly maintenance programs, are initially more expensive. Yet, where maintenance is virtually non-existent, as in Cameroon, there is an argument for the initially expensive facilities. The objective certainly is to provide a live/learn environment that meets expectations, that encourages rather than handicaps and discourages. On the other hand, it seems inappropriate to provide facilities too far removed from the reality of the buildings found in the rural context of Cameroon. There is a strong argument for providing very rudimentary facilities for the Teacher Training Colleges, to prepare the teachers for the situations in which most of them will teach: simple open sided shelters.

The buildings that already exist at the five TTC's are probably the best indication of what Cameroonians believe to be appropriate, varying from the low quality found at Pitoa and Maroua to the recently constructed facilities at Garoua. The facilities at Garoua seem to strike a good balance between those that would be too rudimentary and those that would be overdesigned; therefore they were adopted as a standard of quality for the project.

Building unit costs grow directly out of decisions about building quality, i.e. the choice of materials and systems. As a basis for estimating building costs for this project, a very general outline specification was derived from the relatively new ENI facilities at Garoua. This is intended only as a suggestion of the materials and systems to indicate the nature of buildings recommended, not as a source of actual cost takeoff, which is impossible until the buildings are designed.

It is recommended that buildings not exceed two storeys and where space permits, they should all be single storey. On sloping sites, two storey buildings may be more advantageous, but the single storey buildings are simpler, more economical, and better related to the rural context.

Recommendations for building materials and structures follow:

Framing System - A light concrete frame with a wood truss roof fastened to the frame is the preferred and traditional structural system. Concrete coming out of the ground to the roof mitigates the termite (white ant) problem. It also provides more flexibility in opening the sides of buildings for natural light and ventilation. It is structurally more stable and probably as economical as a masonry bearing wall system.

Roof - Deformed aluminium sheet, fastened to the top of sloping wood trusses is currently the preferred roof. If properly fastened to prevent leakage, the roof is durable and reflective; and though a somewhat expensive material the aluminium is cheap to ship, handle, install, and is locally produced in Cameroon.

Walls - A relatively thin 15 mm concrete block wall plastered inside and out is the common non-bearing interior and exterior wall. Tied to and supported by the concrete frame, the walls provide a weather resistant and economical skin. However, these thin walls are subject to breakage and chipping, particularly where the wall joins the concrete frame. Use of thicker (20 cm) and higher quality block is recommended.

Floors - Exposed concrete floor slab on grade or on the concrete frame, in the case of a two storey building, is universal in institutions. This is a permanent and low maintenance floor surface, though is difficult to keep clean.

Ceiling - Plywood paneling (7 mm thick) applied to the underside of wood roof trusses is the traditional system in single storey construction. This is a good and economical solution, if best quality plywood is killfully applied on leveling strips and painted white for light reflectance. It is better accoustically, and more insulative than a concrete roof slab.

Windows - The generally mild weather, and the need for cross-ventilation has popularized the glass louvered "joulousie" type-window. Very economical in first cost and relatively economical to maintain, this window type is the best choice. Use of tight casement windows could be considered in colder areas such as Ngaoundéré and Bamenda, at least for dormitories.

Doors - Locally manufactured ordinary hollow core doors are not of good quality and warp easily. A higher quality hollow core or else a solid core door in solid wood frame is the best construction. Though not commonly available, kiln dried lumber would solve many of the problems in door and frame construction. A major problem is termites (white ants) entering the frames. Precautions should be taken to prevent this from happening or metal doors and frames should be considered.

Hardware - A very small item in the total cost, it is always best to obtain the best quality hardware available to reduce the frustration of disrepair and lack of serviceability. Importing hardware may be actually less expensive and the best alternative to consider.

Electrical System - Lighting systems can be kept simple and inexpensive using locally available technology and fixtures. Utilizing natural illumination in classrooms that are left virtually white can greatly reduce any need for artificial illumination. Use of color on walls should be limited and advisable for the bottom portion (shoulder height) of the walls only.

Municipal power is available to all institutions and could be provided in bulk high voltage at reasonable rates, if the system is designed in that manner. The institution must provide its own transformer to reduce line voltage to the standard building voltage. Power to buildings should ideally be distributed through underground cables.

Water System - In most cases all that is required is simply an extension of an already existing municipally supplied water distribution system. The Bamenda ENI is unique in that there is currently no water system on campus and the municipal source does not have sufficient head to supply the hilltop site of the school. Required is an elevated tank on the hill, supplied by pump from the municipal source. An underground storage tank near the source may be desirable to allow some flexibility and to reduce the size of the elevated tank.

Plumbing and sewage disposal - This constitutes the most serious problem for all institutions. Students coming to the schools are often unused to plumbing and do not know how to use the facilities. As a consequence, virtually all plumbing systems for dormitories are non-functioning. The difficulties stem from designing residential quality fixtures and fittings in an institutional situation. Moreover, there are an inadequate number of fixtures provided for the number of users. Add to this lack of training and discipline in use, and it is understandable why temporary latrines must be provided.

There are obviously two alternatives for solving the problem. The first is to revert to the rudimentary, and design good latrines as a permanent solution. The other alternative is to design heavy institutional systems with sufficient institutional fixtures to bear the stress, then educate and discipline the users. Breakdowns, when they occur, are then solvable maintenance problems. Traditionally, every building has its own septic tank and disposal cesspool, rather than any kind of centralized institutional system such as oxidation ponds.

Costs are based upon the first alternative: installing heavy plumbing with individual building septic tanks.

Roads - With few cars, there is a minimal requirement for campus roads. A new entry road (5 m width) with turnaround and parking, is recommended for each institution. Proper grading and compacting with a 10 cm gravel cover and proper drainage is necessary to protect the roadway.

Land Shaping - At Maroua and to some extent at Pitoa, land filling is important to raise some low areas and provide a slope for drainage away from the buildings. This is possible where the building plinth levels are sufficiently high. The fill should be compacted and seeded with grass.

Playfields need to be prepared through cutting and filling at Garoua and Bamenda. The one at Ngaoundéré is nearing completion, though needs some qualitative improvement on its edges.

Walkways - Landshaping should anticipate walkway location, and grading should drain water away from them. Cost estimates are based upon new walkway systems for every campus except Garoua, which already has a good system. Walkways would average 2 m in width and at least 8 cm thick.

Fencing - To provide a barrier for livestock and to deter other trespassing, it is important to provide a perimeter fence, as at Pitoa. Estimated cost is based upon use of steel angle posts set in concrete 2 meters apart, with 2 m wide aluminium chain link netting stretched on a heavy 3 strand wire at top, bottom, and middle. It will be necessary to provide gates for access through the fence.

08. Facilities Planning and Design Process

The design and construction of institutional facilities can follow various procedures, some of which are likely to produce unsatisfactory results. Particularly when the institutions are small and located in outlying districts, as is the case with the five TTC's of this project, a special effort must be made if a result is to be achieved that is commensurate with the expectations of the participants in the project and the potential of the investment. It is virtually certain that if traditional procedures presently being followed are allowed to determine results, disappointment will ensue.

One only needs to visit the five institutions of the project to recognize that they for the most part were poorly planned, designed, and constructed. To quote the Director of one of the institutions, his dormitory was a "scandal". The major problem is lack of experience in institutional planning and design, lack of commitment to achieving a quality product, and limited control of the construction process.

For the same investment it is possible to achieve a delightful, conveniently arranged, and soundly constructed environment, or a disorganized, crudely built, frustrating one. When the latter occurs everyone suffers. In order to prevent this from happening, the following considerations and methodology are proposed:

a) In a project where expatriate advice and technical assistance is sought all permanent results of the investment should be a contribution of something better than would ordinarily be achieved. Therefore, some form of intervention such as an expatriate

specialist in Educational Facility Planning (Consultant) should be programmed into the process through a USAID direct contract with an IQC.

b) The Service of Construction and School Equipment in the Planning Division (Service) has important responsibilities for the construction component of the project. Through the services of the Consultant, the Service could present to the Ministry of Equipment (MINEQUIP) a thorough description of its needs for the five TTC sites. The MINEQUIP will then contract with an Architectural and Engineering (A&E) firm for the preparation of the bid documents. The Service, together with the MINEQUIP and USAID, will review and approve each stage of the A&E work through the sketch, preliminary and prefinal submissions to assure that the stated needs are being met. The final bid documents will finally be jointly approved by the MINEQUIP, the Service and USAID before the construction is advertised for bidding. The bids will be opened in the Presidency where they will be evaluated by a panel composed by the members of the Presidency, the MINEQUIP, the Service, and USAID. Finally a host country contract, or contracts, for the construction in the five TTC sites will be awarded and approved by USAID.

c) The USAID/Yaounde engineer (GEO) would monitor the work developed by the Service and the Consultant during the up-front preparation of Master Plans and building layout concepts to be presented to the MINEQUIP for the procurement of A&E services. Before the A&E firm can begin its work, the following studies by the Consultant would be needed:

i) Building Program. This study will describe the findings of needs analysis derived from educational, physical, and financial considerations by the Consultant in cooperation with the users of the facilities. The Consultant will investigate and describe in detail the requirements of the institutions. These include courses, curricula, administration, policies, students, staff and operations. He will then translate them into specific descriptions of detailed facility requirements such as classroom size, shape, seating, and equipment.

ii) Schematic Designs for each Building or Preliminary Bloc Plans. Various alternative configurations will be studied for each building type to examine appropriateness for the situation. Prototypes will be developed and reviewed for their conformance to the specific needs described in the building program. Schematic floor/plans and elevations to illustrate concepts in preliminary form will also be developed.

iii) Site Plan. This will constitute an environmental analysis of the site, including topographical, dimensional, and geological studies. An accurate base map of the site will be prepared, and all collected data recorded. In addition, site needs and constraints will be identified. Alternative organizational plans indicating distribution of the facilities will be synthesized and compared and finally the best selected.

iv) Campus Master Plan. This final document will represent the needs of the user. In it, the schematic design plan of each building will be combined with the site plan concept, adding roads, walkways, utilities, and landscaping.

Throughout this process it is presumed that the Consultant would be in constant dialogue with the Service, who is the user, and the USAID/Yaounde engineer to be sure that the designs and plans produced meet the required needs.

After the above four steps are completed, the final design work would be passed on to an architectural and engineering (A/E) firm through the initiatives of the MINEQUIP.

d) The final design by the A/E firm will consist of the following Phases:

i) Design Development. This includes the preparation of detailed drawings and other data relating to building appearance and structure, mechanical and electrical systems, construction materials and finishes and other essentials. The A&E firm also will submit a Statement on Estimated Construction Cost. The entire process of Design Development includes three separate submissions by the A/E firm:

a. Sketch Submission: This must include alternative selection of material studies and schematics, small-scale preliminary drawings and outline specifications.

b. Preliminary Submission: This must include a preliminary set of drawings representing the site plan, floor plans, elevations, and sections for each discipline: civil, architectural, structural, mechanical, plumbing, and electrical engineering studies and specifications will be outlined so as to be able to identify special problem areas to be resolved and calculate a reasonable cost estimate for construction. This submission is most important; it will determine beyond a reasonable doubt, the feasibility of the construction program vis-à-vis the budgeted funds.

c. Prefinal Submission: This must include all plans and specifications in their final form, incorporating the corrections and modifications recommended through the previous submissions and reviews.

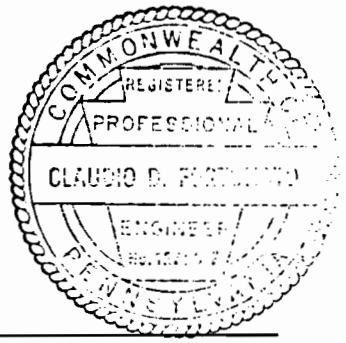
ii) Final Submission and Construction Documents Preparation: Following the prefinal submission approval, the plans, specifications, instructions to bidders, time schedule for construction and a confidential cost estimate will be prepared so as to constitute a final package which must be approved by USAID before advertising for bids.

The GEO will participate in all stages of design development and construction (approval through completion) to assure the application of sound engineering principles.

10. 611 (a) Determination

I have examined the description of the project and participated in the elaboration of the "Facilities Design and Construction", Annex ____, through several fields trips, research, and analysis of construction cost data.

By the observations and studies relative to those activities, I determine that the requirements of Section 611 (a) of the Foreign Assistance Act (FAA, 1961) for the construction program have been met.



Claudio D. Fortunato, P.E.
General Engineering Officer
USAID/Cameroon

TABLE I

NEW BUILDING FACILITIES - Floor Area Requirements m2**
Ref: Building types and Space Norms Annexure_____.

	GAROUA	PITOA	MAROUA	NGAOUNDERE*	BAMENDA
TOTAL STUDENTS	(210)	(220)	(220)	(220)	(320)
LIBRARY (seat 120-160)	240m2	240m2	240m2	240m2	320m2
FACULTY ROOM (15 staff)	50	Remodel	50	50	60
CLASSROOMS (40 stud.-70m2	0	(4)-280	(5)-380	(3)-210	(4)-280
SCIENCE LAB (40 stud.)	0	(1)-100	(1)-100	(1)-100	(10-100
DOMEST. SC. LAB (20 stud.)	0	Remodel	(1)-120	(1)-120	(1)-120
SHOP/MAINT. (20 stud.)	0	Remodel	120	100	120
ADMINISTRATION (Enlarged staff)	Remodel	150	150	Add 40	Remodel
DORMITORIES (8m2/student)	(80)-640	(130)-1050	(220-1760	(160)-1280	(300)-2400
DINING ROOM (Multi-purpose)	Add-120	Remodel	250	Add 138	360
KITCHEN	Add-20	Remodel	160	Add 20	160
LAUNDRY (Supplemental)	25	25	25	0	30
INFIRMARY (6 beds +	0	0	30	30	36
NET TOTALS	1095	1845	3385	1508	3986
+ 20% CIRC/WALLS	274	461	846	377	996
GROSS FLR.AREA.	1369m2	2306m2	4231m2	1885m2	4982m2

TOTAL FLOOR AREA REQUIREMENTS 14,733m2 = /159,000ft2/

* Excludes buildings now planned for construction by GURC during next two years.

** Please note the "Multi-purpose Hall" is not included in the scope of this project. To be funded by the GURC separately. (Not included in above table).

TABLE II

REMODEL & RENOVATE - (Exist. Facilities Flr. area m2)

	GAROUA	PITOA	MAROUA	NGAROUNDERE	BAMENDA
CLASSRM.	0	288	NEW	0	84
ADMIN.	98	NEW	NEW	0	150
DORMS.	180	130	NEW	60	0
DINING	136	300	NEW	0	NEW
KITCHEN	126	150	NEW	100	NEW
OTHER	0	356	NEW	40	0
TOTALS	540m2	1214m2	0	200m2	234m2

TOTAL FLOOR AREA REMODELING/RENOVATION .. .. Say 2200m2

TABLE III

BUILDING TYPE PROJECT PERCENTAGE (New Buildings)

Building Type	No. Units	Net Total Floor Area	% Proj. Net Total
Library	(5) units	1280m2	11
Faculty Room	(4)	210	2
Classrooms	(14)	980	8
Science lab	(3)	300	3
Domestic Science lab	(3)	360	3
Shop/Maint.	(2)	220	2
Administration	(3)+Add	340	3
Dormitories	(20)	6650	55
Dining Room (multi-purpose)	(2)+Add	918	8
Kitchen	(2)+Add	360	3
Laundry	(4)	105	1
Infirmary	(3)	96	1
12 types	65 bldgs.	11819m2	100%

TABLE IV

SITE DEVELOPMENT COSTS

Public utilities available to serve every site. All but Maroua and Pitoa drain naturally. Bamenda has no utilities, requires water tanks, pump.

	GAROUA	PITOA	MAROUA	NGAOUNDERE	BAMENDA
ENTRY ROAD/PARKING Grading/compaction Gravel 10cm Cost/m2 = $26	5x200m $26,00	5x300 39,000	5x20 2,600	5x150 19,500	5x250 62,500 ($50/m2)
WALKWAYS 2m wide Conc. 8cm thick Cost/m2 = $30	2x150m $9,000	2x550 33,000	2x450 27,000	2x550 33,000	2x500 30,000
FENCING Steel posts/ netting Cost/m2 = $18	1200m $2km600	Repair only 6,000	2,000 36,000	2,000 36,000	2,000 36,000
GRADING $4/m3	Grade/ fill	Grade/ fill	New Site	Grading	Grade/fill
FILLING $3/m3 (incl packing)	5,000m3 $17,500	2,000m3 $7,000	25,000	2,500m3 7,000	10,000m3 35,000
WATER SYSTEM pipe to buildings Cost/m = $8	Extension 60m $500	Extension 250 2,000	New Sys- tem 62,300	Extension 250 2,000	New Complete line, tank, pump 250,000
POWER SYSTEM (underground) Cost/m = $10	Extension 60m $600	Extension 250m 2,500	New Ser- vice tra- nsformer 250m 5,500	New Service transformer 250m 5,500	New Service transformer 300m 6,000
SEWER SYSTEM (Septic tank, well) $5,000 ave/bldg.	Replace, Add $30,000	Replace, Add 40,000	All New 60,000	Add 40,000	All new. 70,000
TOTALS	$105,000	$129,500	$218,400	$143,500	$489,500

Note: Quantities are rough estimates derived from site plan diagrams. Rates were obtained from local contractors. (Garoua, Yaounde). Not included are costs of land acquisition, road surfacing, (except Bamenda), building dismantling (assume salvage of materials covers costs), telephone system, and landscaping.

All estimated costs based on 1981 rates

EQUIPMENT AND FURNITURE - (Excluding Library, included elsewhere) TABLE V

Location	Description	Units	Unit Cost	Total Cost
TEACHERS' ROOM -	Refrigerator	1	500	500
	Conf. Table	1	400	400
	Chairs (Study)	16	50	800
	Chairs (lounge)	8	80	640
	Lockers	16	20	320
				2660
For 5 institutions - 5x2660 =				$13,300
CLASSROOM -	Teachers' Desk	1	200	200
	Teachers' Chairs	2	50	100
	Desk Armchair	40	50	2000
	Chalkboard, 4m	2	400	800
				3100
Total 16 classrooms - 14x3100 =				$49,600
SCIENCE LAB	Demonstration Table	1	350	350
	Teachers' Chairs	2	50	100
	Desk Armchair	40	50	2000
	Chalkboard 4m	1	400	400
	Tackboard 4m	1	250	250
	Wall Counter 8m (cabinets under)	3	800	2400
				5500
For 4 institutions 4x5500 =	(Not needed in Garoua)			$22,000
DOMESTIC SCIENCE	Teachers' Table	1	200	200
	Teachers' Chairs	2	50	100
	Refrigerator	1	500	500
	Traditional Stove	1	150	150
	Butagas Stove	1	200	200
	Kitchen Cupboard	1	250	250
	Sewing Machines	2	400	800
	Cutting Tables	2	200	400
	Materials' Cupboard	1	250	250
	Demonstration Tables	1	150	150
	Bed	1	250	250
				3250
For 5 institutions - 5x3250 =				$16,250

EQUIPMENT AND FURNITURE (Cont)

TABLE V (Cont.)

Locaton	Description	Units	Unit Cost	Total Cost
SHOP/MAINT.	Work benches	4	250	1000
	Bench vises	20	50	1000
	Wall counter 8m	1	800	800
	Shelving (misc.)		1000	1000
	Tool storage panels	4	200	800
				4600
For 5 institutions - 5x4600 =				23,000
ADMINISTRAT. -	Executive desks	6	400	2400
	Secretarial desks	4	200	800
	Desk chairs	10	80	800
	Side chairs	12	50	600
	Side tables	6	150	900
	File cabinets	12	250	3000
	Bookshelves	8	150	1200
	Typewriters	6	800	4800
	Mimeograph	1	600	600
				15100
For 5 institutions - 5x15100 =				$75,500
DORMITORIES -	Single beds/mattress	40	250	10000
	Side tables	40	100	4000
	Wall Closet (built in)	40	120	4800
				18800
For 22 units of 40 - 22x18800 =				$413,600
DINING ROOM - (For 220)	Folding tables for 8	28	300	8400
	Chairs	220	50	11000
				19400
For 4 institutions - 4x19400 = (Not needed in Garoua)				$77,600
KITCHEN -	Large refrigerators	2	1500	3000
	Butagas stoves	2	900	1800
	Wood range (large)	1	1200	1200
	Food prep tables	4	300	1200
	Freezer equip.	1 set	5000	5000
	Stock, pots	3	400	1200
	Stainless countertops	3	1000	3000
	Exhaust Hoods	3	1500	4500
				20900
For 4 institutions - 4x20900 = (Not needed in Garoua)				$83,600

EQUIPMENT AND FURNITURE (Cont)

TABLE V (Cont.)

Location	Description	Units	Unit Cost	Total Cost
LAUNDRY -	Ironing tables	4	100	400
	Linen cabinets	4	200	800
	Extractor	1	1200	1200
				2400
For 5 institutions - 5x2400 =				$12,000
INFIRMARY	Beds and Mattresses	6	300	1800
	Desk	1	250	250
	Chairs	8	50	400
	Medical Supply Cabinet	1	200	200
	Examination table	1	600	600
				3250
For 5 institutions - 5x3250 =				$16,250
TOTAL EQUIPMENT AND FURNITURE				$802,700

Note: All estimated costs based on 1981 rates

SUMMARY PHYSICAL DEVELOPMENT ESTIMATED COSTS — TABLE VI

Assume costs uniform in T.T.C. locations (outlying towns)
Assume same unit costs all buildings - 125,000 cfa/m^2 = $500/$m^2$
Assume remodeling/rehab. ave. cost. - 25,000 cfa/m^2 = $100m.

GAROUA -	New Construction -1369 m^2x$500	=	$684,500
	Remodel/Renovate - 540 x 100	=	54,000
	Site Development	=	105,200
	Total		$843,700
PITOA -	New Construction -2306 x 500	=	$1,153,000
	Remodel/Renovate - 1214 x 100	=	121,400
	Site Development	=	129,500
	Total		$1,403,900
MAROUA -	New Construction - 4231 x 500	=	$2,115,500
	Remodel/Renovate - -0-	=	-0-
	Site Development	=	218,400
	Total		$2,333,900
NGAOUNDERE -	New Construction - 1885 x 500	=	942,500
	Remodel/Renovate - 200 x 100	=	20,000
	Site Development	=	143,500
	Total		$1,106,000
BAMENDA -	New Construction - 4982 x 500	=	$2,491,000
	Remodel/Renovate - 234 x 100	=	23,400
	Site Development	=	489,500
	Total		$3,003,900

TOTAL BUILDING COSTS	$8,691,400
FURNITURE/EQUIPMENT	802,700
GRAND TOTAL DEVELOPMENT COSTS - (1981)	$9,494,100
	say $9,500,000

SUPPORT TO PRIMARY EDUCATION PLATE A

NORTH AND NORTHWEST PROVINCES.

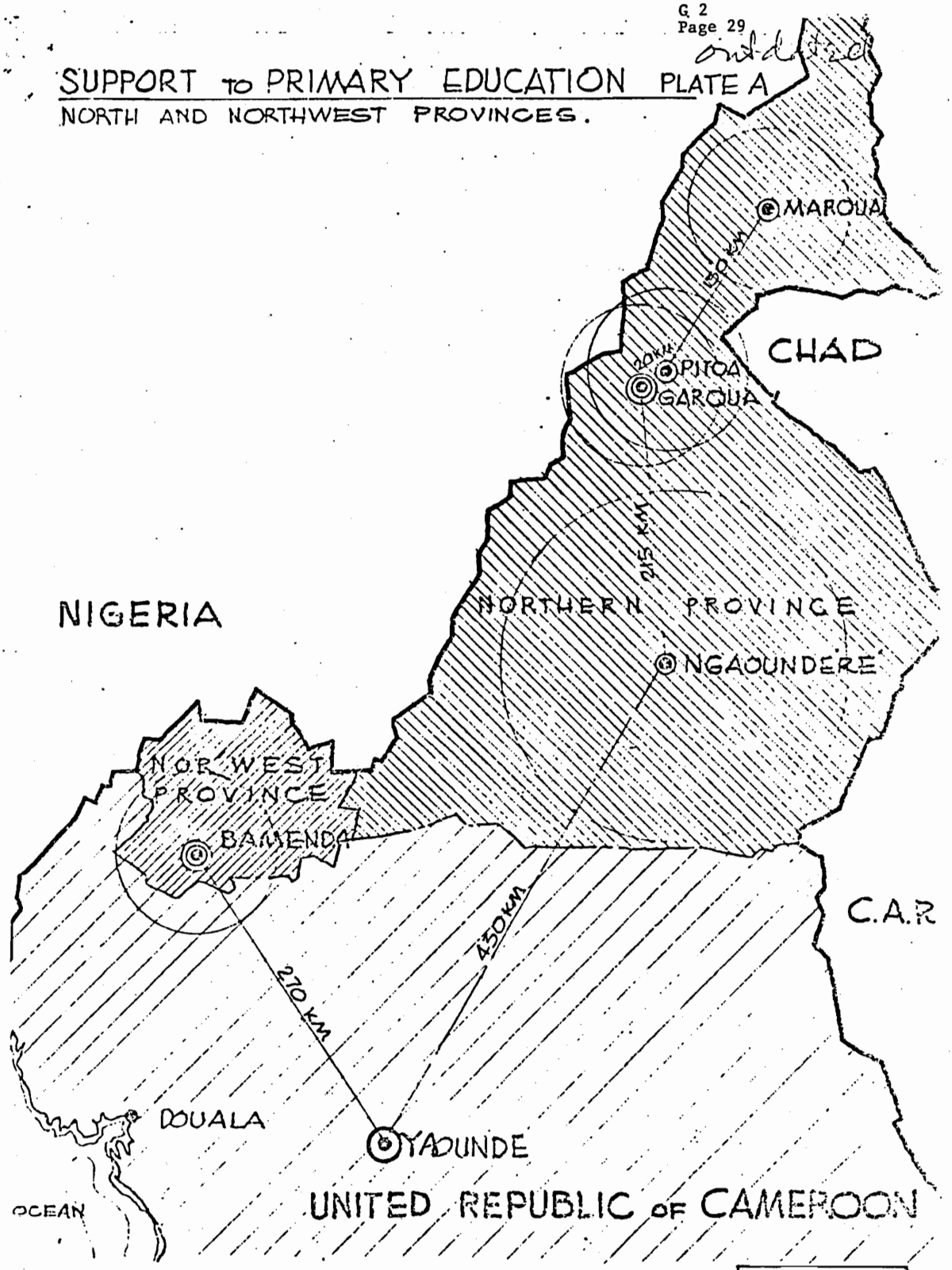
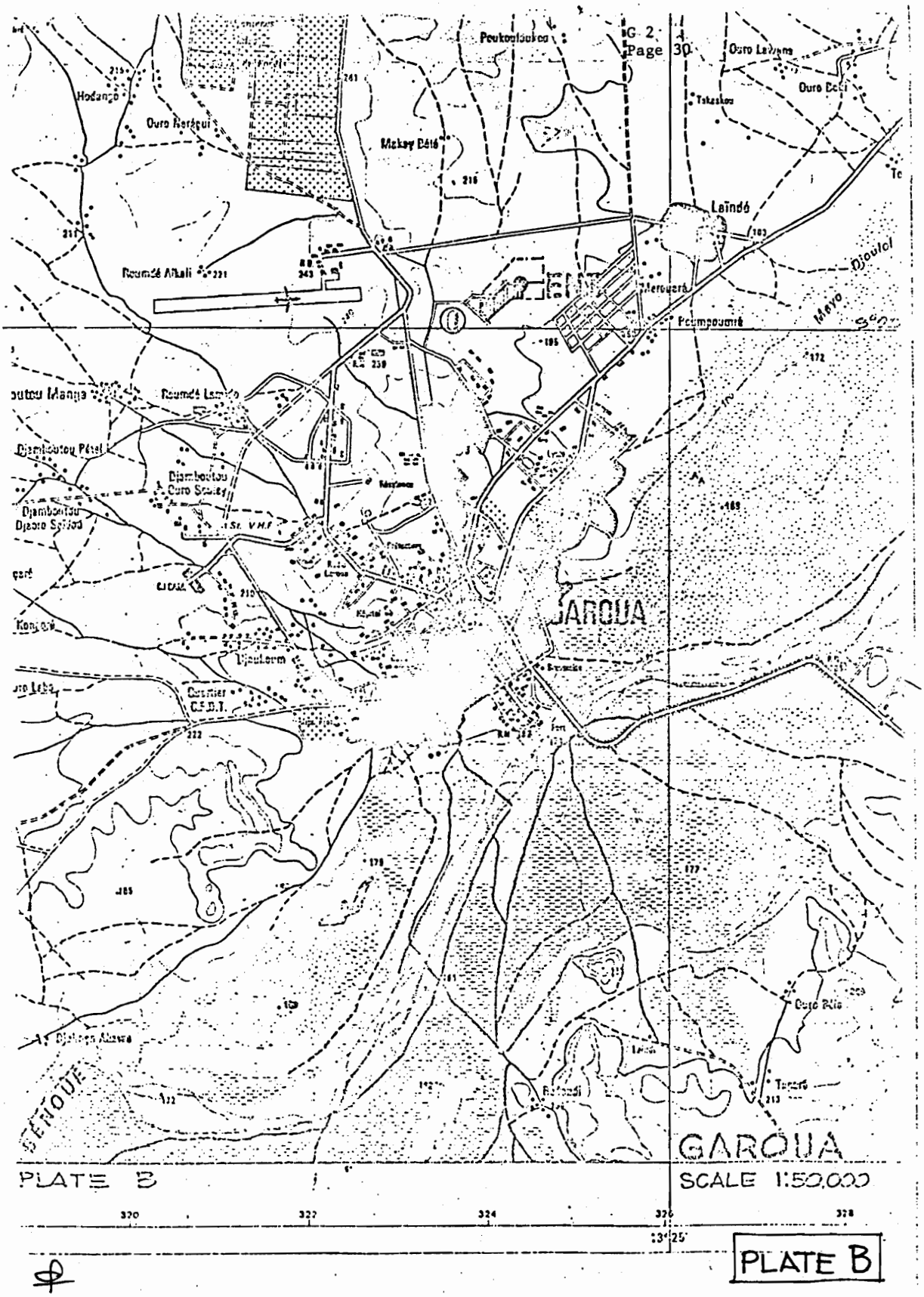
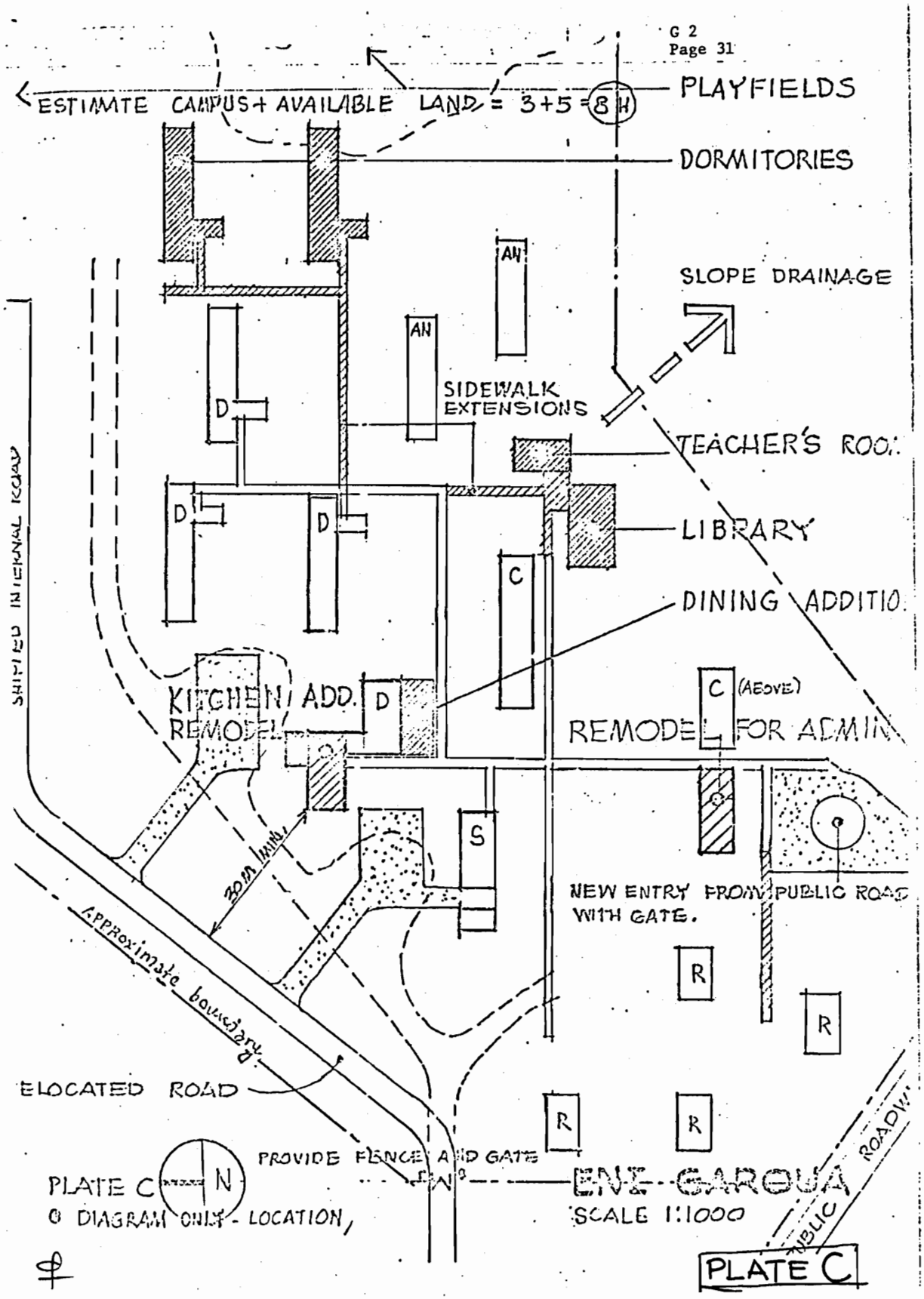


PLATE A





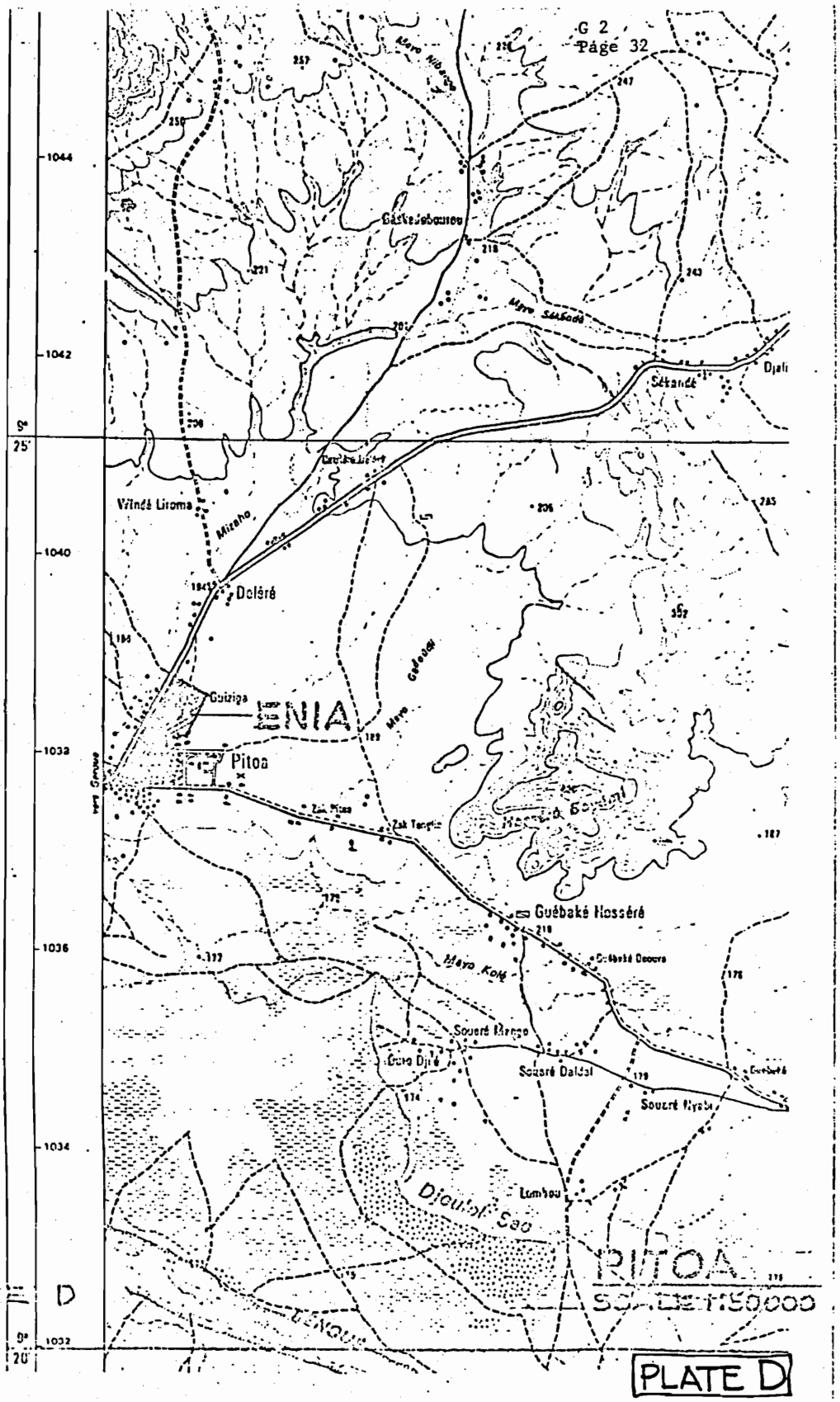


PLATE D

PLATE D

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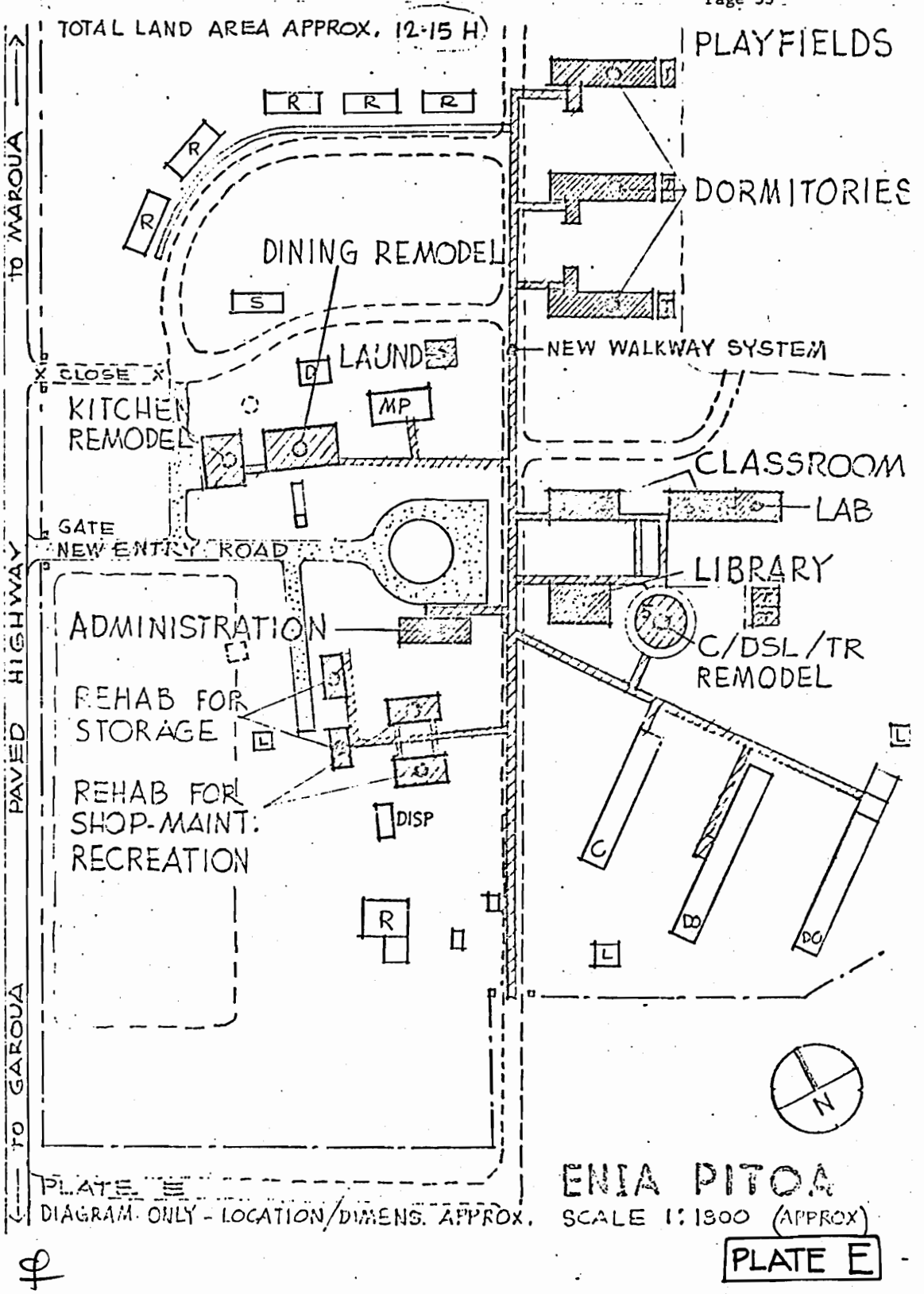

PLATE E

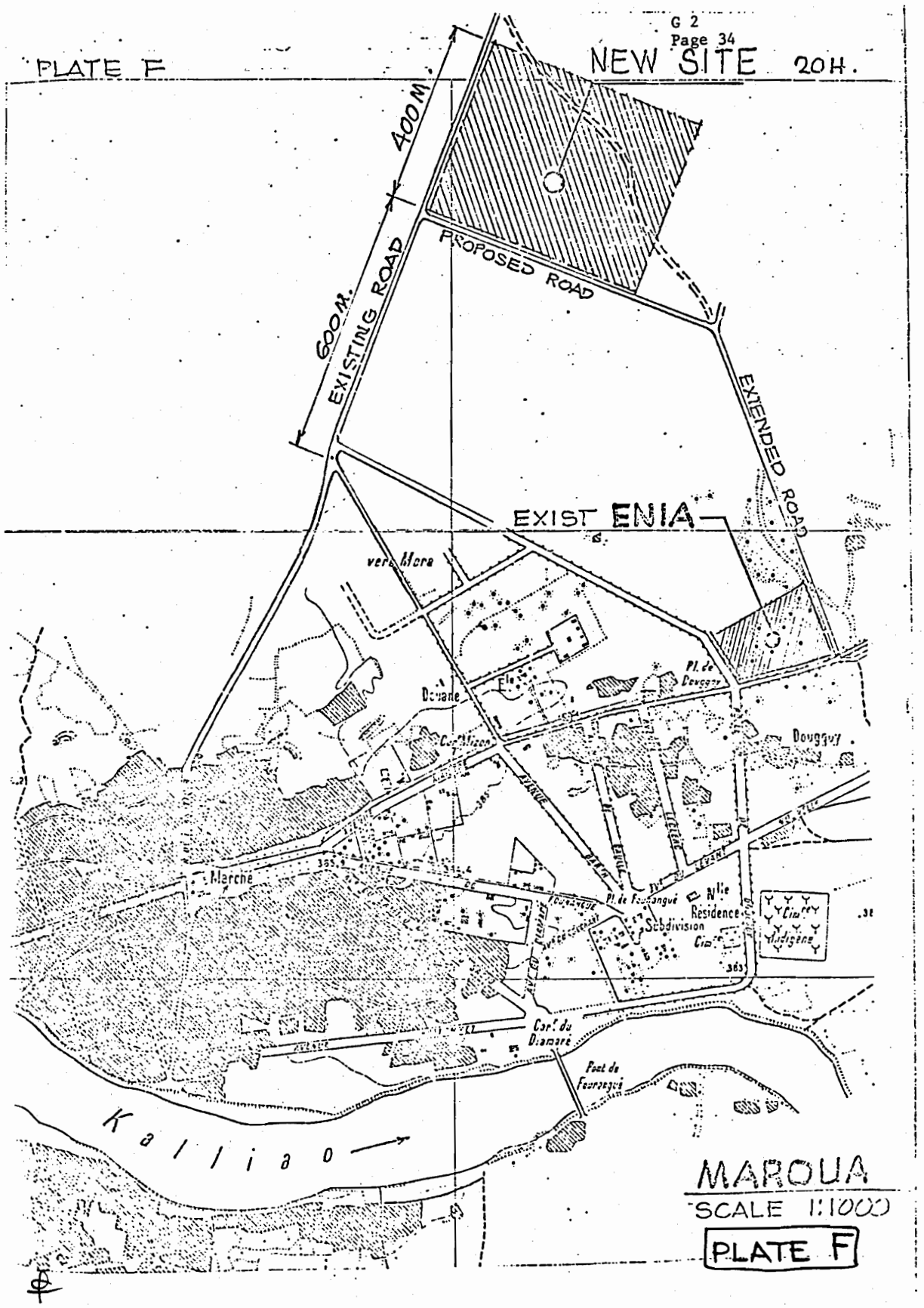

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PLATE G

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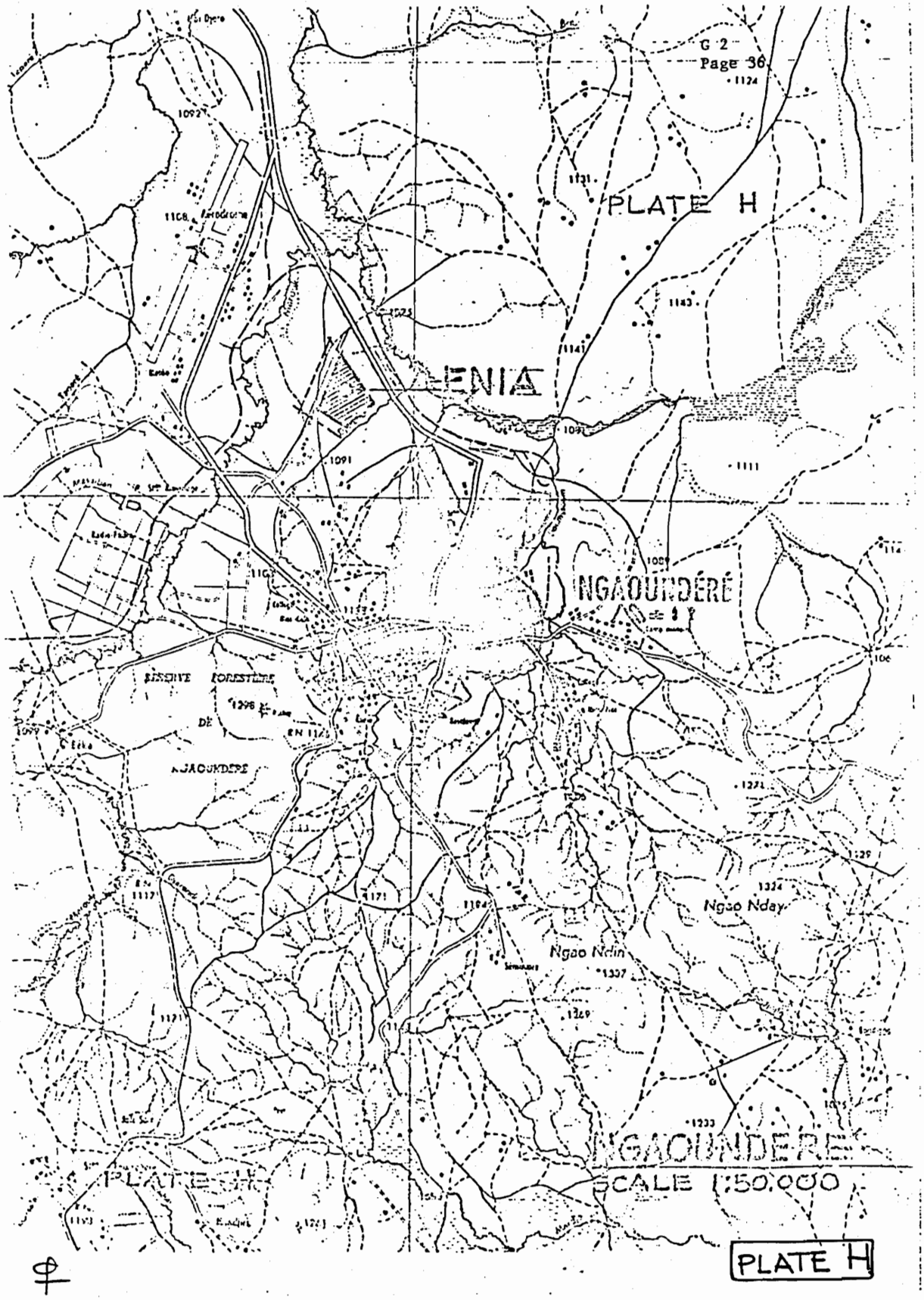
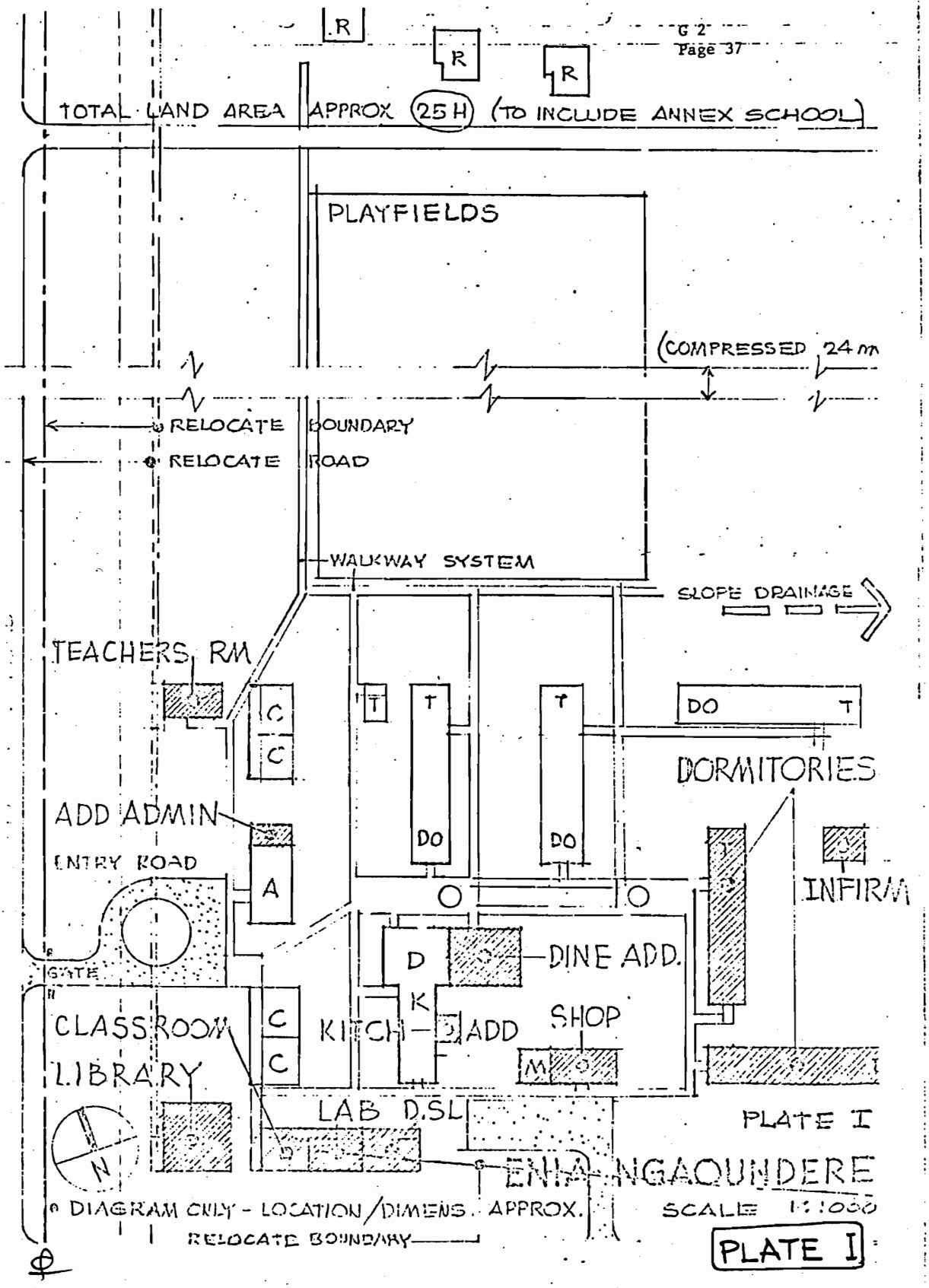
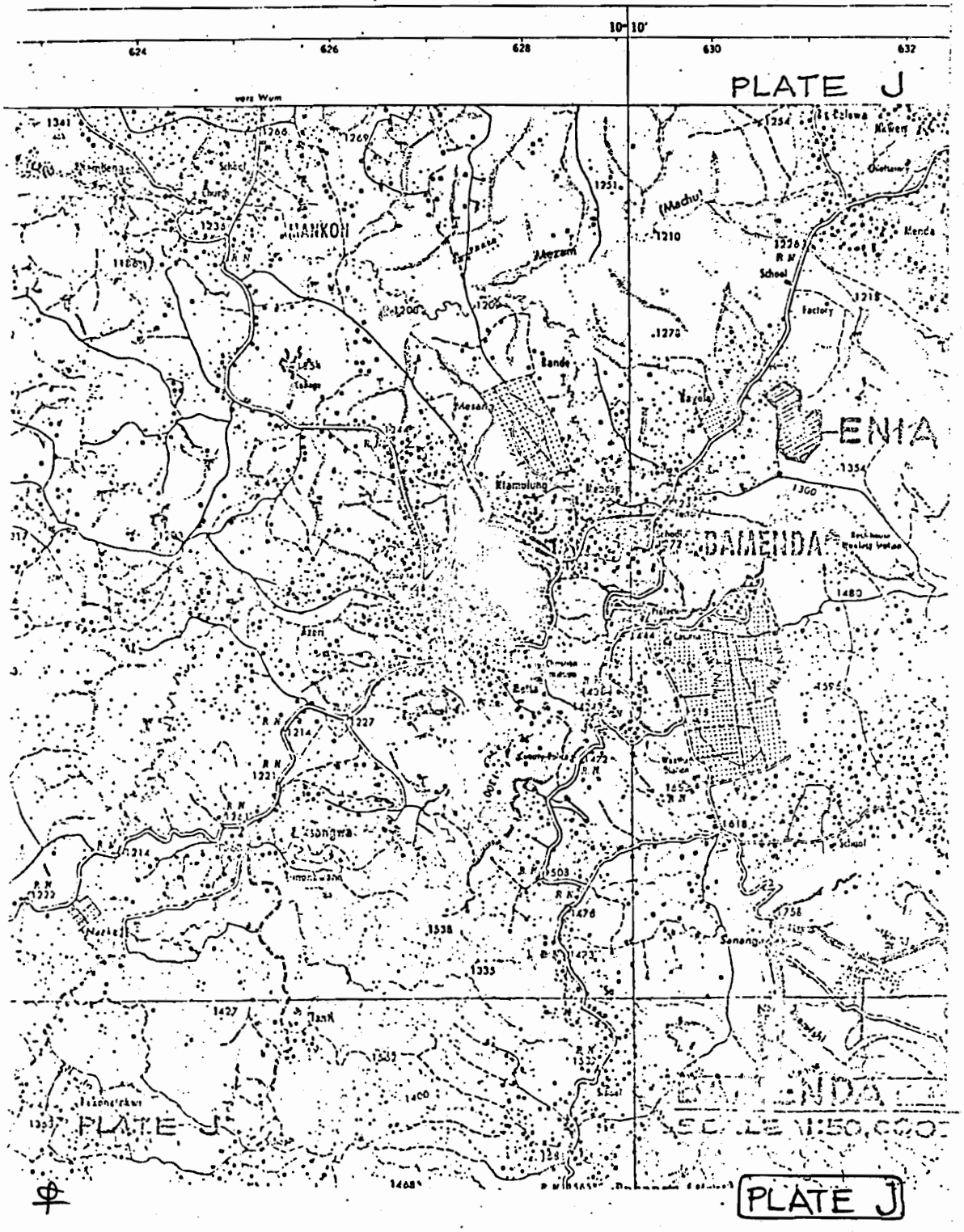
Page 35

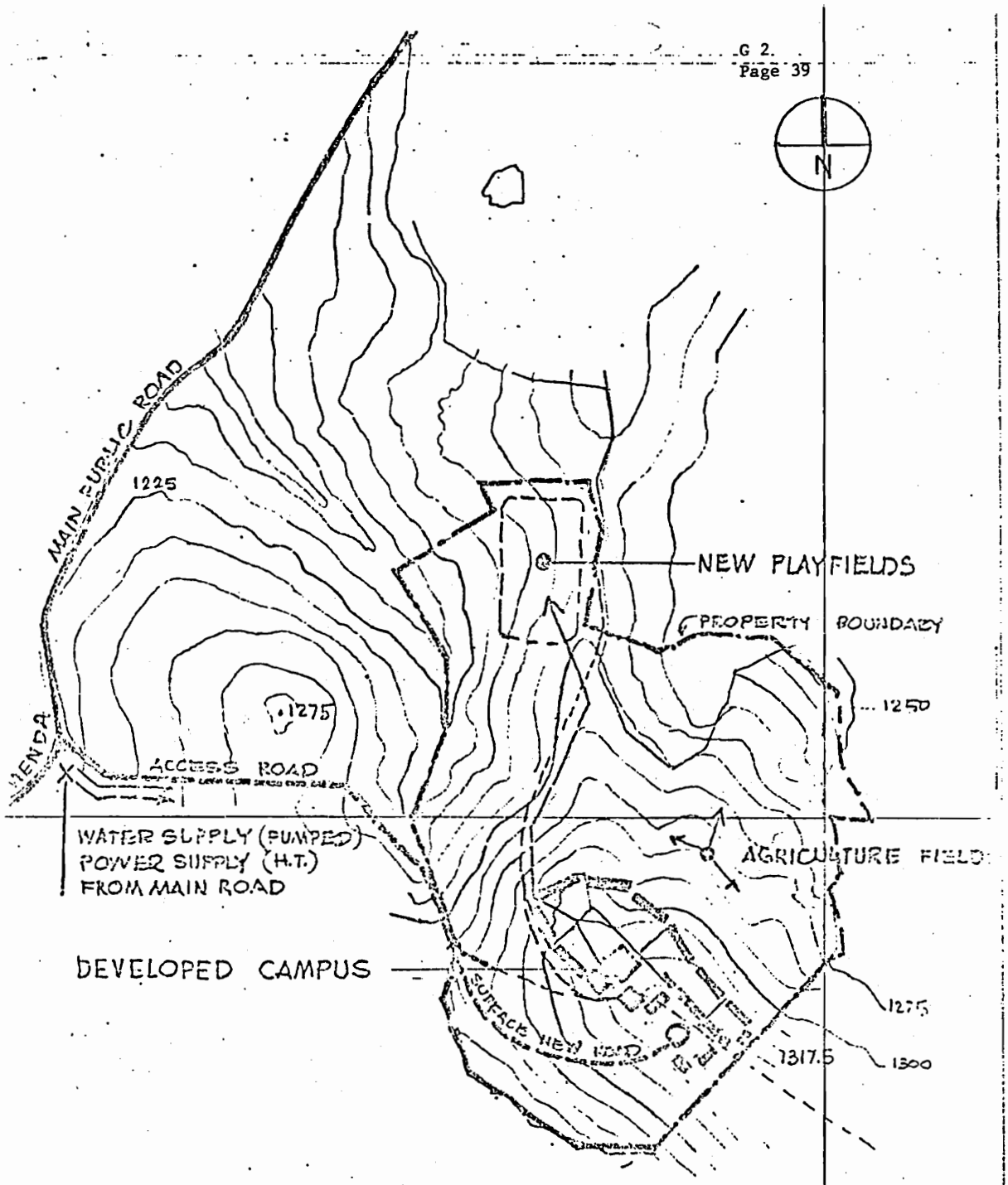




AFOUSSAM 3 c
(OUMBAN - DSCHANG)

TIRAGE PRÉLIMINAIRE





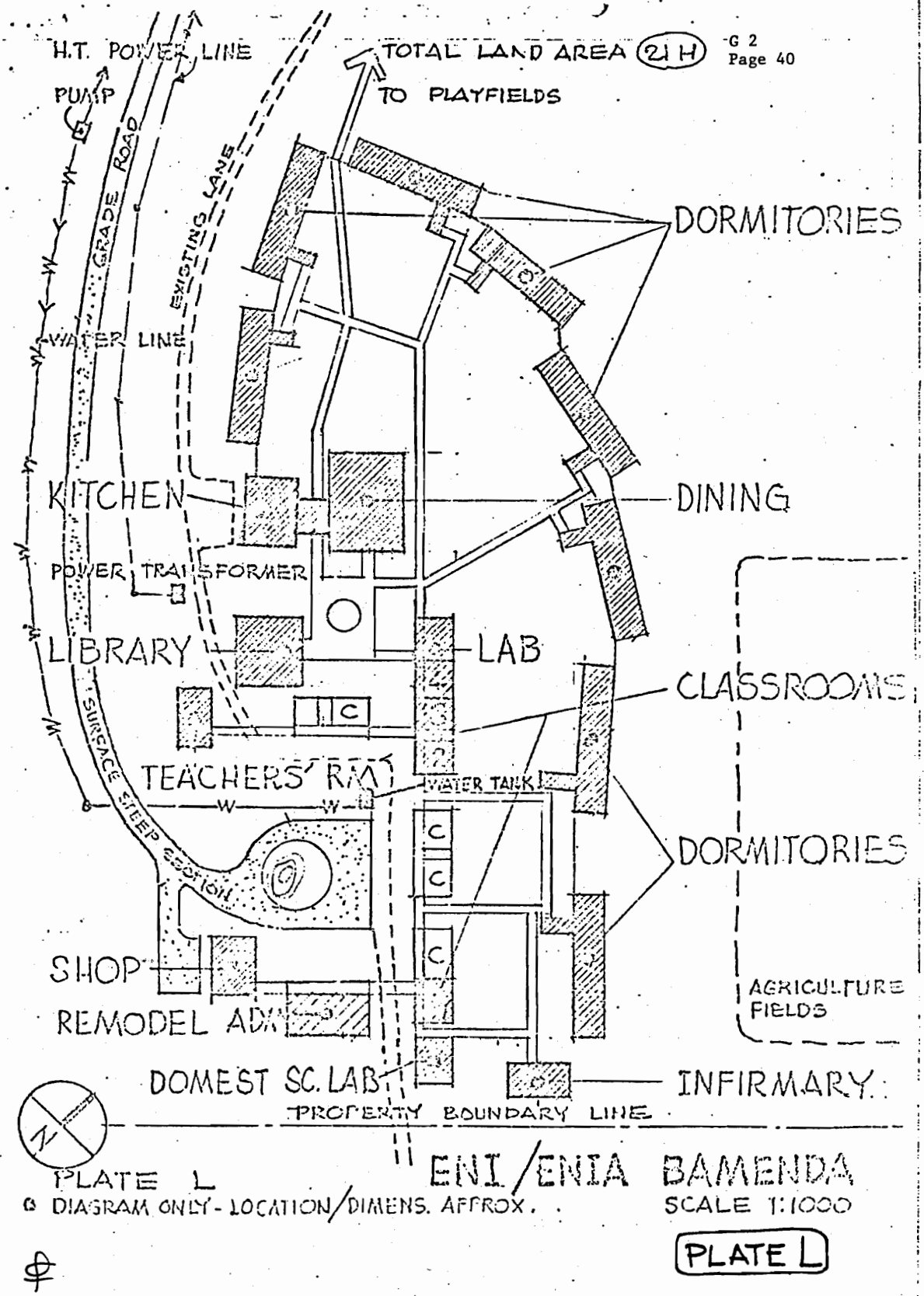


PLATE L

ENI/ENIA BAMENDA

◎ DIAGRAM ONLY - LOCATION/DIMENS. APPROX.

SCALE 1:1000

PLATE L

09. Design and Construction Implementation and Financial Program

For a successful implementation of the projected construction activities it is recommended that the following tasks be undertaken during the assigned times, in their respective sequence and that financing be secured in accordance with the following schedule.

TASK	TIME (MONTHS)	RESPONSIBILITIES GOV'T	USAID	CONTR.	COST FINANCED BY AID (000)	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
01. Secure Consultant thru an IQC*	(3)		X		200	ooo				
02. Complete studies of five Master Plans	(6)			X		oooooo				
03. Approve five Master Plans	(1)	X	X			o				
04. Secure an A/E firm for Constr. Docum.	(3)	X				ooo				
05. Prepare Sketch Submission	(2)			X			oo			
06. Approve Sketch Submission	(1)	X	X				o			
07. Prepare Preliminary Submission	(6)			X			oooooo			
08. Approve Preliminary Submission	(2)	X	X					oo		
09. Prepare Pre-final Submission	(3)			X				ooo		
10. Approve Pre-final Submission	(2)	X	X					oo		
11. Prepare Final Submission	(2)			X				oo		
12. Approve Final Submission	(1)	X	X					o		
13. Advertise for Bids	(6)	X	X					oooooo		
14. Negotiate and Sign Construct. Contr.	(4)	X	X						oooo	
15. Mobilize in Garoua and Pitoa	(3)			X	750				ooo	
16. Mobilize in Maroua	(3)			X	780				ooo	
17. Mobilize in Ngaoundéré	(2)			X	370				oo	
18. Mobilize in Bamenda	(2)			X	1,000				oo	
19. Constr. and Rehab. in Garoua and Pitoa	(12)			X	1,500				ooooooooooo	
20. Construction in Maroua	(18)			X	1,554				ooooooooooooooooo	
21. Constr. & Rehab. in Ngaoundéré	(8)			X	736				oooooooo	
22. Constr. & Rehab. in Bamenda	(16)			X	2,000				ooooooooooooooo	
23. Procurement for Garoua and Pitoa	(6)	X			220					oooooo
24. Procurement for Maroua	(12)	X			200					ooooooooooo
25. Procurement for Ngaoundéré	(4)	X			160					oooo
26. Procurement for Bamenda	(8)	X			230					oooooooo
Financial Plan for Construction (June 1981 prices)	...	...	...	...	9,700	(200)			(4,800)	(4,500) (200)

* Note: it is possible to secure a consultant prior to signing the ProAg, thus anticipating the implementation program by 2 or 3 months.

Social Soundness Analysis

I. METHOD

Since this Project is concerned with rural primary education, a special effort was made to visit rural villages in both Project provinces. Shortage of time precluded visits to the most remote schools, where one must walk 1-3 days after leaving a road. However, villages on roads requiring four-wheel drive vehicles year-round, as well as villages which are cut off from vehicles during the rainy season, were visited, and, in the Northwest Province, included Sagba, Belo, Baingeh, Fundong, Bafmeng, Kuk, Weh, Befang, and Bafut. In the North, visits included a number of villages in the Garoua area (Gaschiga, Hamakoussou, Djalou, Ram, Benaye, Ndoudja, Pitoa, and Ndola) and in the Maroua-Mokolo area (Wandai, Mora, Godigong, Tala Mokolo, and Méri).

The visits were unannounced and school officials were absent. In some villages, the Researcher had previous acquaintances, and in other places with teachers, parents, and sometimes village officials. Questions concerned the local school, the teachers' qualifications, career advancement, rural problems, inspector's visits, school attendance, books and teaching materials. Above all, an attempt was made to probe for attitudes concerning modern education, rural teaching assignments, girls in school and women as teachers, and the role of the teacher in the community. In all, 82 people were interviewed, either individually or in small groups:

	Northwest	North
Primary school teachers interviewed	26	22
Public/Private	12/14	18/4
Women/Men	8/18	2/20
Northerners/Southerners	-	12/10
Trained/Untrained	16/10	11/11
Over 40/Under 40	14/12	2/20
Rural Parents interviewed	8	20
Rural school dropouts interviewed	-	6

In addition, during visits to TTCs, faculty members and groups of students were also interviewed. Special sessions were held with women students alone:

	Northwest	North
TTC faculty	5	3
TTC students	35	98
Women/Men	18/17	12/86

From these visits and interviews three topics emerged which are of special concern to the Project:

- Primary schools in rural communities
- Incentives in the teaching profession
- Women in the teaching profession

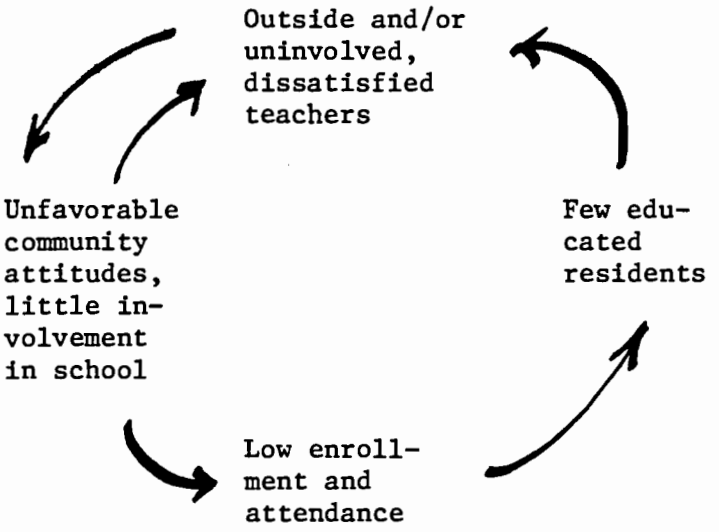
II. PRIMARY SCHOOLS IN RURAL COMMUNITIES

Our visits made clear that there are really two types of rural communities--those in a vicious cycle of poor school--community progress, and those in a productive cycle.

Villages in the vicious cycle

In both the Northern and Northwestern provinces, some rural areas are still resistant to modern primary education. Patents place a low priority on schooling, preferring instead for children to work in family fields, herd cattle, or care for younger siblings. Modern education sometimes means a sharp break from traditional values and ways of living, particularly for girls and for Moslem children. The children usually have to leave their villages to complete even their primary schooling, as well as to attend secondary school or to earn wages. Thus school enrollment rates are low (15-20% in some parts of the North); attendance is low (sometimes less than 15% at the end of the school year, which is the busy planting season; and retention rates are low (50% have dropped out by grade 4).

The teachers assigned to such villages are often another detrimental factor. They are both an effect and a cause of community resistance to the school:



During our unannounced rural visits in the North, we happened upon four villages illustrative of this model all within an easy hour's drive of a Departmental Primary Inspector's office. We heard reports of other similar villages in both the North and the Northwest.

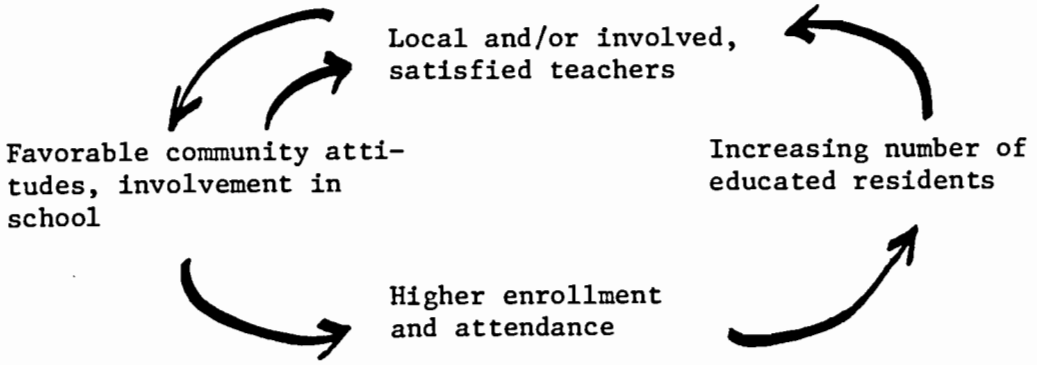
The school in such a village typically has three or four grades, with only one or two teachers, and 25-170 pupils enrolled. The teacher is often an unmarried young man, in his first teaching post after the training school. Sometimes he is still in the third year (full-time teaching) of his teacher training program. He is ill-prepared for rural teaching, namely for: the rudimentary school buildings; the crowded classes and irregular attendance; the shortage of desks, benches, text books and teaching materials; the isolation from colleagues, advisors, entertainment and sometimes from villagers themselves at the site where the school is located. An additional difficulty occurs in the North: many of the rural teachers are Southerners (from the Eastern, Western, Central South, and Littoral Provinces), who are unprepared for Northern life, e.g., the heat, the lack of water, the millet diet, the pervading Moslem religion, and their own inability to communicate in the Fulfulde language.

The young teacher feels isolated and frustrated. His salary is usually delayed 8-12 months or more. Mail does not arrive. For lack of transportation, and, in some instrances, initiative, the inspector never visits the village to counsel the teacher or arbitrate teacher-community difficulties. As a result, the teacher becomes irregular in his teaching and leaves the village frequently to buy food, to seek medical care, to borrow money, and to file for a transfer.

The villagers, of course, complain that the school "does not function normally". They accuse the teacher of drinking, absenteeism, and lack of seriousness. They do little to improve his housing or to provide school furnishings. Their children attend school less and less, even when the teacher is present.

Eventually, the teacher may simply desert his post altogether, and the following year another new teacher is sent to the same village. Over the years, few residents of the village become literate or educated. The consequences are two-fold. First, the villagers, even the traditional chief, feel powerless to complain to the distant hierarchy of the Ministry of Education and to demand improvements. Second, none of the village young people becomes a teacher who can serve his or her own community. Young, unprepared, outside teachers keep arriving. The vicious cycle continues.

Villages in the productive cycle



A very different and productive pattern occurs in many villages of both provinces, sometimes throughout entire districts. In some of these villages, the teachers are natives of the area, able to adjust quickly to local life. In some villages young outsiders teach alongside experienced local teachers. The government school inspector or the church school manager visits at least once a year.

The community often has a Parent-Teacher Association, active in providing the teachers' lodging, planning new buildings, maintaining existing buildings and equpment, and perhaps helping with a school garden. The community has favorable attitudes toward the school and toward modern education. The teacher is something of a "king", a "light" in the community. School enrollment and attendance are good. Some of the teachers stay in the community for a long time (more than four years).

After some 15-20 years in this cycle, a considerable number of villagers have been educated to primary level or beyond. Whether living in the village or elsewhere, they continue to work for the improvement of the village. They know how to organize themselves for collective action for non-traditional endeavors, how to obtain and administer local or outside funds, how to ask the administration for road repairs or for roofing for a new school. Most important, perhaps, some of the villagers have become teachers, and work in their own village or in others nearby. The circle has closed, and a good pattern perpetuates itself.

One might well ask why such different village patterns occur and particularly how the productive cycle became established in a given rural community. The answer seems to be that at one time the village had dedicated and highly motivated teachers from outside. In some areas they were missionaries from abroad. Elsewhere they were Cameroonians sent by their government or their church. During the critical period, they received regular professional supervision and support. They developed good community relations and fostered favorable village attitudes toward education. Eventually the community began to produce its own teachers, and outsiders were no longer needed.

Implications for the Project:

One desired result of the present Project would be to aid villages to break the vicious cycle and to enter and maintain the productive cycle. In the immediate future, these villages need trained, dedicated, well-supervised teachers from outside. The following Project activities can help provide such teachers:

-- Pre-service courses in TTCs will include practical help for living and teaching in a rural milieu. Courses in hygiene and manual arts will include practice in building a wall, digging a well and a latrine, and making desks and benches. If Southerners are being trained for Northern posts, they will have special studies on cross-cultural adaptation, including the Moslem religion and the Fulfulde language. Student practice

teaching will occur not only in urban schools, but also in small, crowded rural schools with student-teacher ratios representative of those they will actually be facing as teachers.

-- Textbooks will be provided to students at the beginning of their TTC training. As they go to teaching posts, these books will help them prepare lesson plans, as well as study for their own professional exams.

-- With more teachers available for rural posts, young teachers (and Southerners in the North) can be assigned to schools with experienced teachers, rather than alone.

-- Vacation in-service training courses will offer rural teachers stimulation and advancement opportunities equal to those found in urban areas. Their job satisfaction, motivation, and effectiveness are bound to rise.

-- The creation of additional sub-inspectorates is already enabling inspectors to visit rural schools more frequently. Short in-service training courses will enable inspectors to carry out better their multiple roles of administrator, personnel manager, and pedagogical advisor. Vehicles will address transportation problems.

-- Short-term training for headmasters will make them better pedagocal advisors for the teachers working under them

III. INCENTIVES IN THE TEACHING PROFESSION

This Project hopes to train many new teacher candidates, offer in-service training to current personnel, and make school personnel more effective in their jobs, particularly those in rural areas. What incentives now encourage personnel to take training and to do good work? What disincentives discourage them?

To enter the teaching profession

1. Incentives:

   - Good chance of permanent employment in an expanding profession;
   - Opportunities for professional advancement over the years;
   - Relatively light schedule: a 5-day week, a 9-month year (especially appealing to women with family responsibilities)

- For a married woman: a guaranteed job wherever her husband may be transferred;
- Opportunity to earn extra money by tutoring privately (especially in cities).
-

2. Disincentives:

- Lower income than many other fields requiring comparable education--police, administration, commerce;
- Likelihood of assignments in difficult rural areas;
- Likelihood of transfers every 2-4 years (not true for private teachers).

To attend TTC

1. Incentives:

- Salary during training period in government teacher training schools;
- 10-year contract, beginning immediately;
- Increased chance of becoming a civil servant (with guaranteed job, salary, benefits, and pension);
- Increased chance of passing professional exams and of entering higher pay grade;
- Increased educational level enabling the graduate to leave primary teaching for other (more lucrative) fields;
- For students from areas of low primary school enrollment: occasional special consideration on entrance requirements.

2. Disincentives:

- No real risk at present of losing job opportunity if one does not attend the TTC;
- Tuition and fees required to attend private TTCs.

To take in-service courses (correspondence courses, evening courses, vacation courses, short seminars)

1. Incentives:

- Increased chance of succeeding in professional exams, thus receiving a salary raise;
- Pressure from supervisors to attend certain "obligatory" sessions (some journées pédagogiques, church-run courses in the North);

- Paid transport, living expenses or "night allowances" for some courses (some journées pédagogiques, churn-run courses in the North).

2. Disincentives:

- Lack of financial reward for successfully completing the course itself;
- No risk of losing job or certification if one does not attend the course;
- Tuition and book fees required in some courses (correspondence, private evening courses in urban areas)
- Loss of vacation or evening time;
- For upper level teachers, directors, TTC professors, and inspectors: lack of opportunties for financial or professional advancement;
- For rural and small town teachers: distance from urban centers; they cannot attend evening courses and often do not even receive information in time to register for correspondence courses and exams.

To be an effective teacher, director, professor, or inspector

1. Incentives:

- Favorable report by superior;
- Job satisfaction;
- Good community relations.

2. Disincentives:

- Lack of financial rewards for good work;
- Little or no risk of losing salary, job, or civil service status;
- For teachers: lack of time to do both lesson preparation (which goes unrewarded) and study for professional exams (where success receives high financial rewards); furthermore, professional exams occur at the end of the school year, just when the teacher is most needed in his or her own classroom.
- For inspectors: difficulty and inconvenience of rural trips; lack of transportation; inadequate vehicle maintenance and gasoline allowances.

To teach at rural schools

1. Incentives:

- Legal obligation to work wherever posted;
- Salary equal to urban salary, but usually the cost of living is lower in rural areas;
- For rural natives: opportunity to serve one's own village.

2. Disincentives:

- Difficult living condition--food (inadequate, difficult to obtain), water, (in short supply or almost unavailable in the dry season), housing (often primitive and crude);
- Distance from medical care, departmental Inspectorates and the Provincial delegations, professional counseling and advice, in-service training courses, information, upper level schooling for one's own children;
- Lack of financial rewards for hardship posts;
- Failure of government to honor requests for transfer after the required 3 years in a post. Eventually, the only possibilities for a teacher to leave may be to plead frail health, exploit personal connections, or abandon the post.

Implication for the Project:

Among the disincentives for entering the teaching profession and for attending TTC, the relatively low pay of teachers is nearly always cited as the most significant. This Project cannot aim to raise the pay scale. Instead it should focus on certain people (of rural origin, with varying levels of education) for whom current teachers' pay and working conditions will not be discouraging.

In-service training:

In-service training is often offered to teachers once a year for one or two days by provincial inspectors. In addition, confessional school systems also offer a variety of programs to upgrade their teachers, including one which was developed in Ngaoundéré by the Lutherans of one month's duration to assist their teachers to study for the annual national concours (exams given by the government which, if the candidates pass, permits them to advance to the next higher grade). In addition, hundreds of teachers, especially in the cities, each year try to prepare themselves in a variety of ways, evening courses, group sessions individual study, etc., to sit for, and hopefully pass, these concours. Most of them pay enrollment and book fees themselves. They have one goal in mind: to pass a national professional exam, the only path to professional advancement and substantial salary increase. The Project must recognize that money is their primary incentive, not professional certification (which is not uniformly required in Cameroon) nor more effective teaching (which is rewarded only intangibly). Therefore, in-service training offered by the Project could require a small financial investment by the students. Above all, it must offer financial benefits, increased chances of passing professional exams, or a salary increment awarded for successful completion of the training course.

More incentives are clearly needed for effective teaching in rural shcools. Teachers trained in Project activities must be induced to serve in rural villages and teachers currently in rural posts should be given

priority as candidates for Project training. Then they should be obligated and rewarded (with special attention, if not money) for at least three years of dedicated service in one rural school.

During our discussions with teachers and TTC students, they suggested a number of ways to make rural teaching more attractive. Here are their ideas:

- Require all teachers to work 3-4 years in rural areas. Then after the required period, honor their requests to leave.

- Offer financial incentives for rural posts, such as hardship allowance or salary increment for completed rural service.

- Guarantee housing which meets these minimum standards:

  - Small house with 1-2 bedrooms and a sitting room
  - Walls of mud block or cement
  - Good roof of thatch or metal

- Guarantee schoolrooms which meet these minimum standards:

  - Walls of mud block or cement
  - Good roof of thatch or metal
  - Basic furniture - teacher's desk and chair, pupils' desks, blackboard
  - Basic supplies - teachers' textbooks, chalk
  - A well near the school

- Give new teachers a salary advance to help them through the first months until their salary begins to arrive regularly.

- Establish a system of delivering salaries to rural government teachers, so they don't have to leave their post for several days each month to obtain it. (Private schools already have good systems of salary delivery.)

- Offer loans for motorcycle purchases.

- Furnish isolated teachers with two-way radios.

- Decentralize government handling of personnel matters, so teachers do not have to travel to Yaounde to follow applications for transfer, professional advancement, etc. (Private schools handle such files in the department or division.)

- Encourage community development in rural areas so they become desirable, healthy places to live.

- Incorporate teachers into rural communities by giving them responsibilities such as record keeping or community development duties.

IV. WOMEN IN THE TEACHING PROFESSION

The current situation:

About one-fifth of the primary teachers in the Northwest Province are women; about half of the TTC students are women. In the Northern Province, the statistics are scanty, but the proportions are surely much smaller.

The law in Cameroon guarantees equal treatment of men and women in schooling, examinations, employment, salaries, etc. In addition, women are entitled to special benefits such as maternity leave and nursing breaks (for breastfeeding infants during working hours). Nearly all the persons we interviewed (teachers, administrators, parents, students), male and female, agree with these regulations. They accept quite matter-of-factly that women are and should be employed as teachers, and are entitled to maternity and nursing benefits, as well as time to care for sick children.

Our informants, however, are quick to point out several difficulties which apply only to women:

1. Women students (married and unmarried) who become pregnant in the TTC often miss important segments of their training. Some schools suspend pregnant students; others allow them to continue their studies as best they can.

2. Unmarried women teachers, some people say, "cannot" be assigned to rural posts because "they cannot adapt", "the life is hard", or "they are not strong enough". It appears, however, that such assignments have rarely been tried, with young women teachers being assigned to rural schools with other experienced teachers. Furthermore, some administrators admitted that unmarried women could be assigned to their own villages without problems.

3. Married women, according to civil service policy, are posted in the same place as their husbands. Women teachers are usually married to men whose jobs keep them in urban centers. Therefore, urban centers often have a surplus of teachers, the majority of them women.

4. In a primary school with several women teachers, at least one of them will be absent at any given time, because of maternity leave, nursing breaks, or their own children's needs. A teaching colleague will have to take over her class that day, sometimes adding 50 or 60 students to his or her own class. Some male teachers expressed ressentment about this situation; others saw it as unavoidable, yet detrimental for the pupils.

The school administrators we interviewed (all men) were divided on the question of whether more women should be encouraged to enter the teaching profession. Some felt they should not, because of the above problems. Others said they would like to see more women entering TTCs. Still, others felt that mostly men should be recruited at present. Later when rural areas become more developed and more accessible, women recruits could have priority.

Implications for the Project:

Under current Cameroonian policies, all Project activities will be open to men and women alike. In some areas, the Project might encourage administrators to seek solutions to the problems which currently make them hesitate to train, hire, and assign women teachers.

In the Northern Province, in particular, there are few women teachers, but many opportunities exist for them in small towns and large villages (even if not in remote villages). The Project will provide new or expanded dormitories for women in Northern TTCs. In addition, the causes of current low female enrollment in TTCs should be determined. The causes might include a lack of women candidates for the entrance exams, a small number of successful women candidates, or the decision of successful candidates to go to school elsewhere. Once the causes are identified, gradual steps could be taken to integrate more Northern women into the teaching profession.

Library Analysis

1. INTRODUCTION

Although a library should be a cornerstone of teacher training, at present such a library system is lacking at the five Teacher Training Colleges this project proposes to assist. The limited holdings available are disorganized and outdated. There is no professional staff to give direction to this aspect of teacher training.

To correct the above situation, the project will establish a staff of ten people to run a library service at each of the TTCs.

A. The Status of Libraries in Cameroon

Until independence in 1960, libraries in Cameroon were attached to foreign missions. Libraries, like higher education, have evolved since independence. The National Archives and Library evolved in 1966 to house the nation's historical documents. Each new institution of higher education also acquired a library.

Today there are 43 trained librarians in the nation. They are divided into two categories: 21 professional librarians who hold a Master's degree and 22 intermediate librarians who have undergraduate training. Cameroon's professional librarians have studied in Canada, France, Great Britain and the United States. Those librarians classified as intermediate attended a two year course offered in Dakar, Senegal or Ibadan, Nigeria. The Cameroonian Association of Librarians, Architects, Documentalists and Museum Technicians (ABADCAM) was founded in 1979 to set professional standards. However, for all practical purposes it is defunct.

There currently is no office in the MINED actively responsible for libraries. However, there are decrees for the establishment of libraries in secondary schools and institutions of higher education, including teacher training colleges (TTCs). The Garoua and Bamenda TTCs already have rooms designated to serve as libraries.

B. Description of Library Resources at Teacher Training Colleges in the North and Northwest Provinces

Visits to the five TTC campuses revealed striking differences in library resources. The library building in Garoua is closed. The Director and Library Assistant made this decision due to loss of books, insufficient funds for materials, and lack of furniture. This is the only place which has a staff person assigned specifically to the library. He attended the Library Institute in 1979 at the University of Yaounde library. (It was intended that this institute would be held on an annual basis, but so far the three week workshop held in 1979 is the only one that has taken place). The acquisitions record lists 474 volumes; a shelf count gives 234. The books are locked in a room, or closed-stack area, and are covered with dust.

There is a library room on the campus of the ENIA in Maroua, which was closed during 1980/81, by decision of the Director. There are some 1,000 volumes on open shelves, again covered with dust. There are no records maintained on holdings.

The TTC in Ngaoundere, temporarily occupying space belonging to the Lycee, has about 500 volumes and these are shelved in the Director's office. Students and faculty are allowed to borrow these books. The original architectural plan for the new TTC campus at Ngaoundere called for a library building but has yet to materialize.

The few books available for students to use at Pitoa have been purchased by individual teachers who keep and lend them on a personal basis.

Though the TTC in Bamenda has a new library building, the library collection of about 500 volumes is in the office of the school's storekeeper, where students are encouraged to browse and borrow. USAID, the British Council and the French Cultural Center donated most of the collection, which has no periodicals.

None of these libraries has card catalogs. A log, when available, lists holdings. A similar log is maintained for circulation. In all cases, books are arranged on the shelves roughly according to the Dewey Decimal Classification System. With no air conditioning for protection against heat and dust, holdings are bound to disintegrate. Only the Garoua library has an air conditioner, which needs replacing.

Existing library collections appear to have been established through gifts when the original facilities were constructed. Budgetary constraints have precluded additions. In sum, the use and maintenance of TTC libraries seems marginal.

It should also be added that it is critically important that the library at each TTC should serve as a place where students can study. Outside of studying in bed, there is no place except in the classrooms where students can work; dormitory space is inadequate to permit a student to have even a small table and/or chair. At Garoua, which has relatively new dormitories, and where the number of students being housed is in accordance with the capacity for which the buildings were designed, there is no study area. At the newest dormitory, the one at Ngaoundere which has not yet been occupied, the building was designed on the basis of the Garoua norms but beds have been double-bunked and thus a building designed for 40 will in fact be accommodating 80. Under these circumstances, it is questionable whether or not students can even study in bed. Thus, while the need for a school library in a book-starved environment is self-explanatory, the need under present TTC conditions, for at least one place where students can study, is also overwhelming. (See Appendix 1 for a chart summarizing library resources in Cameroon.)

II. ANALYSIS OF TTC LIBRARY NEEDS

A. Personnel and Administration

The problem of personnel exists in all five TTCs. Garoua has a part-time staff member who supervises the library. Bamenda has library space but no personnel. The other three TTCs have neither space nor personnel. MINED and the TTCs have a minimum need of ten new library positions. Three MLS trained librarians (Grade A 1), five library assistants (Grade B 1), and two bilingual clerical assistants (level 6) are needed. (See Appendix II for Administrative Structure).

The MLS librarians will be the coordinators for all TTC libraries. They will be based in Yaounde in the office of the Inspectorate General. They will set policies, supervise library assistants, and order and distribute library materials. The five library assistants will manage the TTC libraries.

The two bilingual clerical assistants will be located in Yaounde. They will be responsible for typing orders, correspondence and cataloging, etc. (See Appendix III for sample job descriptions and qualifications.) These positions must be approved and created by GURC. They must be ready when the librarians return from MLS training.

Proper training of staff is imperative if the library is to function properly. The MLS candidates should be selected by March 1984. The candidates must have a B.A. or B.Sc. and be willing to work on an MLS in the U.S. Practical library experience is desirable but not necessary. They should have a background in Education. If Francophone, the candidate will receive three months English language training in the U.S. All will receive one month of cultural and educational orientation. Actual MLS training will begin in August 1984. During the 23 months the MLS candidates will be in the U.S., they will intern two months in a U.S. teacher college library. This experience will give the new librarians an idea of how to organize and manage different sections of a library.

Upon the librarians' return, library and clerical assistants will be hired. In-service training will be an on-going process for all staff members. The first training session will be given for one month by the library TA and librarians before the colleges open in 1986. It will include an introduction to Dewey Decimal Classification for shelving purposes; how to check out books; how to keep library statistics; how to file cards; how to take book requests from faculty members; and how to use the card catalog and basic reference tools. Before the session, the librarians and library expert will have prepared a manual for each TTC library describing, step by step, each of the above jobs. In the last two project years, summer training sessions will be held in Garoua by the librarians for two weeks.

The library technical expert will schedule four trips to Cameroon. In the first one month visit to Cameroon in May of 1984, this person will: establish contacts in MINED with the Inspectorate and DPNE; meet with the

Project Implementation Committee and other ministry officials to discuss the needs of the TTC core collections, furniture and equipment; visit all TTC sites and discuss supplementary books for the curriculum; and meet the MLS candidates. At the end of the trip, a written report will be filed.

In FY 84-85 the Library TA will spend one month working in the U.S. to: gather quotations for the core collection from various book dealers; obtain estimates for library furniture, equipment and supplies; do bibliographic searching for catalog copy for the core collection; visit and confer with the MLS participants; and arrange for a summer internship for participants at U.S. teacher colleges.

The following month the library technical expert will return to Cameroon to present to the Project Implementation Committee and the U.S. technical team recommendations for library books, subscriptions, furniture and equipment; work with the project administrative specialist to order materials; and help the GURC draw up job descriptions and qualifications for the library assistants who theGURC will start recruiting in January 1986.

By June 1986 the library technical expert will return to Cameroon with the new librarians. They will set up the central office for the TTC libraries in the Inspectorate of the Ministry. They will hire five library assistants and two bilingual clerks to help process incoming books, journals and supplies. The librarians and the Library TA will work on designing the month long course to be given to the library assistants in Garoua in August, 1986. This will include writing the procedural manuals for use in all libraries. This technical expert and the librarians will visit and stock all TTC sites.

The expert will assist the librarians in the first distribution of books, journals, supplies and equipment, and in the second order of library materials, before returning to the U.S. three months later.

In 1987, the library expert will return to Cameroon for one month to meet with the librarians to discuss problems they may have encountered. They will visit all TTC libraries and hold individual training sessions as needed. They will confer with the TTC faculty and staff.

To encourage professional motivation, librarians and staff will attend workshops, conferences and seminars. TTC faculty should include library assistants who should also be permanent members of the TTC library committee.

A library decree will incorporate the TTC libraries as part of the TTCs. It will define library resources and facilities, the status of the central TTC coordinating librarians, the status of the library assistants, and provide for the creation of the library advisory committee. This decree will ensure that by the time the librarians are trained, the proper authority is vested in the librarians so that they will be able to fulfill their duties.

The scope and nature of the TTC library services shall be defined in specific objectives and functions. The decree should state whether the libraries are to serve only the staff and students of the TTC or whether it is available to the public. The nature of the library resources should be defined. The decree should explicitly state that all resources, whether acquired by purchase, gift or exchange, are property of the TTC's. This definition includes buildings, equipment, supplies,and furniture as well as books, microforms, and audio-visual aids. It does not involve personal property of faculty. The decree should insist on formally trained librarians and provide them with salaries commensurate with their education.

The library committee from the ministry should be advisory, not operational. The decree should specify the advisory nature of the committee; otherwise the functions of the library staff and ministry personnel will overlap.

Efficient administration on the part of the librarians requires forecasting and planning in relation to library objectives, sensible organization of appropriate activities, calculation of material, and personnel requirements, selection, assignment, training and supervision. The authority to do this is derived from the library decree.

In drawing up the program for development of resources and services to support the TTC objectives, the librarian needs not only sound appraisal of available resources and operating conditions of the library, but must also have specific knowledge of the financial and administrative support the ministry and in particular the Inspectorate General is willing to provide for future development. Without adequate funding for the libraries, operational support will falter and the libraries will quickly degenerate into under-staffed, under-stocked rooms in which little can be found. This is clearly illustrated by the present state of the TTC libraries. It is, therefore, absolutely necessary that the libraries be assured a budget separate from that of the rest of the TTC. This budget would be administered from the Yaounde office in the Inspectorate. It is imperative that this budget be 10% of the total allotted budget for all five TTCs by the end of the project.

If the staff is small or untrained, the book collection inadequate to support the curriculum, or dispersed among facilities in which the librarians have no control, any program devised will be ineffective. The librarians must be given manpower, financial resources, materials and authority. With these they can plan and present the Director of the Inspectorate General with a realistic program.

B. Holdings

The five TTC's current holdings are minimal. Improvements of this situation calls for an immediate bookstock increase. Each TTC library's holdings during the project should be increased to a core collection of 3,000

volumes. An "opening day"collection of approximately 1,500 volumes, including reference works, will be assembled for each TTC early in the project. Also included in the initial purchase will be bibliographic tools for the Yaounde office. A book dealer should provide this service. The project librarians will prepare a library profile indicating the subject and non-subject parameters of their choice. The book dealer will supply the announcement forms with complete bibliographic information. Suggested guidelines for the core collection would be made from the library profile and various individual lists.

In general, this means the collection would consist of education theory and history, teaching methodology, and child development and psychology. A strong effort should be made to collect books and reports produced in and/or for African countries. A portion of the acquisitions should be set aside for books with an African emphasis in literature, history, economics and basic sciences. Subscriptions would be placed for approximately 15 periodical titles for each TTC. Ideally, TTC collections should be bilingual.

This core collection with dealer supplied cataloging and processing services, will be ready to use upon arrival in Cameroon. Services will be tailored to meet the TTCs' needs. The book dealer will supply catalog card sets for each book, labels for call numbers, book pockets, circulation cards and date due slips. Thus, the MINED based TTC librarian will only have to assign the call number and send the books to the individual TTCs.

C. Physical Environment

Good planning is fundamental to the success of the library structure; therefore, the contracted architect should be made aware of requirements. (See Appendix IV for discussion of building needs and basic library inter-relations.)

A contract with a local pest service must be established for the TTC libraries. The holdings and buildings should be fumigated to decontaminate before the core collection is added. The building architect will assist the librarian in deciding what structural controls are needed. (i.e., air conditioning, lighting, fenestration, etc.).

D. Acquisitions

The building of the five TTC library collections depends on cooperation of the TTC librarians, library staff, TTC teaching staff and selected ministry officials. The following procedures should be implemented.

1) The budget will be allocated by the TTC librarian with the advice of the advisory committee. The library advisory committee will be composed of various TTC staff and some ministry officials.

2) Each TTC will have appointed a library advisory committee member and all orders will be channeled through him. The committee member will also represent the special needs and problems of each TTC to the library. His opinion will be solicited on subscriptions.

3) Approximately 25% of the book fund will be allocated for general purposes. This is necessary because of commitments for periodicals. A special contingency fund for major purchases which cannot be met from any one fund should be created and the method of recommending and approving such requests made clear to advisory committee.

In order to achieve broad coverage, bibliographic tools are needed. The core collection will include subscriptions to basic tools. Because the libraries have limited human and fiscal resources, a good book dealer is essential. Book dealers consolidate library book orders to various publishers into one order, thereby materially cutting down on record keeping and multiplication of bills. The dealer is familiar with library procedures and library needs. He simplifies adjustments which are common in acquisition work.

The relationship between the central Yaounde library office and the accounts or finance office in the Inspectorate is close and very important. Presentation of library bills approved for payment to the financial office and the checking of account office ledger sheets should help the library keep an accurate record of its accounts. Differences and adjustments must be attended to promptly. This is why placing orders through book dealers is desirable.

Book buying is a specialized job requiring specialized knowledge of the book market and books; for this reason the library must be autonomous in selecting its suppliers. Further, because expedition is frequently the deciding factor in securing materials, the library must have a system to expedite the needed signatures as time lags will cost the library in terms of lost books, orders and money. The TTC librarian must have authorization to dispense the library funds once allocations have been decided in conjunction with the library advisory committee.

All periodical subscriptions will be placed with a reliable dealer or directly if no dealer is available. The dealer placed orders will ensure continuous coverage, easy adjustments, and easy claim procedures. A clerical assistant will be trained to handle the routine kardex work. A step by step manual will be created by the TTC librarians to help train future workers as well as maintain continuity.

E. Cataloging

The main tasks of the catalog area are to prepare all cataloged materials for public use and to produce and maintain the card catalog. Organizational division of the catalog area will be along functional lines to separate clerical from professional aspects of cataloging. The usual process of typing, filing, reproducing cards from master copy, and the mechanical preparation of books are assigned to clerical staff members. The librarian is concerned with the editing and revision of printed cards, original cataloging, supervision, and special problems involving linguistical ability and knowledge of bibliographic organization principles.

Cataloging is a complex and meticulous process. New clerical staff will learn cataloging procedures by in-house training. In-house training and written manuals assure continuity of procedures and maintenance of the quality or work accomplished.

Most catalog copy, or work needed to produce catalog cards, will be purchased from book dealers. This will include the book card set and processing (book pocket, date due slip, stamp, and call number labels). The librarian will assign the call number. The cost/benefit of purchased cataloging is enormous. The cost is minimal when compared to the person-hours needed to produce one card set. Purchased copy frees staff to work in other areas.

Written filing and catalog rules should be adopted and used in the card catalog. The card catalog will be a divided catalog as it is easier to consult, simplifies filing, and makes more obvious the subject approach. This is needed in a system where the classed subject concept is unfamilar. The last component of the card catalog is the shelf list. The upkeep of the shelf list is an important but time-consuming task. The shelf list provides a separate entry for every title in the library which has a distinctive call number. It records all copies of each book and tells copy location. It is used to avoid duplication of call numbers, to promote uniformity and consistency in assigning classification and book numbers, and to provide a check list in taking stock inventory.

F. Circulation

The circulation policy delineated earlier will provide control of library materials. Library assistants will charge out books to students, send out overdue notices, and collect fines. Fines not paid will be deducted from student scholarships as is done in the Univeristy of Yaounde. Procedures for this will be written out in the circulation manual so that staff changes will not interrupt the routine.

The library will be open nights and weekends. The library assistant will be assisted during these hours by the administrative staff. They will be able to check out books and supervise the students in the library during evening hours and on a rotating schedule during weekends.

G. Reference Service

The library staff must be active in serving the user, as most students will not know how to use a library. To create an awareness of what the TTC libraries can initially and ultimately offer students and teachers, the librarian should participate in training sessions to inform faculty of library assistance for the classroom. This will be designed to encourage teachers to use available materials and to introduce new sources of information. This participation by the librarian is a vital link in establishing institutional ties for the librarian.

By the last year of the project, the central librarian will have the acquisition and cataloging functions in hand. This person will be able to consider development of an Information and Resource Center in the Inspectorate.

H. Maintenance

Provision of maintenance is essential to the smooth running of any organization; a library is no exception. There is a need for competent staff to sweep floors, dust books and spray for insects. Book binding needs to be done yearly and should be sent to a local bindery. Air conditioners whould be on a service contract. Without a good maintenance program, all the work done by the library staff is wasted. Books deteriorate rapidly; insects eat the glue in bindings; dust clogs machines. Machines fall into disrepair and do not function when the staff need them. To solve maintenance problems, a service contract must be established for the library in conjunction with the rest of the college.

I. Library Equipment, Supplies, and Furniture

Appendix V indicates requirements for TTC library system equipment, supplies, and furniture.

III. FINANCIAL PLAN

A. USAID Contribution

The financial cooperation between GURC and USAID/Yaounde for the library staffing commodities and administration will include a USAID contribution to the project as follows:

1. Personnel	
- One library technical assistant for 7 person months; includes overhead, benefits and travel; 6 months in Cameroon, 1 month in U.S.	$ 72,291
2. Training	
-- Three participants for MLS degrees (27 person months each)	153,900
- One month training course in Garoua for 5 library assistants	4,280
- Two 2 week training sessions in Garoua for library assistants.	4,370
TOTAL	162,550

3. Commodities

Core collection and shipping	$ 225,000
Supplemental Books and shipping	$ 114,000
Periodicals for all years	75,000
Library Furniture	118,410
Library equipment	61,750
TOTAL	594,160

4. Other

Binding	18,000
Supplies	30,000
TOTAL	48,000

Total USAID Contribution $ 804,710

Maintenance costs of library buildings and equipment are covered in the architect and engineering report.

B. GURC Contribution

The GURC contribution to TTC library upgrading includes present library facilities, salaries, travel costs for librarian and library operational cost.

Estimated value of GURC contribution is $198,168. Salaries, library operational costs and book funds will be recurrent costs.

Total cost for the five year project is:

1. Personnel

Three librarians (A-1)		$ 102,714
Five Library Assistants (B-1)		57,120
Two Bilingual Clerical Assistants (Level 6)		18,760
	TOTAL	179,594

2. Travel $ 6,000

3. Freight (in-country)

Equipment		$ 2,075
Furniture		4,375
Books		22,600
	TOTAL	$ 29,050

4. Commodities
Books $ 57,000

TOTAL GURC Costs $270,644

C. Summary of library Costs

USAID Contribution	$ 804,710
GURC Contribution	$ 270,644
TOTAL	$1,075,354

D. Recurrent GURC Costs per year (inflation not included)

1. Personnel

3 librarians (A-1)	$ 23,256
5 Library Assistants (B 1)	$ 24,480
2 Bilingual assistants (level 6)	$ 8,040
	55,696

4. Library Commodities

A. Books	$ 57,000
B. Journal Subscriptions	$ 25,000
C. Binding	$ 10,000
D. Supplies	$ 12,000
	$104,000

TOTAL GURC Recurrent Costs $159,696

These recurrent costs will be met by an appropriate allocation from the total GURC annual budget. It should be approximately 10% of each TTC budget. These monies will be administered centrally by the TTC librarian. The GURC must understand the importance of continuing book and journal purchases and the provision of proper maintenance.

If financial priorities must be established, first priority would be the hiring of qualified librarian and staff. Second priority would be a core collection. The third would be the physical housing of the library furnishings, fittings and equipment.

IV. IMPLEMENTATION PLAN

A. Implementation Summary

	Time	Responsible
1. Begin selection of MLS participant	Oct.83	GURC
2. Selection of MLS participant completed	Mar.84	GURC

Implementation Summary

		Time	Responsible
3.	Library TA visits Cameroon (4 weeks) Meets MLS candidates, DPNE and Inspectorate officials; discuss needs for core collection, furniture and equipment. Visits TTC sites. Writes report of activities/conclusions.	April 84	Contractor
4.	MLS participants begin language training in U.S.	May 84	Contractor/ GURC
5.	MLS participants begin training	Aug. 84	Contractor
6.	Library TA works four weeks in U.S. Gathers quotations for recommended core collection, furniture, equipment and supplies. Does bibliographic search for catalog copy. Set up suitable summer training in small teachers' colleges for participants.	Mar 85	Contractor
7.	Library TA visits Cameroon (4 weeks) to present recommendations to committee, make revision as needed. Works with Administration T.A. on orders and with GURC on library Assistant selection criteria.	April 85	Contractor
8.	Library equipment, furniture and supplies ordered by Administration T.A.	May 85	Contractor
9.	Library and clerical assistants selection beings	Jan 86	GURC
10.	Administration T.A. orders books and periodicals	Jan 86	Contractor
11.	Library commodities (books, periodicals, furniture, equipment and supplies) arrive in Cameroon.	June 86	Contractor
12.	Librarians (MLS graduate) return to Cameroon	June 86	Contractor
13.	Library TA arrives for 3 month stay	June 86	Contractor
14.	Library and clerical assistants hired	June 86	GURC

Implementation Summary	Time	Responsible
15. Library TA and Librarians set up office in the Inspectorate, received and catalog incoming commodities, design one month training session for 5 library assistants in Garoua, compile library assistants' manual, and order supplemental library commodities with Administration TA's assistance.	June/July 86	Contractor/ GURC
16. Library TA and Librarians give 1 month training session in Garoua.	Aug 86	Contractor/ GURC
17. First supplemental supplies arrive	Jan 87	GURC
18. Library TA visits Cameroon for one month to meet with Librarians and accompany Librarian to all 5 TTC's to assess, programs and give individual training writes report	May 87	Contractor/ GURC
19. Librarians and Administration TA order second set of supplemental commodities.	June 87	Contractor
20. Two week library workshop in Garoua for library assistants given by librarians.	July 87	Contractor
21. Second supplemental supplies arrive	Jan 88	GURC
22. Librarian visits all 5 TTC's to check on progress.	May 88	GURC
23. Librarians order supplemental commodities	June 88	GURC
24. Librarian holds two week library workshop for library assistants in Garoua.	July 88	Contractor

V. EVALUATION PLAN

Because of the nature of the project, the library technical assistant's reporting requirements and the projects implementation coincide with evaluation arrangements. In the above implementation schedule, certain actions have been underlined indicating significant reports to be prepared by the contractor or GURC personnel. In addition, a library evaluation specialist from USAID/Washington will review the library in 1988. The Specialist will evaluate the following aspects of the library: 1) administration; 2) book collection; 3) staff; 4) finance; 5) physical plant; 6) technical processes; and 7) library use.

In summary, the combined reporting and evaluation program will be scheduled as follows:

1. GURC creates library decree
2. Library TA report
3. Library TA report
4. Library commodities ordered
5. Librarian prepares budget
6. Training session manual
7. Library TA report
8. TTC annual report
9. Library TA report
10. Librarian annual report
11. Final evaluation report

Appendix I

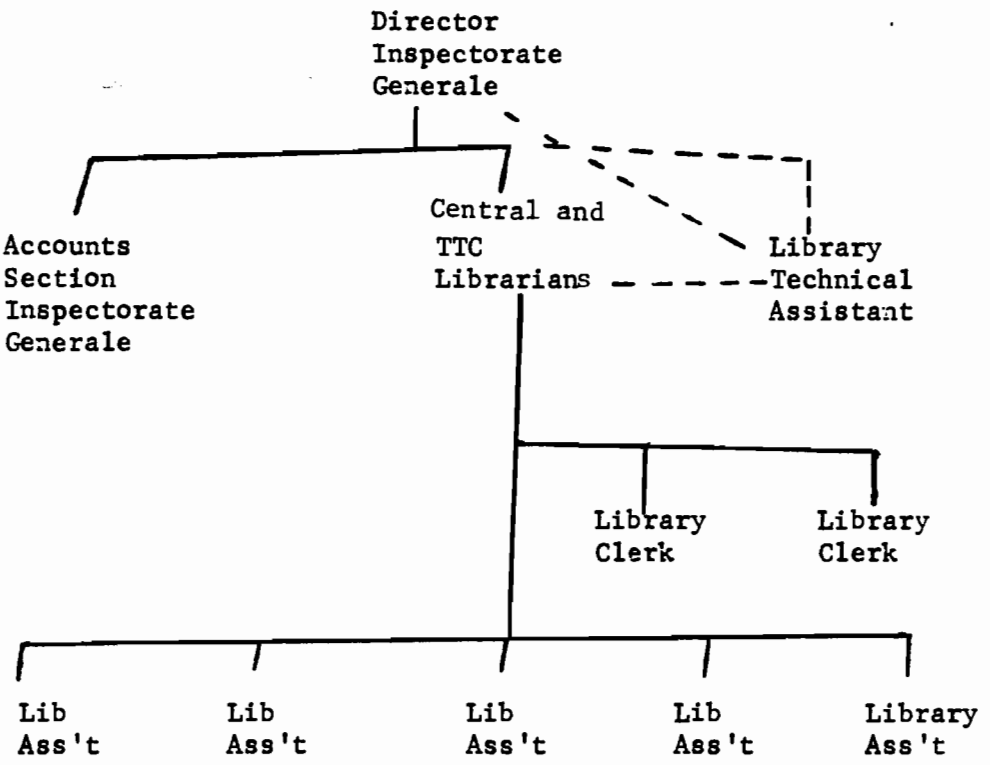
LIBRARIES VISITED - SUMMARY

JUNE 1931

	Year opened	Library building	Library space	Air conditioned	Hours open per week	Librarians	Library assistants	Outside users permitted	Annual acquisitions budget	Total volumes	Periodical titles	Reference collection	Card catalog	- Authors	- Titles	- Subjects	Dewey D.C., system Book stacks - Open	- Closed	Loans - Library-use only	- Outside Library	Loans - Days	Overdue fines	Book loss - Price of book
ENS Yaounde	1962	X		No	39	2	8	NO	CFA. 3.8M	23,000	73	Yes	Yes	X	X	X	X	X	X			No	Yes
Bambili	1967		X	No	10	0	0	No	500,000	2,000	0	No	No				C	X		X	15	Yes	Yes
ENI/ENIA Bamenda	1975	A	D	No	30	0	0	No	0	500	0	No	No				C	X		X	15	Yes	Yes
Garoua	1976	B		Yes	0	0	1	No	0	250	0	No	No				C		X	X			Yes
Maroua		B		No	0	0	0	No	0	1,000	0	No	No										
Ngaoundere		J		No	39	0	0	No	0	500	0	No	No				X			X	15	No	Yes
Pitoa		D		No		0	0	No	0	100	0	No	No				X			X	15	No	Yes
YAOUNDE CNE		X		Yes	35	0	0	Yes		2,000		No	Yes	X	X	X	X	X		X	15	Yes	Yes
ISH		X		Yes	39	1	3	Yes		15,000	20	Yes	Yes	X	X	X	UDC	X	X				Yes
University	1961	X	F	E	64	6	50	Yes	25M	74,000	300	Yes	Yes	X	X	X	X	G	X	X	15 H	No	Yes
GAROUA Public Library	1981	X		No	39	0	3	Yes	1	3,000	0	No					X	X		X	30	Yes	Yes
BAMENDA N.W. PROV. Cultural Center	1981	X		No	30	0	6	Yes	400,000	1,000	0	No	No				C	X		X			

NOTES - A- Library bldg. used as classroom. B - Closed. C - Books shelved roughly by Dewey D.C. D - Books housed in office. E- Stacks only. F - 5783 sq.m. by 1983. G - Faculty, Graduate Students only. H - Faculty, one month. I - French Gov't gift. J - Books housed in Director's office. UDC - Universal Decimal Classification.

Appendix II Library Administrative Structure



APPENDIX III: JOB DESCRIPTIONS FOR TTC LIBRARY SYSTEM STAFF

I. TTC Librarians

A. Example of Duties:

Formulating and administering policies, rules and regulations for the purpose of securing the fullest use of the library by the TTC staff and students; maintaining official relationships with MINED, Inspectorate General Director, TTC Administrators, and Accounts Section; acting as chair person of library advisory committee; making contacts with teaching staff; preparing in conjunction with library advisory committee the budget; administering the budget; developing a book collection that will support the TTC needs; guiding book selection policies; helping plan new buildings or alterations to existing structures; purchasing supplies and equipment; cataloging; classifying and subject headings; developing acquisition procedures to meet needs of TTC's; developing reference service to meet needs of TTC's; preparing reports and memoranda: handling correspondence; conducting staff meetings; directing staff; aiding classification of library positions; preparing salary schedules and maintenance of personnel records; making recommendations regarding appointments, promotions, transfers, salary adjustments and efficiency of other staff members; making library and its resources known to TTC personnel; keeping in touch with library developments by attending conferences and reading professional literature.

B. Minimum Qualifications:

Applicant must have a MLS degree. Working knowledge of modern library organization, procedure policies, aims and service; wide knowledge of educational field; reading knowledge of two or more foreign languages; ability to write clear and comprehensive reports; understanding of the objectives and procedures of the Teacher Training Colleges; ability to organize work; ability to direct, train and supervise.

II. LIBRARY ASSISTANTS

Under supervision of TTC librarian, assist with clerical work of more than average difficulty and to do such other work as may be required.

A. Example of Duties:

Managing TTC library; charging and discharging books; typing overdue notices; handling records; typing cards from supplied copy; filing, collecting and preparing books for binding; checking in periodicals; typing reports and memoranda; filing orders for supplies; taking inventory; doing clerical work of more than average difficulty.

B. Minimum Qualifications:

Bac or "A" levels; accuracy, alertness, capacity for detail; orderliness; systematic methods of work; ability to follow instructions; ability to work well with supervision.

III. BILINGUAL LIBRARY CLERK

Under immediate supervision of TTC librarian or other designated authority, to assist with clerical and secretarial work, and to do such other work as required.

A. Example of Duties;

Sorting and shelving books; cutting leaves of books; filing book cards; arranging and filing order cards; marking books; operating machines; typing letters and reports; compiling statistics; assisting in preparing budgets and annual reports; assisting in keeping all records needed in the administrative office.

B. Minimum Qualifications:

With experience; bilingual; accuracy; alertness; capacity for detail; initiative; orderliness; systematic method of work; ability to organize work; ability to follow instructions; work well with supervisor and co-workers.

APPENDIX IV: BASIC INTERRELATIONSHIPS OF A LIBRARY BUILDING

There are certain basic interrelationships that are common to all TTC library buildings and there are others that have to be worked out for each individual library.

Basic Interrelationships

1. There should be one central exit control point at which all who leave the building can be checked to make certain the library materials they are taking out have been properly checked out. This control point needs to be so designed that it will permit fast handling of the normal maximum number of patrons that will be leaving at one time. Normally, the exit and entrance are located in one place. If there has to be more than one public entrance and exit, these should be arranged so that all patrons pass a single central exit point before leaving the building.

2. Immediately beyond the entrance, one should see the tools and services that serve as keys to the library -- catalog, reference service, bibliographies. People who come to the library consist of three groups; those who know where the books (or place they want to study) are; those who don't; and those who come for information. Therefore, these services should be visible to the library user as soon as he enters the library.

The layout design and placing of these functions constitute a problem that is unique to libraries for the reason that, not only must each function have the right space relationship to the other functions, but also to the technical processes.

This situation exists because adding publications to the library and cataloging them involves very frequent use of the card catalog and reference tools. Much valuable time will be lost unless the distance is short.

Traffic Patterns

Traffic should be planned so that after passing the control exit/entrance point the traffic should be divided in two directions: 1) for those who need to use the library keys; 2) for those who wish to go directly to the place they want to be.

Books and Readers

Provisions for books and readers will depend on whether the library building is a fixed function building or a modular building. Only the librarian consultant and architect can decide this; they will have to consider these factors.

1. Climate: Temperature and humidity requirements for books and people are quite similar. Comparison from various sources suggests a temperature range of 65 to 75°F, combined with about 50% relative humidity as a desirable indoor climate. Air motion, dust, bacteria, and odors must also be taken into consideration according to local conditions.

Storage areas for books should be well ventilated and safe guarded against excessive dampness or aridity, direct sunlight, heavy dust penetration and book destroying insects, fungi, rodents, etc. With the relative humidity at 50%, no microfungi will grow on the covers of the books, especially in himid climates. The air temperature is less important. The best temperature range for permanent preservation of paper is 70-75°F and RH of 50%. W.J. Plumbe has written many articles on preservation of library materials which the librarian, consultant and architect should consult.

2. Thickness of Floors: Floor thickness is determined not only by the type of lighting to be used or duct work, but by the size of the module. If all three factors are properly related, the floor thickness can be kept down to 16-18 inches.

3. Effects of methods of arranging books and services for readers:

A modular building permits a kind of organization that is impossible in a fixed function building. All types of facilities for readers can be mixed in with the book collection in a wide variety of patterns without permanent commitments. Space for expansion should be planned in regular increments of time. As the building is expanded, the new space can be occupied according to the needs of that time without involving constructional alterations in the original building.

In a fixed function building, it is necessary to define in advance and for the life of the building, the spaces that are to be used for housing of books, the seating of readers and other specialized functions. Allowances must be made for the growth of the collection and possible increases in staff and students. The building must be planned in such a manner that expansion of each kind of space will be possible without wrecking the total unity of service throughout the entire building.

APPENDIX V:

A. TTC Library System Equipment

Quantity	Library Equipment			
6	Kardex Units	U.S.	600	3,600
7	Book Trucks	U.S.	200	1,400
7	Typewriters		1 electric 1,500	1,500
			6 manual 300	1,800
7	Filing cabinets	U.S.	250	1,750
7	Typing Tables	U.S.	100	700
6	Card Catalog units	"	2,000	12,000
1	Microfiche Reader	"	2,000	2,000
1	Photocopy Machine		15,000	15,000
1	Duplicator		2,000	2,000
10	Air Conditioners			20,000
				$ 61,750

B. TTC Library System Supplies

Copy paper	Carbon paper
Writing paper/sratch pads	Paper clips
Duplicating paper	Rubber bands
Typing paper	Binding tags
Copier Masters	Staplers
Toner	Staples
Filter	Staple removers
Microform printer paper	Scissors
Microform printer toner	Paper punchs
Microform reader bulbs	Cards, index
Pens, pencils	Catalog card stock
Erasers	Book pockets
Typewriter ribbons	Date dues, book cards
Correcting fluid	Bookends
Envelopes	Pressure sensitive labels
Glue	Catalog guides
Cellotype/magic type	Carbonless multiplicopy book order forms
String	Kardex cards
Stamps	Tapes and mending materials
Date stamp pads	Pamphlet binders
Ink	Paper cutting boards
Stencil	Miscellaneous
Stencil ink	Kardex pocket

This is a suggested guideline for library supplies to be proportionately purchased at $10,000 per year.

C. TTC Library System Furniture

Quantity	Library Furniture	Unit Cost		Total
7	Desks	300		2,100
7	Desk chairs	80		560
80	Reading tables (8 places)	400		32,000
640	Chairs	50		32,000
125	Bookshelf Units (6 shelves)	350	U.S.	43,750
4	Circulation counters (one available in Garoua)	2,000		8,000
				$ 118,410

ANNEX G 5

Suggested Books for TTC Libraries

A. Books for Teacher Training

1. Fr. Munn Norman Leslie.
Traité de psychologie: les principes fondamentaux de l'adaptation humaine. Mme D. Mazé. Paris. Payot. 1961.

Eng. Munn Norman Leslie.
Psychology: the fundamentals of human adjustment. Boston. Houghton Miffin. 1969. 557 pages.

2. Fr. Krumboltz, John D. et Krumboltz, Helen Brandhorst.
Comment intervenir auprès des enfants. M. Parrot-Rémillard. Sainte-Foy, Qué. Ed. Saint-Yves. 1975. 254 pages.

Eng. Krumboltz, John D. et Krumboltz, Helen Brandhorst.
Changing children's hehavior. Englewood Cliffs. N.Y. Prentice-Hall. 1972. 268 p.

3. Fr. Burns Richard W.
Douze leçons sur les objectifs pédagogiques. Jean-Guy Marcaux. Montréal: Centre d'animation, de développement et de recherche en éducation. 1975. 132 pages.

Eng. Burns Richard W.
New approaches to behavorial potential. Dubuque. Iowa. Wm. C. Brown. 1972.

4. Fr. Thornburg Hershel.
L'adolescence. D. Bélanger. Paris. Diffusion Masson. 1975.

Eng. Thornburg Hershel.
Development in adolescence. Menterey. California. Brooks/cole Pub. Co. 1975. 480 pages.

5. Fr. Dewey John.
Démocratie et éducation: introduction à la philosophie de l'éducation. Gérard Deledalle. Paris. A. Collin. 1975. 424 pages.

Eng. Dewey John.
Democracy and education: an introduction to the philosophy of education. N.Y. MacMillan. 1961 (1944). 378 pages.

6. Fr. Dolinsky, Richard.
L'homme et l'apprentissage. D. Bélanger. Paris. Diffusion Masson. 1975. 42 pages.

Eng. Dolinsky, Richard.
Human learning. Dubuque. Iowa. 1966. 31 pages.

7. Fr. Schwebel, Milton et al.
Piaget à l'école. Henriette, Etienne et Danielle Neumann. Paris. Denoël. Gauthier. 1976. 284 pages.

Eng. Schwebel, Milton and al.
Piaget in the classroom. Ed. by Milton, Schewebel and Jane Raph. N.Y. Basic Books. 1973. 305 pages.

8. Fr. Simpson, Ray H.
L'éducateur et l'auto-évaluation. Pol Dupont et Luce Wilquin. Paris. Presses Universitaires de France.

Eng. Simpson, Ray H.
Teacher self-education. N.Y. Macmillan. 1966. 100 pages.

9. Fr. Claparède, Edouard.
Psychologie de l'enfant et pédagogie expérimentale. 6e éd. Paris. Fischbacher. 1916. 571 pages.

Eng. Claparède, Edouard.
Experimental pedagogy and the psychology of the child. Mary Louch and Henry Holman. New York. Arno Press. 1975 (Reprint).

10. Fr. Droz, Remy et Rohmy, Maryvonne.
Lire Piaget. Bruxelles. Dessart. 1972. 243 pages.

Eng. Droz, Remy et Rohmy, Maryvonne.
Understanding Piaget. Joyce Diamonti. New York. International University Press. 1976.

11. Fr. Vurpillot, Eliane.
Le monde visuel du jeune enfant. Paris. Presses universitaires de France. 1972. 412 pages.

11. Eng. Vurpillot, Eliane.
The visual world of the child. W.E.C. Gill-ham. New York. International Universities Press. 1976. 372 pages.

12. Fr. Montessori, Maria.
De l'enfant à l'adolescent. Trad. de l'italien par Georgette J.J. Bernard. 3e éd. Buijes. Desclée de Brouwer. 1958. 166 p.

Eng. Montessori, Maria.
From childhood to adolescence including "Erdbinder" and functions of the university. A.M. Joosten. New York. Schocken Books. 1976. 2nd ed. 141 p.

13. Fr. Frostig, Marianne et Horne, David.
Le programme de correction de la perception visuelle. Michelle Perreault. Ieraci. Montréal. McGraw-Hill. 1973. 164 p.

Eng. Frostig, Marianne and Horne, David.
The Frostig program for the development of visual perception: teacher's guide (adapt.). Chicago. Folletl. 1964. 168 p.

14. Fr. Hobb, Donald Olding.
Psychologie: science moderne. David Bélanger. Paris. Diffusion Masson. 1974. 357 pages.

Eng. Hobb, Donald Olding.
Textbook of psychology. Philadelphia. Saunders. 1958.

15. Fr. Cremin, Lawrence Arthur.
L'école en marche: l'éducation progressive aux Etats-Unis. Elisabeth Malaquais. Paris. Editions Internationales. 346 p. (1973-74).

Eng. Cremin, Lawrence Arthur.
The transformation of the school: progressivism in America Education. New York. Knopf. 1961.

16. Fr. Morrison, Arnold et McIntyre, Donald.
Profession: enseignant: une psychologie de l'enseignement. Monique Linard. Paris. A. Colin. 266 pages. (1973-74).

Eng. Morrison, Arnold and McIntyre, Donald.
Teachers and teaching. Baltimore. Penguin Books. 1969. 206 p.

17. Fr. Craig, Eleanor.
Je voudrais vous voir après la classe. Daniel Martin. Paris. Mercure de France. 1974. 261 p.

Eng. Craig, Eleanor.
P.S. Your not listening. New York. R.W. Baron. 1972. 215 p.

18. Fr. Montessori, Maria et al.
Le manuel Mantessoni. Henriette Etienne. Paris. Denoël. Gauthier. 1973-74.

Eng. Montessori, Maria and al.
A Mantessoni handbook or Dr. Mantessoni's own handbook. New York. Putnam. 1966 (1965). 192 p.

19. Fr. Schoer, Lewell A.
L'évaluation des élèves dans la pratique de la classe: guide programmé à l'intention des enseignants des premier et second degré. Rachel Cohen. Paris. Presses universitaires de France. 175 p. (1973-74).

Eng. Schoer, Lewell A.
Test construction: a programmed guide. Boston. A Clyn and Bacon. 1970.

20. Fr. Piaget, Jean et Inhelder, Barbel.
La genèse de l'idée de hasard chez l'enfant. Paris. Presses universitaires de France. 1951. 265 p.

Eng. Piaget, Jean and Inhelder, Barbel.
The origin of the idea of chance in children. Lowell Leabe, Jr. Paul Bunell and Harold D. Fishbem. New York. Norten. 251 p.

21. Fr. Rousseau, Jean-Jacques.
Emile ou De l'Education. Paris. Editions Souales. 1958. 256 p.

Eng. Rousseau, Jean-Jacques.
Emile. Barbara Foxley. New York. Dutton. 1974.

22. Fr. Wann, Kenneth, Dorn, Miriam Selchen et Liddle, Elizabeth Ann.
Le développement intellectuel chez l'enfant. Montréal. Editions du Renouveau Pédagogique. 1972. 175 p.

Eng. Wann, Kenneth, Dorn, Miriam Selchen and Liddle, Elizabeth Ann.
Fostering intellectual development in young children. N.Y. Bureau of Publications Teachers College. Columbia University. 1962. 140 p.

23. Fr. Buckley, Nancy K. et Walker, Hill M.
Comment modifier les comportements en classe: manuel de procédures pour les professeurs. Jocelyne Lachance et Madeleine Thibault. Ste-Foy, Québec. Editions Saint-Yves. 1972. 123 p.

Eng. Buckley, Nancy K. and Walker, Hill M.
Modifying classroom behavior: a manual of procedures for classroom Teachers. Champaign Ill. Research Press (c 1970). 124 p.

24. Fr. Fuller, Richard B.
Education, automation. Claude Yelnick. Paris. Hachette. 158 p. 1972.

Eng. Fuller, Richard B.
Education, automation. Carbondale Illl. Southern Illinois University Press. 1969 (1962). 88 p.

25. Fr. Gartner, Alan, Kohler, Mary Conway et Riessman, Frank.
Des enfants enseignent aux enfants: apprendre en enseignant. Marie-Rose Grosjean. Paris. Epi. 1972. 180 p.

Eng. Gartner, Alan, Kohler, Mary Conway et Riesman, Frank.
Children teach children: learning by teaching. New York. Harper and Row. 1971. 18 p.

26. Fr. Reimer, Everett.
Mort de l'école: solutions de rechange. Jules Chambert. Paris. Ed. Fleurus. 1972. 206 p.

Eng. Reimer, Everett.
School is dead: alternative in education. Garden City. New York. Double day. 1971. 215 p.

27. Fr. Beeby Clarence, F.
L'Ecole en voie de développement. Pierre Nicolas-Tours. Paris. Mame. 1969. 219 p.

Eng. Beeby Clarence, F.
The quality of education in developing countries. Cambridge. Massachussetts. Harvard University Press. 1966.

28. Fr. Illich, Yvan.
Une société sans école. Gérard Durand. Paris. Editions du Seuil. 1971. 190 p.

Eng. Illich, Yvan.
Deschooling Society. New York. Harper and Row. 1971. 116 p.

29. Fr. Mager, Robert F.
Comment définir les objectifs pédagogiques. Georges Décote. Paris. Gauthier-Villars. 1971 (nouvelle édition). 60 p.

Eng. Mager, Robert F.
Preparing instructional objectives. Palo Alto. California. Fearon. 1962. 60 p.

30. Fr. Rogers, Carl R.
Liberté pour apprendre. Daniel Le Ban. Paris. Dunod. 1971. 364 p.

Eng. Rogers, Carl R.
Freedom to lean. Columbus. Ohio. Merrill. 1969. 358 p.

31. Fr. Gattegno, Caleb.
Ces enfants, nos maîtres, ou, la subordination de l'enseignement à l'apprentissage. Clermonde Dominicé. Paris. Delachaux et Niestlé. 1971. 116 p.

Eng. Gattegno, Caleb.
What we owe children, the subordination of teaching to learning. New York. Outerbridge and Drenstfrey. Distributed by Dutton. 1970. 118 p.

32. Fr. Rosenthal, Robert A. et Jacobson, Lenore.
Pygmalion à l'école, l'attente du maître et le développement intellectuel des élèves. Suzanne Audebert et Yvette Richards. Paris. Castermann. 1971. 293 p.

Eng. Rosenthal, Robert A. and Jacobson, Lenore.
Pygmalion in the classroom. New York. Holt. Rinehart and Winston. 1968. 240 p.

33. Fr. Winnicott, Donald W.
Processus de maturation chez l'enfant, développement affectif et environnement. Jeannine Kalmanovitch. Paris. Payot. 1970.

Eng. Winnicott, Donald W.
The maturational processes and the facilitating environnement. New York. International Universities Press. 1965. 245 p.

34. Fr. Costello, Lawrence F. et Gordon, George N.
L'enseignement télévisé. Marie Sinoir. Strasbourg. Istra. 1970. 224 p.

Eng. Costello, Lawrence F. and Gordon, George N.
Teach with television: a guide to instructionnal T.V. 2nd ed. N.Y. Hastings. 1965. 192 p.

35. Fr. Gattegno, Caleb.
Vers une culture visuelle, la télévision au service de l'éducation. Clermonde Dominicé. Paris. Delachaux et Niestlé. 1970. 125 p.

Eng. Gattegno, Caleb.
Towards a visual culture, educating through television. New York. Outerbridge et Dientsfrey. Distributed by Dutton. 1969. 117 p.

36. Fr. Piaget, Jean.
Les notions de mouvement et de vitesse chez l'enfant. Paris. Presses universitaires de France. 1946. 284 p.

Eng. Piaget, Jean.
The child's conception of movement and speed. G.E.T. Hollaway and M.J. Mackenzie. New York. Ballantine. 1970. 341 p.

37. Fr. Piaget, Jean.
La conception du temps chez l'enfant. Paris. Presse universitaires de France. 1946. 298 p.

Eng. Piaget, Jean.
The child's conception of time. A.J. Pomerans. New York. Ballantine. 1970. 310 p.

38. Fr. Piaget, Jean et Inhelder, Bärbel.
L'image mentale chez l'enfant. Paris. Presses universitaires de France. 1966. 461 p.

Eng. Piaget, Jean and Inhelder, Bärbel.
Mental Imagery in the child, a study of the development of imaginal representation. P.A. Chilton. New York. Basic Books. 396 p. 1970.

39. Fr. Bloom, Benjamin, S.
Taxonomie des objectifs pédagogiques (1-2). Marcel Lavallée. Montréal. Education Nouvelle. 1969. 2 vol.

Eng. Bloom, Benjamin, S.
Taxonomy of educational objectives (1-2). Benjamin J. Bloom, editor and others, New York. Longmans. Green. 1956.

40. Fr. Barry, Mary A. et Johnson, Lois V.
Dynamique des groupes et éducation: le groupe-classe. Claudine Tournadre. Paris. Dunod. 1968. 344 p.

Eng. Barry, Mary A. and Johnson, Lois V.
Classroom group behavior. New York. Macmillan. 1968 (1964). 412 p.

41. Fr. Jacquin, Guy Y.
Grandes lignes de la psychologie de l'enfant. Paris. Ed. Fleurus. 1955. 172 p.

Eng. Jacquin, Guy Y.
The psychology of the school-age child. Anthony M. Buons-Peramus. N.J. Pouliot P. 184 p. 1968.

42. Fr. Piaget, Jean.
Les mécanismes perceptifs. Paris. Presses universitaires de France. 1961. 457 p.

Eng. Piaget, Jean.
The mechanisms of perception. G.N. Seagrim. New York. Basic Books. 1968. 384 p.

43. Fr. Piaget, Jean.
La psychologie de l'enfant. le éd. Paris. Presses universitaires de France. 1976 (1966). 126 p.

Eng. Piaget, Jean.
The psychology of the child. Helen Weaver. New York. Basic Books. 1968.

44. Fr. Poignant, Raymond.
L'enseignement dans les pays du Marché commun. Paris. Institut Pédagogique National. 1965. 319 p.

Eng. Poignant, Raymond.
Education and development in Western Europe, the United States and the U.S.S.R., a comparative study. N.y. Teachers college. 1968. 329 p.

45. Fr. Freud, Anna.
Le normal et le pathologique chez l'enfant. Daniel Widlöcher. Paris. Gallimard. 1967. 215 p.

Eng. Freud, Anna.
Normality and pathology in childhood. New York. International Universities Press. 1970 (1965). 273 p.

46. Fr. Dewey, John.
Expérience et éducation. M.A. Carroi. Paris. A. Collin. 1967. 157 p.

Eng. Dewey, John.
Experience and Education. New York. Callier Books. 1963 (1938). 91 p.

47. Fr. Moumouni, Addou.
L'éducation en Afrique. Paris. Maspero. 1964.

Eng. Moumouni, Addou.
Education in Africa. Phyllis N. Ott. New York. Praeger. 1967. 319 p.

48. Fr. French, Edward L. et Scott, J. Clifford.
Comment aider un enfant handicapé. Françoise Badreau. Paris. Laffont. 251 p. 1967.

Eng. French, Edward L. and Scott, J. Clifford.
How you can help your retarded child. Philadelphia. Lippincott. 1967. 190 p.

49. Fr. Stuart, Jesse.
Les cahiers d'un maître d'école. Claude Levry. Paris. "Jeune Afrique". 1965. 223 p.

Eng. Stuart, Jesse.
The thread that runs so true. New York. Scribner's (c. 1949). 293 p.

50. Fr. Lysaught, Jérôme P. et Williams, Clarence.
Guide de l'enseignement programmé. Armand Gauthier. Montréal. Centre de psychologie et de pédagogie. 1966. 191 p.

Eng. Lysaught, Jérôme P. and Williams, Clarence.
A guide to programmed instruction. New York. Wiley. 1963. 180 p.

51. Fr. Holt, John.
Parents et maîtres face à l'échec scolaire. Suzanne Audebert. Paris. Castermann. 1966. 203 p.

Eng. Holt, John.
How children fail. New York. Dell Pub. 1976 (1964). 223 p.

52. Fr. Cram, David.
Présentation des machines à enseigner et de la programmation pédagogique. Cl. Métais. Paris. Gauthier-Villars (2e éd. rev.). 103 p. 1966.

Eng. Cram, David.
Explaining teaching machines and programming. San Francisco. Fearon. (c. 1961). 157 p.

53. Fr. Fleming, Alice.
Educatrices à l'oeuvre. Elisabeth Malaquais. Paris. Istra. 1966. 190 p.

Eng. Fleming, Alice.
Great women teachers. Philadelphie. Leppincott. 1965. 157 p.

54. Fr. Fletcher, Trevor J.
L'apprentissage de la mathématique aujourd'hui. Françoise Dubail, Daniel Duclos et al. Paris. O.C.D.L. 1966. 392 p.

Eng. Fletcher, Trevor J.
Some lessons in mathematics, a handbook on the teaching of modern mathematics. New York. Cambridge University Press. 1965. 167 p.

55. Fr. Piaget, Jean et Inhelder, Bärbel.
La représentation de l'espace chez l'enfant. Paris. Presses universitaires de France. 1948. 581 p.

Eng. Piaget, Jean and Inhelder, Bärbel.
The child's conception of space. F.J. Landon et J.L. Lunzer. N.Y. Norton. 1966. 490 p.

56. Fr. Capelle, Jean.
L'école de demain reste à faire. Paris. Presses universitaires de France. 1966. 266 p.

Eng. Capelle, Jean
Tomorrow's education, the French experience. W.D. Halls. N.Y. Pergamon. 1966. 229 p.

57. Fr. Labov, William.
Le parler ordinaire: la langue dans des ghettos noirs des Etats-Unis. Alain Kihm. Paris. Les Editions de Minuit. (c. 1978). 2 vol.

Eng. Labov, William.
Language in the inner city: studies in the Black English sernacular. Philadelphia. University of Pennsylvania Press. (c. 1972). 412 p.

58. Fr. Highet, Gilbert.
L'art d'enseigner. Jacques Grandin. Paris. Istra. 1965. 224 p.

Eng. Highet, Gilbert.
The art of teaching. N.Y. Knopf. 1950. 259 p.

59. Fr. Levi-Strauss, Claude.
La pensée sauvage. Paris Plan. (c. 1962). 393 p.

Eng. Levi-Strauss, Claude.
The savage mind. Chicago. University of Chicago. 1965. 290 p.

60. Fr. Fénélon, François de Jalignac de la Mothe.
Traité de l'éducation des filles, etc. Paris. Firmin Didot. 1892. 540 p.

Eng. Fenelon, François de Jalignac de la Mothe.
Fenelon on education. N.Y. Cambridge. 1965. 152 p.

61. Fr. Redl, Fritz et Wineman, David.
L'enfant agressif (1): Le moi désorganisé, (2): Méthodes de rééducation, techniques pour traiter l'enfant agressif. Mme Guy Mabilais, Michel Lemay, Paris. Editions Fleurus. 1964. 2 vol.

61. Eng. Redl, Fritz and Wineman, David.
The agressive child: children who Late, 223 p. and
Controls form within. N.Y. Free Press. 1957. 575 p.

62. Fr. Durkheim, Emile.
L'éducation morale. Paris. P.U.F. 1963 (c. 1934).
242 p.

Eng. Durkheim, Emile.
Moral Education. Everett K. Wilson and Herman Schnuver.
N.Y. Free Press of Glencoe. 1960.

63. Fr. Herskovits, Melville, Jean.
Les bases de l'anthropologie culturelle. François Vaudou.
Paris. Payot. 1952. 343 p.

Eng. Herskovits, Melville, Jean.
Cultural anthropology. N.Y. Knopf. 1955. 569 p.

64. Fr. Linton, Ralph.
Les fondements culturels de la personnalité. Andrée
Lystard. Paris. Dunod. 1977. 138 p.

Eng. Linton, Ralph.
The cultural back ground of personnality. N.Y. Appleton.
Century. Crafts. 1945. 157 p.

65. Fr. Gilbert, Norma.
Statistiques. Trad. et adapté par Jean-Guy Savard. Mon-
tréal. Ed. H.R.W. 1978. 384 p.

Eng. Gilbert, Norma.
Statistics, Philadelphie. W.B. Saunders Company. 1976.

66. Fr. Krishnamurti, Jiddu.
De l'éducation. Carlo Suarès. Paris. Delachaux et Niestlé.
1976 (2e éd.).

Eng. Krishnamurti, Jiddu.
Education and the significance of life. New York. Harper
and Row. 125 p. 1953.

67. Fr. Frosting, Marianne et Miller, Anne-Marie.
Images et modèles: niveau avancé. Guide du maître. Michelle Perreault-Ieraie. Montréal. McGraw-Hill, 1972. 95 p.

Eng. Frosting, Marianne and Miller, Anne-Marie.
Pictures and Patterns: Teacher's guide. Chicago, Follett Pub. Co. 1972 (c. 1966). 48 p.

68. Fr. Mackay, William, Francis.
Principes de didactique analytique: analyse scientifique de l'enseignement des langues. Lorne Laforge. Paris: Didier. 1972 (nouv. éd.). 713 p.

Eng. Mackay, William, Francis.
Language Teaching analysis. Bloomington. Indiana University Press. 1967. 562 p.

69. Fr. Selberg, Edith M., Neal Louise A. et Vessel, Matthew F.
Comment enseigner les sciences à l'élémentaire.
André Caillé. Montréal. Editions du Renouveau Pédagogique. 1971. 459 p.

Eng. Selbert, Edith M., Neal Louise A. and Vessell, Matthew F.
Discovering science in the elementary school.
Reading, Mass. Addison-Wesley. 1970. 495 p.

70. Fr. Education development center. I.P.S. group.
Initiation aux sciences physiques. I.R.P. sous la direction de Jean-Marc Chevrier. Montréal. Instituts de recherches psychologiques. 1969. 227 p.

Eng. Education development centre. I.P.S. group.
Introductory physical science. Engelwood Clipp. N.J. Prentice-Hall. 1967. 227 p.

71. Fr. Piaget, Jean.
Adaptation vitale et psychologie de l'intelligence, Paris, Hermann. 1974.

Eng. Piaget, Jean.
Adaptation and intelligence: organic selection and phenocopy. Stewart Eames. Chicago. University of Chicago Press. 1980. 124 p.

72. Fr. Piaget, Jean.
Psychologie et épistémologie. Paris. Gauthier. (c. 1970). 187 p.

Eng. Piaget, Jean.
Psychology and epistemology: Towards a theory of knowledge. Arnold Rosin. N.Y. Vibing Press. 1973 (c. 1971). 166 p.

73. Fr. Barry, Mary A. et Johnson, Lois. V.
Conduite et animation de la classe. Etienne Bolo. Paris. Montréal. Dunod. 1974. 312 p.

Eng. Barry, Mary A. and Johnson, Lois. V.
Classroom management. Theory and skill training. N.Y. Macmillan. 1970. 453 p.

74. Fr. Cruchon, Georges.
Initiation à la psychologie dynamique. Paris, Mame. 1963.

Eng. Cruchon, Georges.
Dynamic Psychology. G.E. Watt. N.Y. Shedd and Ward. 1965. 278 p.

75. Fr. Piaget, Jean.
Psychologie et pédagogie. Paris. Denoël. 1969. 264 p.

Eng. Piaget, Jean.
Science of education and the psychology of the child. Dereb Coltman. N.Y. Onon P. 1969. 186 p.

76. Fr. Cruchon, Georges.
Psychologie pédagogique (1): Les transformations de l'enfance. Mulhouse. Ed. Salvator. 1966.

Eng. Cruchon, Georges.
The transformation of children. Firmin O. Sullivan. Dayton. Ohio: Pflaum. 353 p. 1968.

77. Fr. Young, Leontine.
Vivre avec les géants, regards d'enfant sur le monde des adultes. Louis Brevet. Mulhouse: Salvator. Paris: Castermann. 1967. 212 p.

77. Eng. Young, Leontine.
Life among the geants. New York. McGraw-Hill. 1971 (c. 1966). 193 p.

78. Fr. Glasser, William.
Des écoles sans déchets. J. Chambert. Paris. Ed. Fleurus. 1973.

Eng. Glasser, William.
Schools without failure. New York. Harper and Row. 1969. 235 p.

79. Fr. Abrahamsen, David.
Comment développer le caractère de votre enfant. Marie Maurel. Verviers. Gerard. 1972. 316 p.

Eng. Abrahamsen, David.
The emotional care of your child. New York. Trident Press. 1969. 287 p.

80. Fr. Babin, Pierre.
Dieu et l'adolescent. Lyon. Edit. du Chalet. 317 p. 1963.

Eng. Babin, Pierre.
Faith and the adolescent. David Gibson. N.Y. Herder. 1964. 128 p.

81. Fr. Piaget, Jean, Inhelder, Barbel et Szeminska, Alina.
La géométrie spontanée de l'enfant. Paris. Presses Universitaires de France. 1948. 514 p.

Eng. Piaget, Jean, Inhelder, Barbel and Szeminska, Alina.
The child's conception of geometry. E.A. Lunzer. N.Y. Harper. 1963. 411 p.

82. Fr. Schacter, Helen J., Jenkins Gladys G. et Bauer W.W.
Les années de l'adolescence. Adapt. de Pierre De Lean. Torents. Montréal. Cage. 1960.

Eng. Schacter, Helen J., Jenkins Gladys G. and Bauer W.W.
Into your teens. Chicago. Scott. Foresman. 1951. 352 p.

83. Fr. Lawson Chester Alvin.
Les mécanismes du cerveau humain et l'apprentissage.
Jean-Michel Gaulier. Paris. Ed. E.S.F. 1971.

Eng. Lawson Chester Alvin.
Brain mechanisms and human learning. Boston. Houghton Mifflin. 1967. 126 p.

84. Fr. Bruner, J.S. (direction de Lee S. Shulman).
La pédagogie par la découverte. René Dutour. Paris.
Ed. E.S.F. 1973. 181 p.

Eng. Bruner, J.S. (direction of Lee S. Shulman).
Learning by discovery: a critical appraisal. Chicago.
Rand. McNally. 1968. 224 p.

85. Fr. Standing, Edwin Mortimer.
Maria Montessori à la découverte de l'enfant. Paule
Escudier. Paris. Desclée de Brouwer. 1972. 273 p.

Eng. Standing, Edwin Mortimer.
Maria Montessori, her life and work. New York.
New American Library 1962. 382 p.

86. Fr. Valette, Rebecca M.
Le test en langues étrangères: guide pratique. Francin
Rey. Paris. Hachette.

Eng. Valette, Rebecca M.
Direction in Modern Language Testing. 2nd. New York.
Harcourt Brace Jovanovich. 1977. 349 p.

87. Fr. Gattegno, Galeb.
Enfin Freddy comprend l'arithmétique. René Fouéré.
Paris. Delachaux et Niestlé. 1962.

Eng. Gattegno, Galeb.
Now Johny can do arithmetic. Educational Solutions. 1971.
New York.

88. Fr. Seagoe, May W.
Pédagogie et motivation, expériences américianes. Paris. Ed. d'Organisation. 215 p. 1965.

Eng. Seagoe, May W.
A teacher's guide to the learning process. Wm. C. Brown Compagny Publishers. Dubuque. Iowa. 1961.

89. Fr. Gouin-Décarie, Thérèse.
Intelligence et affectivité chez le jeune enfant. Paris. Delachaux et Niestlé. 1962.

Eng. Gouin-Décarie, Thérèse.
Intelligence and affectivity in early childhood. Elisabeth P. and Lewis W. Brandt. N.Y. International Universities Press. 1965. 230 p.

90. Fr. Chase, Mary Ellen.
La joie d'enseigner. Lionel Bart. Paris. Istra. 1962. 157 p.

Eng. Chase, Mary Ellen.
-A goodly fellowship. N.Y. Macmillan. 1952. 305 p.

91. Fr. Kluckhohn, Clyde.
Initiation à l'anthropologie. Marc Richelle. Bruxelles. Dessart. 1966.

Eng. Kluckhohn, Clyde.
Mirror for man. Faweett Book Group. N.Y. 1974.

92. Fr. Allinson, Alec et Beverly, McInes, John.
Media-sens. Jean D. Bélanger, Yvan Laframboise et Claude Langevin. Don Mills, Ont. Eds. Nelson du Canada. 1974. 112 p.

Eng. Allinson, Alec and Bervely, McInes, John.
Mediamind: Bowmar-Noble. Los Angeles. 1973.

93. Fr. Eicholz, Robert Edgar, O'Daffer, Phares et Fleenor, Charles P.
La mathématique à l'élémentaire: manipulations, découvertes, applications. Jean-Paul Collette et Lucien Laliberté. Montréal, Eds. du Renouveau Pédagogique. 1972-73.

Eng. Eicholz, Robert Edgar, O'Daffer, Phares et Fleenor, Charles P.
Investigating school mathematics. 1973. A.-W.

94. Fr. Allinsen, Alec et Beverly et McInes, John.
Media-sens: livre du maître. Jean D. Bélanger, Yvon Laframboise et Claude Langevin. Don Mills. Ontario. Eds. Nelson du Canada. 1974. 191 p.

Eng. Allinsen, Alec et Beverly et McInes, John.
Mediamind: Teacher's book. Bowman-Noble, Los Angeles.

95. Fr. Allinsen, Alec et Beverly et McInes, John.
Multimondes: livre du maître. Jean D. Bélanger, Yvon Laframboise et Claude Langevin. Don Mills. Ontario. Eds. Nelson du Canada. 1974. 190 p.

Eng. Allinsen, Alec and Beverly and McInes, John.
Multiworlds: Teacher's guide book. 1973. Bowman-Noble. Los Angeles.

96. Fr. Allinsen, Alec et Beverly et McInes, John.
Multimondes. Jean D. Bélanger, Yvan Laframboise et Claude Langevin. Don Mills. Ontario. Eds. Nelson du Canada.

Eng. Allinsen, Alec and Beverly and McInes, John.
Multiworlds. Bowman-Noble. Los Angeles.

97. Fr. Wauthier, Claude.
L'Afrique des Africains. Paris. Ed. du Seuil. 1964.

Eng. Wauthier, Claude.
The literature and thought of modern Africa: a survey. Shirley Kay. West part. Coun. Greenwood Press. (Reprint). 1974. 323 p.

98. Fr. Dodson, Fitzhugh J.
Tout se joue avant six ans. Yvon Geffroy. Paris. R. Laffont. 1974. 430 p.

Eng. Dodson, Fitzhugh J.
How to parent. New American Library. New York. 1973.

99. Fr. Ackermann, Nathan W. et al.
Pour ou contre Summerhill. Micheline Languilhomie. Paris. Payot. 356 p. 1971.

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P20

99. Eng. Ackermann, Nathan W. and al.
Summerhill: for and against. Hart Publishing Company.
New York. 1970.

100. Fr. Dreikurs, Rudolf et Soltz, Vicki.
Le défi de l'enfant. Ivé Leschallier de l'Isle. Paris.
R. Laffont. 301 p. 1970.

Eng. Dreikurs, Rudolf et Soltz, Vicki.
Children, the challenge. N.Y. Hawthorn Books. 1964.

101. Fr. Donovan, Frank R.
Education stricte ou éducation libérale. Simone Roux.
Paris. R. Laffont. 1969. 288 p.

Eng. Donovan, Frank R.
Raising your children. 1968. Paul R. Reynolds Inc.
New York.

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P 21

B. Books for Primary School Students

1. Fr. Shaw Russell George.
Les noeuds pratiques et décoratifs. Roland Prévôt.
Montréal. Editions de l'Homme. 1975.

Eng. Shaw Russell George.
Knots. Boston. Hughton Misslin.

2. Fr. Burt John., Brower Linda A., Cardyn Léon J.
Education sexuelle: concept et plan de cours (maître seulement). Gaston Gauthier. Ed. H.R.W..
Montréal. 1973.

Eng. Burt John J., Brower Linda A., Cardyn Léon J.
Education for sexuality: concept and programs for teaching. Ed. W.B. Saunders. Philadelphia. 1970.

3. Fr. Savoir lire. Jean D. Bélanger, Yvon Laframboise, Claude Langevin. Sélection du Reader's Digest.
Montréal. 1973.

Eng. New Reading Skill Builder. Level 1-2-3. Part 1-2.
Rittenhouse (consultant). Reader's Digest. 1969.

4. Fr. La vie fantastique des îles et des océans.
La terre cette inconnue.
En collaboration. Sélection du Reader's Digest.
Montréal. 1972-75.

Eng. Secret of the sea.
Marvelous and mysteries of the world around us.
Reader's Digest. New York.

5. Fr. Shapp Martha et Charles.
Je me renseigne sur les pompiers. André St-Pierre.
Montréal. Grolier. 1966. 42 p.

Eng. Shapp Martha and Charles.
Let's find out about firemen. N.Y. Watts. 1962.
42 p.

6. Fr. Shapp Martha et Charles.
Je me renseigne sur les indiens. André St-Pierre.
Montréal. Grolier. 1965. 42 p.

Eng. Shapp Martha and Charles.
Let's find out about Indians. N.Y. Watts. 1962.
42 p.

7. Fr. Shapp Martha et Charles.
Je me renseigne sur la sécurité. André St-Pierre. Montréal. Grolier. 1965.

Eng. Shapp Martha and Charles.
Let's find out about security. N.Y. Watts. 1964. 42 p.

8. Fr. Shapp Martha et Charles.
Je me renseigne sur l'hiver. André St-Pierre. Montréal. Grolier. 1966. 41 p.

Eng. Shapp Martha and Charles.
Let's find out about winter. N.Y. Watts. 1963.

9. Fr. Shapp Martha et Charles.
Je me renseigne sur ce que fait l'électricité. André St-Pierre. Montréal. Grolier. 1965. 42 p.

Eng. Shapp Martha and Charles.
Let's find out what electricity does. N.Y. Watts. 1961.

10. Fr. Shapp Martha et Charles.
Je me renseigne sur le printemps. André St-Pierre. Montréal. Grolier. 1966. 42 p.

Eng. Shapp Martha and Charles.
Let's find out about spring. N.Y. Watts. 1963. 42 p.

11. Fr. Shapp Martha et Charles.
Je me renseigne sur l'automne. André St-Pierre. Montréal. Grolier. 1966. 42 p.

Eng. Shapp Martha and Charles.
Let's find out about fall. N.Y. Watts. 1963. 42 p.

12. Fr. Shapp Martha et Charles.
Je me renseigne sur l'été. André St-Pierre. Montréal. Grolier. 1966. 42 p.

Eng. Shapp Martha and Charles.
Let's find out about summer. N.Y. Watts. 1963.

13. Fr. Shapp Martha et Charles.
Je me renseigne sur les roues. André St-Pierre.
Montréal. Grolier. 1966. 42 p.

Eng. Shapp Martha and Charles.
Let's find out about whells. New York. Watts. 1962.
42 p.

14. Fr. Ridout, Ronald et Holt, Michael.
Le cycle de la vie (collection).
- Les poussins
- Les grenouilles
- Les papillons
- Les chats
Editions des Deux Coqs d'Or. Paris. 1973.

Eng. Ridout, Ronald and Holt, Michael.
The Big Book of Puzzle.
- Chicks
- Frogs
- Butterflies
- Cats
New York. Knopf. 1974-75.

15. Fr. Brown Peter Lancaster.
Nouveaux guides pour tous (collection).
- L'astronomie en couleurs.
Paris. Fernand Nathan. 1973.

Eng. Brown Peter Lancaster.
- Comets, meteorites and men. N.Y. Taplinger. 1974.
- Megaliths, Myths and men. An introduction to astro-archeology. N.Y. Taplinger. 1976.

16. Fr. Sonneborn, Ruth, Lee, Robert J. et autres.
Questions-réponses (collection).
- Les animaux et leurs secrets
- L'espace et sa conquête
- La science qui nous entoure
- La nature
- La mer et ses secrets
Paris. Fernand Nathan. 1966-72.

Eng. Sonneborn, Ruth A., Lee Robert J. and other.
- Question and Answer Book of Every day Science. 1961. Random. New York.
- Question and Answer Book of Space. Random. New York. 1965.

17. Fr. Scharff, Robert; Robbin, J.; Sutton, Félix, Vosburgh, L. et autres.
Qui? Pourquoi? (collection).
Paris. Editions Chanteclerc. 1972-73.

Eng. Scharff, Robert; Robbin, J.; Sutton, Félix, Vosburgh, L. and others.
How and Why Wonder Books Ser. N.Y. Wonder.

18. Fr. Johnston, Ted et Richards, Day.
Un grand livre d'or (collection).
1001 tours de chimie et de biologie. Paris.
Ed. des Deux Coqs d'Or. 1975.

Eng. Johnston, Ted and Richards, Kay.
Science Magic with Chemistry and Biology. Arco Division of Prentice-Hall, N.Y.. 1975.

19. Fr. Ensemble E.J.J. (Trousses de matériel)
- Les os
- Les lumières et les ombres
- Les mobiles
- Les vers de farine
- Comparez et mesurez
- Les blocs modèles
- Les cubes de glace
- Les cartes-miroirs
- Livre de recettes des instruments de musique
- La vie des fèves et des pois
- Les papillons
- Optiques
- Piles et ampoules

* Pour chacun: nécessaire expérimental et guide du maître.
Montréal, McGraw-Hill.

Eng. Elementary Science Study.
- Bones (1967)
- Light and shadows (1975)
- Mobiles (1975)
- Behavior of Mealworms (1975)
- Match and Mesure (1971)
- Pattern Blocks (1970)
- Ice Cubes (1975)
- Miror Cards (1975)
- Musical Instruments Recipe Book (1971)
- Life of Beans and Peas (1975)
- Butterflies
- Optics (1971)

* Student's book or material and Teacher's guide.
McGraw-Hill, New York.

ANNEX G 6

G6: Job Descriptions and Technical Qualifications for Technical Experts

INTRODUCTION

The heart of this project is improved training and support for primary school teachers. Because of the critical importance of TTC staff and faculty to such training, some U.S. technical experts will work in the MINED's central offices in Yaounde to assure TTCs are supported, while others will live near TTC campuses, to work day by day with staff and faculty on the improvement of TTC operations and programs.

These experts will assure the appropriate transfer of American techniques of education adapted to Cameroonian needs.

The amount and scope of U.S. technical assistance is large since project designers believe that only through long-term commitment can institutions change. There also will be short-term help when specific specialists are needed.

Responsibilities and qualifications for short-term experts are covered in exhibits G.2 (Engineering) and G.4 (Library). Long-term advisors have up-to-date information on project progress and needs.

Job descriptions and selection criteria for the long-term U.S. experts follow.

I. T E A M L E A D E R

Works with the Ministry of National Education in Yaounde as a counterpart to the Director of Primary Education. Serves on the Project Implementation Committee and with departments and services related to the project. Is responsible for the other U.S. experts on the technical assistance team. Serves as team spokesperson to the GURC, USAID, and the contracting institution.

Responsibilities:

1. Coordinates, supervises and evaluates the U.S. advisory team. This will necessitate numerous site visits.

2. Serves as counterpart to the Director of Primary and Nursery Education. This entails working with the Project Implementation Committee and with those GURC officials concerned with this project outside the Ministry of Education, e.g., Ministry of Plan. In this capacity, the team leader's specific tasks will include, but by no means be limited to:

- MINED management and administration, as related to support for project TTCs;
- Educational Reform planning and implementation for primary education, as related to curriculum development; personnel policies, and school construction;
- Specific TTC operation, including financial, personnel, and facility management, curriculum development and pedagogy for pre and in-service training for primary school teachers, as well as in-service training for primary school support personnel (school directors, inspectors, etc.).

- Execution of monthly progress reports for all parties concerned with the project (the GURC, USAID, U.S. contractors).

Qualifications:

1. Education: Ph.D. in Education with specialization in Teacher Education and Administration

2. Experience:

Teaching: Minimum of 5 years at the university level in a school or department of education in the area of primary education. Teaching should include methods, school administration, educational evaluation, educational psychology, curriculum development and materials development. Experience as a supervisor or coordinator of practice teaching is highly desirable.

Experience as a consultant or contract team member in an AID funded education project is highly desirable as is overseas experience in developing countries, especially Africa.

3. Language: French S3 R3 as tested at FSI.

II. TEACHER TRAINING/SCHOOL ADMINISTRATION ADVISOR - Based at TTC

Is the counterpart of the TTC Director, and, as such, has the following responsibilities:

1. Administration: Assists in administration of the TTC, e.g., curriculum and facilities planning, data collection, course activity scheduling, staff communications, facility maintenance and usage, and other areas deemed appropriate for collaboration by the TTC faculty, staff, and students.

2. Pre-Service Teacher Training: Develops with TTC staff and faculty new pre-service programs. These include such elements as methodology, educational philosophy, syllabus and lesson preparation, preparation of teaching materials, practice teaching, library use, testing and evaluation, and other areas appropriate to a revised program of pre-service training. Also works with school inspectors and provincial education officials to coordinate their work with the new program.

Develops new pre-service program within the guidelines of the primary school curriculum including those elements now being revised by the Ministry of Education. Visits primary schools to help gauge student needs and teacher problems. Assures that new programs are practical and can be applied within Cameroonian classrooms.

3. In-service Training: Helps establish revised in-service training programs for divisional inspectors, TTC staff and faculty, and primary school directors and teachers. Assists in designing the programs, including content, methodology, organization, duration, materials and administration. Analyzes present in-service programs and revises them according to the certification requirements of the Ministry of Education. Determines best location for in-service programs to assure minimum inconvenience to teachers.

In addition to their main function as advisors to the TTCs, U.S. experts in the TTCs will:

A. Work with provincial officials and divisional inspectors to assist in improving primary school and TTC related data collection, record keeping, personnel management, examination procedures, materials distribution, administration, budget preparation and pedogogical support to teachers.

B. Assist other members of the advisory team with activities taking place in the provinces and at the TTCs, e.g., construction activities, library program, data collection.

C. Write monthly progress reports for the Project Implementation Committee, including the technical assistance team leader and the USAID project officer.

Qualifications:

1. Education: Master's degree in Primary Education.

2. Experience:
   a. Teaching: Five years teaching experience in primary education methods at the university level.

   b. Experience in developing countries: Work in education, in a developing country, as a Peace Corps volunteer, and/or on an AID education project, is desirable.

3. Language Skills: S3 R3 level as tested at FSI.

III. ADMINISTRATIVE SUPPORT EXPERT

This person will be responsible for the logistical support of the U.S. contract team and the procurement of project commodities. This person will have the following responsibilities:

Responsibilities:

1. Orders and ships furniture and household applicances for U.S. advisors.

2. Locates and negotiates rental of appropriate housing for TEs.

3. Procures project vehicles for TEs and all off-shore commodities.

4. Serves as liaison with institutional contractor to assure timely project backstopping.

5. Works with the Division of Construction and Equipment in the Division of Planning, Guidance and School Equipment in the procurement of local project commodities.

6. Provides continuous logistical support to U.S. team during the life of the project.

7. Assures that all procurement is in accordance with AID procurement regulations. Coordinates activities with project officer and Supply Management Division of USAID/Yaounde.

8. Writes monthly progress report for USAID project manager.

Qualifications:

1. Experience:

   a. Minimum of 5 years experience in support or administrative service with experience in procurement and logistical support of contractors. Experience with AID contract teams preferable.

   b. Experience in Developing Countries: Field experience in logistical support of U.S. contract teams is highly desirable. Support of teams as administrative backstop is a requirement.

2. Language: S3 R3 as tested at FSI.

Technical Exhibit G 7: Pertinent GURC Decrees and Forms

- Decree No. 74-406 of 24 April 1974 to reorganize the Ministry of Education.

- Decree No. 69-157/COR for the creation and organization of the IPARs. (Institut de Pedagogie Appliquee a Vocation Rurale)

- Arrete No. 558/C/84/MINEDUC/DEPM.- Fixant le programme des Examens Professionnels de l'Enseignement Primaire et Maternel

- School Inspection Forms

Décret n° 74-406 du 24 avril 1974

portant réorganisation du ministère de l'éducation nationale.

LE PRÉSIDENT DE LA RÉPUBLIQUE,

Vu la constitution de la République unie du Cameroun ;

Vu le décret n° 65-DF-210 du 21 mai 1965 portant suppression des cabinets ministériels et créant dans chaque ministère un poste de secrétaire général ;

Vu le décret n° 72-281 du 8 juin 1972 portant organisation du gouvernement de la République unie du Cameroun ;

Vu les nécessités de service ;

Décrète :

Article premier.— Le ministère de l'éducation nationale, placé sous l'autorité d'un ministre assisté d'un vice-ministre, comprend :

— un secrétariat particulier du ministre ;
— un secrétariat particulier du vice-ministre ;
— deux conseillers techniques ;
— une administration centrale ;
— des services extérieurs.

TITRE PREMIER

De l'administration centrale.

Art. 2.— L'administration centrale comprend :

— le secrétariat général ;
— la direction de l'administration générale ;
— la direction de l'enseignement supérieur ;
— la direction de l'enseignement secondaire général ;
— la direction de l'enseignement technique et professionnel ;
— la direction de l'enseignement primaire et maternel ;
— la direction des examens et concours ;
— la direction de l'enseignement privé.

Chapitre premier

Du secrétariat général.

Art. 3.— Le secrétaire général suit, sous l'autorité du ministre et du vice-ministre dont il est le principal collaborateur des affaires du département. Il assure l'exécution des décisions prises par le ministre et le vice-ministre conformément aux dispositions de l'article 5 du décret n° 72-281 du 8 juin 1972 portant organisation du gouvernement de la République unie du Cameroun, il reçoit à cet effet délégation de signature.

Art. 4.— Sont directement rattachés au secrétariat général :

— l'inspection générale de pédagogie ;
— la division de la planification, de l'orientation et de l'équipement scolaire ;
— le service des activités post et péri-scolaires ;
— le service d'ordre ;
— le service de la santé scolaire, universitaire et sportive ;
— le bureau de traduction.

Decree No. 74-406 of 24 April 1974

to reorganize the Ministry of Education.

THE PRESIDENT OF THE REPUBLIC,

Mindful of the Constitution of the United Republic of Cameroon ;

Mindful of Decree No. 65-DF-210 of 21 May 1965 to abolish Ministerial Cabinets and create a post of Secretary General in each Ministry ;

Mindful of Decree No. 72-281 of 8 June 1972 to organize the Government of the United Republic of Cameroon ;

Considering the needs of the Service ;

HEREBY DECREES AS FOLLOWS:

1. The Ministry of National Education placed under the authority of a Minister assisted by a Vice-Minister shall comprise :

— a Private Secretariat of the Minister,
— a Private Secretariat of the Vice-Minister,
— two Technical Advisers,
— a Central Administration,
— External Services.

PART I

The central administration.

2. The Central Administration shall comprise :

— the Secretariat General;
— the Department of General Administration;
— the Department of Higher Education;
— the Department of General Secondary Education;
— the Department of Technical and Vocational Education;
— the Department of Primary and Nursery School Education;
— the Department of Examinations and Competitive Examinations;
— the Department of Private Education.

Chapter I

The secretariat general.

3. The Secretary General shall direct the affairs of the Ministry under the authority of the Minister and Vice-Minister of whom he shall be the principal assistant. He shall ensure the implementation of measures taken by the Minister and Vice-Minister in accordance with Article 5 of Decree No. 72-281 of 8 June 1972 to organize the Government of the United Republic of Cameroon. For this purpose he shall receive delegation of signature.

4. The following shall be directly attached to the Secretariat General :

— the General Inspectorate of Pedagogy;
— the Planning, Guidance and School Equipment Division,
— the Post-curricular and Extra-curricular Activities Service,
— the Mail and Index Service,
— the School, University and Sports Health Service,
— the Translation Bureau.

De l'inspection générale.

Art. 5.— Dirigée par un inspecteur général, l'inspection générale de pédagogie qui comprend des inspecteurs pédagogiques nationaux, est chargée, sous l'autorité du secrétaire général, et en accord avec les directions intéressées :

1° De définir les programmes et les méthodes d'enseignement des différentes disciplines. Dans ce but, les inspecteurs pédagogiques nationaux participent à l'établissement des programmes d'action de l'institut national d'éducation et des IPAR, et à la conception des méthodes et des travaux de recherche ; ils préparent ensuite en collaboration avec les directions et services intéressés, la mise au point des programmes et des méthodes retenus par le ministre de l'éducation nationale, et en contrôlent l'application dans les établissements primaires, secondaires, publics et privés.

2° De conseiller, inspecter et noter les professeurs et inspecteurs départementaux en exercice. Dans leur rôle de conseillers, les inspecteurs pédagogiques nationaux sont assistés par les conseillers pédagogiques provinciaux auxquels ils donnent toutes instructions et directives utiles dans leurs disciplines respectives.

3° D'accomplir toute enquête d'ordre pédagogique dans les établissements scolaires à la demande du ministre de l'éducation nationale.

Art. 6.— L'inspecteur général de pédagogie a pour tâche de coordonner l'activité des inspecteurs pédagogiques nationaux et en particulier de planifier les missions d'inspection. L'inspecteur général est l'interprète du corps de l'inspection pédagogique nationale auprès du secrétaire général, du vice-ministre et du ministre.

L'inspecteur général a autorité sur le secrétariat administratif du corps de l'inspection pédagogique nationale. Il est nommé par décret présidentiel sur proposition du ministre de l'éducation nationale et a rang de directeur de l'administration centrale.

Art. 7.— Les inspecteur pédagogiques nationaux dont le nombre est fixé au début de chaque année scolaire ont rang de chef de service de l'administration centrale et sont nommés par arrêté présidentiel.

Art. 8.— Dirigé par un chef de service, le secrétariat administratif de l'inspection générale de pédagogie est chargé des travaux de secrétariat et de la diffusion des instructions et directives. Il s'occupe de l'organisation matérielle des stages de recyclage et des missions d'inspection pédagogique nationale.

Il comprend deux bureaux :

— le bureau des instructions et rapports ;
— le bureau des missions et des stages.

De la division de la planification, de l'organisation et de l'équipement scolaire.

Art. 9.— Placée sous l'autorité d'un chef de division ayant rang de sous-directeur d'administration centrale, assisté de deux chargés d'études assistants, ayant rang de chef de service, la division de la planification, de l'orientation et de l'équipement scolaire est chargée :

— de la préparation du plan en matière d'éducation et du contrôle de son exécution ;

— de la préparation des projets à soumettre au financement extérieur et de la coordination des aides extérieures relatives à l'éducation, et des questions relatives aux bourses d'étude ;

The general inspectorate.

5. Under the authority of the General Inspector, the General Inspectorate of Pedagogy, which shall comprise National Pedagogic Inspectors, shall be responsible, under the authority of the Secretary-General and in collaboration with the Department concerned :

(1) for defining teaching syllabuses and methods in the various disciplines. In this sphere, the National Pedagogic Inspectors shall participate in drafting the programme of activities of the National Institute of Education and the Institutes for Applied Rural Pedagogy (IPAR) and in designing research methods and projects ; they then collaborate with the departments and services concerned, in putting into final form the syllabuses and methods which have been approved by the Minister of National Education. They supervise the introduction of such syllabuses in the primary and secondary, public and private institutions.

(2) for advising, inspecting, and assessing the work of, the teachers and inspectors in services in the Divisions. The National Pedagogic Inspectors shall be assisted in their task as advisers by the Provincial Pedagogic Counsellors to whom they shall give all necessary instructions and orders within the sphere of their respective disciplines.

(3) for undertaking any investigation of a pedagogic nature in the schools at the request of the Minister of National Education.

6. The General Inspector of Pedagogy shall be responsible for coordinating the activities of the National Pedagogic Inspectors and for planning tours of inspection in particular. The General Inspector shall be the spokesman of the National Pedagogic Inspectorate Corps before the Secretary General, the Vice-Minister and the Minister.

The General Inspector shall exercise authority over the administrative secretariat of the National Pedagogic Inspectorate Corps. He shall be appointed by Presidential Decree on the proposal of the Minister of National Education and shall rank as a Central Administration Director.

7. The National Pedagogic Inspectors whose number shall be fixed at the beginning of each academic year shall rank as Central Administration Service Heads and shall be appointed by Presidential Order.

8. Placed under the authority of a Service Head, the administrative secretariat of the General Inspectorate of Pedagogy shall be responsible for the secretariat duties and for transmitting the various instructions and orders. It shall handle the practical organization of refresher courses and the National Pedagogic Inspectorate tours.

It shall comprise two bureaux :

— the Instructions and Reports Bureau;
— the Tours and Training Courses Bureau.

The Planning, Guidance, and School Equipment Division.

9. Placed under the authority of a Division Head ranking as Central Administration Sub-Director, assisted by two Assistant chargés d'Etudes, ranking as Service Heads, the Planning, Guidance and School Equipment Division shall be responsible for :

– de la carte scolaire en relation avec les directeurs responsables des différents niveaux d'enseignement, et notamment de la coordination des procédures de créations d'établissements privés ;

– de l'orientation des élèves en fonction des aptitudes intellectuelles et physiques de chacun et en fonction des objectifs fixés par le plan ;

– des études sur le rendement du système éducatif ;

– de la préparation des conseils consultatifs en matière d'éducation, et notamment du conseil supérieur de l'éducation nationale dont le chef de la division assure le secrétariat permanent ;

– de la préparation du rapport annuel d'évaluation de l'ensemble des activités de l'éducation.

Elle comprend quatre services :

– le service des bourses et des stages ;
– le service de la planification, de la carte scolaire et des statistiques scolaires ;
– le service de l'orientation scolaire ;
– le service des constructions et équipement.

Art. 10.– Placé sous l'autorité d'un chef de service, assisté d'un adjoint, le service des bourses et des stages est compétent en matière de bourses d'études :

– bourses de l'enseignement secondaire général et technique ;
– bourses de l'enseignement supérieur ;
– services de tous ordres à rendre aux étudiants.

Il est en outre chargé de la préparation des commissions de bourses dont le secrétariat est assuré par le chef de service des bourses.

Il comprend trois bureaux :

– le bureau des bourses de l'enseignement supérieur ;
– le bureau des bourses de l'enseignement secondaire général et technique public ;
– le bureau des bourses de l'enseignement privé.

Art. 11.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service de la planification, de la carte scolaire et des statistiques scolaires s'occupe :

– de recueillir et de traiter toutes statistiques afférentes à l'éducation nationale;
– d'exécuter les objectifs du plan de développement économique et social en matière d'éducation;
– de dresser la carte scolaire;
– de préparer les projets d'investissement à soumettre aux sources de financement extérieur.

Il comprend deux bureaux :

– le bureau des statistiques;
– le bureau de la planification et de la carte scolaire.

Art. 12.– Placé sous l'autorité d'un chef de service, éventuellement assisté d'un adjoint, le service de l'orientation scolaire et universitaire et professionnelle est chargé :

– preparing the section of the Plan dealing with Educational matters and supervising its implementation;
– drafting projects to be submitted for foreign assistance and coordinating foreign educational aid, and dealing with matters connected with scholarships,
– dealing with the school map in conjunction with the Directors responsible for the various levels of education, and in particular coordinating the procedure for setting up private institutions;
– guiding students on the basis of their intellectual and physical capabilities in accordance with the objectives laid down in the Plan;
– undertaking studies on the productivity of the educational system;
– preparing Consultative Meetings in the sphere of education ; and, inter alia, those of the Higher Council for National Education whose permanent secretary shall be the Division Head ;
– drafting the annual assessment report on all educational activities.

It shall comprise four services :

– the Scholarships and Training Service,
– the Planning, School Map and School Statistics Service.
– the Educational Guidance Service,
– the Buildings and Equipment Service.

10. Placed under the authority of a Service Head assisted by a deputy, the Scholarships and Training Service shall deal with scholarship matters :

– General Secondary and Technical Education Scholarships;
– Higher Education Scholarships;
– Services of all kinds rendered to students.

It shall furthermore be responsible for preparing scholarship commission meetings, the secretarial work of which shall be handled by the Head of the Scholarships Service.

The scholarships and training service shall comprise three bureaux :

– the Higher Education Scholarships Bureau ;
– the General Secondary and Technical Education Scholarships Bureau;
– the Private Education Scholarships Bureau.

11. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Planning, School Map and School Statistics Service shall be responsible for :

– collecting and processing all statistics relating to National Education;
– carrying out the objectives of the Economic and Social Development Plan relating to Education,
– drawing up the school map;
– preparing investment projects for submission to foreign financing sources.

It shall comprise two bureaux :

– the Statistics Bureau;
– the Planning and School Map Bureau.

12. Placed under the authority of a Service Head, assisted if need be by a Deputy, the School, University and Vocational Guidance Service shall be responsible for :

- de l'orientation des élèves;
- de l'expérimentation des tests adaptés aux réalités et aux besoins du pays;
- de la participation à la sélection des élèves entrant dans un centre de formation professionnelle à quelque niveau que ce soit;
- de l'élaboration d'un fichier des professeurs et carrières offertes aux élèves et aux étudiants;
- de l'information et de la documentation des parents d'élèves, des étudiants, des chefs d'établissements scolaires et de la formation professionnelle, et du public en général.

Il comprend deux bureaux :

- le bureau de l'orientation scolaire, universitaire et profesionnelle;
- le bureau du fichier des professions et carrières.

Art. 13.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des constructions et de l'équipement scolaires est chargé de suivre avec les services techniques compétents, les travaux de construction et d'équipement scolaires.

Il comprend deux bureaux :

- le bureau des études;
- le bureau des marchés.

Art. 14.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des activités post et péri-scolaires a pour objectif de favoriser l'enracinement de l'école dans le milieu. Il doit d'une part associer les parents d'élèves à la vie de l'école, et d'autre part faire rayonner l'école dans le village ou le quartier, la ville ou la région.

Dans ce but, il suscite et favorise l'organisation des associations de parents d'élèves, il conseille et contrôle les coopératives scolaires et met sur pied un programme d'activités permettant à l'école d'agir sur le milieu.

Il comprend deux bureaux :

- le bureau des associations des parents d'élèves et organisations assimilées ;
- le bureau des activités para-scolaires et des coopératives.

Art. 15.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service d'ordre est chargé de la réception du courrier adressé aux ministre et vice-ministre, de la transmission dudit courrier aux directions et services après que le ministre, le vice-ministre ou le secrétaire général en aient pris connaissance, et de l'acheminement du courrier émanant du ministère. Il tient et conserve le fichier central du ministère.

Il comprend trois bureaux :

- le bureau du dépouillement et de la cotation;
- le bureau du fichier central;
- le bureau de transmission.

Art. 16.– Placé sous l'autorité d'un chef de service, assisté d'un adjoint (docteurs en médecine et spécialisés en médecine scolaire et sportive), le service de la santé scolaire, universitaire et sportive assure la surveillance et l'amélioration de la santé des élèves et des étudiants dans les établissements d'enseignement et d'éducation de tous ordres.

- providing guidance for students;
- trying out tests adapted to the realities and needs of the Country;
- participating in the selection of students to be admitted to professional or occupational training centres at any level;
- compiling a card-index of professions and careers available to pupils and students;
- providing information and documentation for parents, students, Heads of educational and vocational training establishments and the general public.

It shall comprise two bureaux :

- the School, University and Vocational Guidance Bureau;
- the Professions and Careers Cardindex Bureau.

13. Placed under the authority of a Service Head assisted if need be by a Deputy, the School Buildings and Equipment Service shall be responsible for supervising together with the competent technical services school buildings and equipment.

It shall comprise two bureaux :

- the Studies Bureau;
- the Contracts Bureau.

14. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Post-curricular and Extra-curricular Activities Service shall aim at integrating the school into the environment. It shall on the one hand relate pupils' parents with the life of the school and on the other hand extend the school's influence in the village or district, town or area.

To that end, it shall develop and encourage the organization of Parents' Associations, it shall advise and supervise School Co-operatives and initiate a programme of activities enabling the school to influence its environment.

It shall comprise two bureaux :

- the Parents' Association and Related Organizations Bureau;
- the Extra-curricular Activities and Co-operatives Bureau.

15. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Mail and Index Bureau shall be responsible for the reception of mail addressed to the Minister and Vice-Minister, the transmission of the said mail to the Departments and Services after the Minister, Vice-Minister or Secretary General have taken cognizance of it and the dispatch of mail from the Ministry. It shall keep and maintain the central index of the Ministry.

The Mail and Index Service shall comprise three bureaux :

- the Mail Sorting and Registration Bureau,
- the Central Index Bureau;
- the Transmission Bureau.

16. Placed under the authority of a Service Head, assisted by a Deputy (Medical doctor specialized in school and sports medicine), the School, University and Sports Health Service shall be responsible for the supervision and improvement of the health of pupils and students in teaching and educational establishments of all types.

A ce titre, il possède un fichier sanitaire donnant la situation du point de vue sanitaire de tout enfant scolarisé ou de tout étudiant.

Il comprend deux bureaux :

- le bureau d'hygiène et de prophylaxie ;
- le bureau du fichier scolaire.

Les modalités de fonctionnement du service de la santé scolaire seront fixés par arrêté conjoint du ministre de l'éducation nationale et du ministre de la santé et de l'assistance publiques.

Chapitre II

De la direction de l'administration générale

Art. 17.— Placée sous l'autorité d'un directeur assisté d'un adjoint, la direction de l'administration générale est chargée de toutes les activités administratives et financières du ministère, notamment :

- des relations extérieures,
- des affaires administratives et financières,
- de l'élaboration des projets de budgets de fonctionnement et d'équipement, ainsi que de leur mise en exécution et de leur contrôle, en liaison avec la division de la planification de l'orientation et de l'équipement scolaire ;
- de la gestion du personnel et du matériel de l'ensemble du ministère.

La direction de l'administration générale comprend :

- un service des affaires administratives et financières directement rattaché au directeur ;
- une sous-direction du personnel.

Art. 18.— Le service des affaires administratives et financières, placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint et relevant hiérarchiquement du directeur de l'administration générale, est chargé :

- de toutes les affaires à caractère administratif concernant le fonctionnement du ministère de l'éducation nationale ;
- des affaires financières, budgétaires et comptables des services et organismes dépendant du ministère de l'éducation nationale. A ce titre, il assure la préparation, l'exécution et le contrôle du budget de fonctionnement des services centraux et des services extérieurs relevant du ministère, il vérifie les comptes de gestion des comptables matières et des différents registres comptables de tous les établissements dépendant du ministère de l'éducation nationale. Il contrôle la gestion des crédits de fonctionnement, des fiches de crédit par ligne budgétaire afin de donner au ministre, au vice-ministre, au secrétaire général et aux différents responsables du ministère et à tout moment la situation des crédits.

Le service des affaires administratives et financières comprend quatre bureaux :

- le bureau du budget ;
- le bureau des dépenses communes ;
- le bureau de la comptabilité matière ;
- le bureau des études, de la documentation et des archives.

In this capacity, it shall keep a health index recording the health situation of all pupils or students.

It shall comprise two bureaux :

- the Hygiene and Prophylaxis Bureau;
- the School Index Bureau.

The functioning of the School, University and Sports Health Service shall be fixed by joint Order of the Ministers of National Education and of Public Health and Social Welfare.

Chapter II

Department of General Administration.

17. Placed under the authority of a Director assisted by a Deputy, the Department of General Administration shall be responsible for all administrative and financial activities of the Ministry, inter alia :

- external relations;
- administrative and financial affairs,
- the drawing up of draft recurrent and capital expenditure budgets as well as their implementation and control in conjunction with the Planning, Guidance and School Equipment Division;
- the management of personnel and equipment of the whole Ministry.

18. The Administrative and Financial Affairs Service, placed under the authority of a Service Head, assisted if need be by a Deputy and administratively attached to the Director of General Administration, shall be responsible for :

- all matters of an administrative nature concerning the functioning of the Ministry of Education;
- financial, budgetary and accounting matters of service and establishments under the jurisdiction of the Ministry of Education. To this end, it shall, execute and control the recurrent budget of both the Central and External Services of the Ministry ; it shall examine the management accounts of the stores accountants and the various accounts books of all establishments under the jurisdiction of the Ministry of Education. It shall supervise the management of the recurrent votes, and the vote cards for each budgetary item in order to be able to provide the Minister, Vice-Minister, Secretary General and various officials of the Ministry at any time with information on the situation of credits.

The Administrative and Financial Affairs Service shall comprise four bureaux :

- the Budget Bureau;
- the Common Expenses Bureau;
- the Stores Accounts Bureau;
- the Studies, Documentation and Records Bureau.

19. Placed under the authority of a Sub-Director, the Personnel Sub-Department shall be responsible for the management of all the personnel of the Ministry.

It shall comprise three services :

- the Established Personnel Service;
- the Non-established Personnel Service;
- the Technical Assistance Personnel Service.

Art. 19. Placée sous l'autorité d'un sous-directeur, la sous-direction du personnel est chargée de la gestion de l'ensemble des personnels du département.

Elle comprend trois services :
- le service du personnel fonctionnaire;
- le service du personnel non fonctionnaire ;
- le service du personnel de l'assistance technique.

Art. 20.- Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service du personnel fonctionnaire comprend deux bureaux :
- le bureau de recrutement et de gestion des effectifs
- le bureau de la réglementation et du contentieux.

Art. 21.- Placé sous l'autorité d'un chef de service, éventuellement assisté d'un adjoint, le service du personnel non fonctionnaire comprend deux bureaux :
- le bureau des agents contractuels ;
- le bureau des agents décisionnaires.

Art. 22.- Placé sous l'autorité d'un chef de service, éventuellement assisté d'un adjoint, le service du personnel de l'assistance technique comprend deux bureaux :
- le bureau du personnel de l'assistance technique ;
- le bureau du personnel étranger sous contrat camerounais.

Chapitre III

De la direction de l'enseignement supérieur.

Art. 23.- Placée sous l'autorité d'un directeur assisté d'un adjoint, la direction de l'enseignement supérieur est chargée de coordonner et d'appliquer la politique gouvernementale en matière d'enseignement supérieur.

A cet effet :

- Elle étudie et propose toute mesure de nature à favoriser le développement de l'enseignement supérieur dans le cadre du plan de développement économique social et culturel.
- Elle suit les activités d'enseignement et de recherche des établissements d'enseignement supérieur.
- Elle étudie toutes les questions relatives à la coopération internationale en matière d'enseignement supérieur et de formation des cadres, à la vie professionnelle des enseignants et à l'équivalence des diplômes.
- Elle prépare le conseil de l'enseignement supérieur.

Elle comprend deux services :

- le service des affaires générales et pédagogiques ;
- le service des équivalences des diplômes.

Art. 24.- Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des affaires générales et pédagogiques est chargé des questions administratives, de la réglementation et des programmes, des questions statutaires et de l'information universitaires. Il suit en outre les questions relatives à la coopération bilatérale et internationale en matière d'enseignement supérieur.

Il comprend deux bureaux :

- le bureau des affaires administratives et de la coopération ;
- le bureau de la réglementation et des programmes.

20. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Established Personnel Service shall comprise two bureaux :

- the Recruitment and Personnel Management Bureau ;
- the Regulations and Disputes Bureau.

21. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Non-established Personnel Service shall comprise two bureaux :

- the Contractual Employees Bureau;
- the Bureau for employees recruited on the basis of a decision.

22. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Technical Assistance Personnel Service shall comprise two bureaux :

- the Technical Assistance Personnel Bureau;
- the Bureau for Expatriate Personnel under Cameroonian contract.

Chapter III

The Department of Higher Education.

23 Placed under the authority of a Director assisted by a Deputy, the Department of Higher Education shall be responsible for co-ordinating and applying Government policy on higher education.

To that end, it shall :

- study and recommend any measures which may encourage the development of Higher Education within the framework of the Economic, Social and Cultural Development Plan;
- supervise teaching and research activities in the institutions of Higher Education;
- examine all matters relating to International Co-operation in the sphere of Higher Education teacher training, the professional status of teachers, and the equivalence of diplomas;
- prepare the work of the Council for Higher Education.

It shall comprise two services :

- the General and Pedagogic Affairs Service;
- the Equivalence of Diplomas Service.

24. Placed under the authority of a Service Head, assisted if need be by a Deputy, the General and Pedagogic Affairs Service shall be responsible for administrative matters, regulations and syllabuses, statutory questions and information related to university affairs. It shall also deal with questions of bilateral and international co-operation in the sphere of higher education.

It shall comprise two bureaux :

- the Administrative Affairs and Co-operation Bureau;
- the Regulations and Syllabuses Bureau.

Art. 25.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des équivalences des diplômes est chargé de toutes les questions relatives aux équivalences des diplômes techniques, professionnels et de formation générale ainsi que du contentieux qui pourrait en résulter.

Il comprend deux bureaux :

– le bureau des diplômes techniques et professionnels ;
– le bureau des diplômes de formation générale.

Chapitre IV

De la direction de l'enseignement secondaire général.

Art. 26.– Placée sous l'autorité d'un directeur assisté d'un adjoint, la direction de l'enseignement secondaire général est chargée :

– de l'administration des établissements d'enseignement secondaire général public : lycées d'enseignement général, collèges d'enseignement secondaire général ;
– du contrôle technique et pédagogique des établissements d'enseignement secondaire général public et privé ;
– de l'exécution des objectifs du plan de développement en matière d'enseignement secondaire général ;
– des études relatives à la création de nouveaux établissements.

Elle comprend deux services :

– le service de la gestion des établissements et du personnel
– le service des affaires pédagogiques.

Art. 27.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service de la gestion des établissements et du personnel de l'enseignement secondaire général est chargé :

– des études relatives à la création et à la transformation des établissements publics
– de l'organisation des structures pédagogiques des établissements
– de la préparation et de l'exécution du mouvement du personnel de direction, d'enseignement et de surveillance
– de la tenue des dossiers des établissements et du fichier pédagogique du personnel
– du contrôle des emplois du temps et des heures supplémentaires
– de l'exploitation des différents rapports des chefs d'établissements.

Il comprend deux bureaux :

– le bureau des établissements ;
– le bureau du personnel.

Art. 28.– Placé sous l'autorité du chef de service éventuellement assisté d'un adjoint, le service des affaires pédagogiques de l'enseignement secondaire général est chargé, en collaboration avec les inspecteurs pédagogiques nationaux de l'enseignement secondaire général;

25. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Equivalence of Diplomas Service shall be responsible for all matters relating to the equivalence of technical, professional and general education diplomas, and for dealing with any disputes that may arise therefrom.

It shall comprise two bureaux :

– the Technical and Professional Diplomas Bureau;
– the General Education Diplomas Bureau.

Chapter IV

The Department of General Secondary Education.

26. Placed under the authority of a Director assisted by a Deputy, the Department of General Secondary Education shall be responsible for :

– the administration of public general secondary schools : General Education Lycées, General Secondary Education Colleges;
– the technical and pedagogic supervision of public and private general secondary schools;
– the carrying out of the objectives of the Development Plan in matters of general secondary school education;
– studies relating to the setting up of new establishments.

It shall comprise two services :

– the Establishments and Personnel Management Service;
– the Pedagogic Affairs Service.

27. Placed under the authority of a Service Head assisted if need be by a Deputy, the Establishments and Personnel Management Service of the Department of General Secondary Education shall be responsible for :

– studies relating to the setting up and transformation of public establishments;
– the organization of the pedagogic structures of establishments;
– the preparation and implementation of transfers of administrative, teaching and supervisory personnel;
– the maintenance of institutional files and of the pedagogic index of personnel.
– the supervision of hours of work and overtime;
– processing of the various reports of the Heads of establishments.

It shall comprise two bureaux :

– the Establishments Bureau;
– the Personnel Bureau.

28. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Pedagogic Affairs Service, in conjunction with the National Pedagogic Inspectors of General Secondary Education, shall be responsible for :

- de la préparation des textes réglementant l'organisation, [illegible] et l'activité des enseignants et [illegible] professeurs, règlement intérieur ;
- de la préparation de la conférence annuelle des chefs d'établissements et de la mise en œuvre des décisions de cette conférence.

Il comprend deux bureaux :

- le bureau de la réglementation et de l'organisation ;
- le bureau du fichier pédagogique et du contrôle de la vie scolaire.

Chapitre V

De la direction de l'enseignement technique et professionnel.

Art. 29.- Placée sous l'autorité d'un directeur, assisté d'un adjoint, la direction de l'enseignement technique et professionnel est chargée :

- de l'administration des établissements d'enseignement technique public (lycées techniques, collèges d'enseignement technique, sections artisanales rurales, écoles et sections ménagères) ;
- du contrôle technique et pédagogique des établissements d'enseignement technique public et privé,
- de l'exécution des objectifs du plan de développement en matière d'enseignement technique,
- des études relatives à la création de nouveaux établissements.

Elle comprend :

- le service de la gestion des établissements et du personnel,
- le service de l'animation pédagogique.

Art. 30.- Placé sous l'autorité d'un chef de service, éventuellement assisté d'un adjoint, le service de la gestion des établissements d'enseignement technique et professionnel est chargé :

- des études relatives à la création et à la transformation des établissements ;
- de l'organisation des structures pédagogiques des établissements ;
- de la préparation et de l'exécution du mouvement du personnel de direction, d'enseignement et de surveillance ;
- de la tenue des dossiers des établissements et du fichier pédagogique du personnel ;
- du contrôle des emplois du temps et des heures supplémentaires.

Il comprend deux bureaux :

- le bureau des établissements ;
- le bureau du personnel.

- the preparation of regulations governing the organization, [illegible] and activities of teachers and [illegible] professors, rules of procedure ;
- the organization of the annual Conference of School Principals and the implementation of the Conference decisions.

It shall comprise two bureaux :

- the Regulations and Organization Bureau ;
- the Pedagogic Index and School System Control Bureau.

Chapter V

The Department of Technical and Vocational Education.

29. Placed under the authority of a Director assisted by a Deputy, the Department of Technical and Vocational Education shall be responsible for :

- the administration of public technical education schools (Technical Lycées, technical education colleges, rural artisanal sections & Home Economics Schools and Sections) ;
- technical and pedagogic supervision of public and private technical education schools ;
- the carrying out of the objectives of the Development Plan in matters of technical education ;
- studies relating to the setting up of new schools.

It shall comprise :

- the Establishment and Personnel Management Service
- the Pedagogic Action Service.

30. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Technical and Vocational Establishment Management Service shall be responsible for:

- studies relating to the setting up and transformation of establishments,
- the organization of the pedagogic structures of schools,
- the preparation and implementation of the transfer of administrative, teaching and supervisory personnel,
- the maintenance of school files and the pedagogic index of personnel,
- the supervision of time-tables and extra hours.

It shall comprise two bureaux :

- the Establishments Bureau,
- the Personnel Bureau.

31. Placed under the authority of a Service Head, assisted if need be by a Deputy, the Pedagogic Action Service of the Vocational and Technical Education Establishments shall, in conjunction with the National Pedagogic Inspectors of Technical Education, be responsible for :

- the internal organization of establishments and the school system ;
- relations with the profession ;
- the continuing training of adults ;
- the examination of the special problems raised by rural handicrafts sections, Home Economics Sections and Schools.

Art. 31. Placé sous l'autorité d'un chef de service, éventuellement assisté d'un adjoint, le service de l'animation pédagogique des établissements d'enseignement technique professionnel est chargé en collaboration avec les inspecteurs pédagogiques nationaux de l'enseignement technique :

de l'organisation interne des établissements et de la vie scolaire ;

des relations avec la profession;

de la formation continue des adultes;

de l'étude des problèmes particuliers posés par les sections artisanales rurales, les sections ménagères et les écoles ménagères.

Il comprend trois bureaux :

le bureau du fichier pédagogique et du contrôle de la vie scolaire;

le bureau de la formation continue et des relations avec la profession;

le bureau des sections artisanales rurales, des sections ménagères et des écoles ménagères.

Chapitre VI

De la direction de l'enseignement primaire et maternel.

Art. 32. Placée sous l'autorité d'un directeur, assisté d'un adjoint, la direction de l'enseignement primaire et maternel est chargée :

de l'administration des établissements publics d'enseignement primaire et maternel;

de l'administration des établissements de formation des maîtres (ENI - ENIA) ;

du contrôle technique et pédagogique des établissements publics et privés d'enseignement primaire,

de l'organisation et du contrôle de l'enseignement maternel;

de la formation permanente du personnel enseignant,

de la préparation et de la coordination des stages et des conférences;

de la diffusion des documents pédagogiques en vue d'un développement harmonieux de l'enseignement primaire et maternel;

des études relatives à la création de nouveaux établissements.

Elle comprend trois services :

le service des affaires générales et de la législation,

le service des affaires pédagogiques et de la formation,

le service de télé-enseignement.

Art. 33. Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des affaires générales et de la législation est chargé :

des études relatives à la préparation et à l'exécution du budget,

des études relatives à la création de nouveaux établissements,

de l'étude des problèmes concernant le personnel (recrutement - prise en charge - promotions - affectations),

de l'étude des problèmes relatifs au fonctionnement des établissements de formation des maîtres de l'enseignement primaire et maternel,

de la préparation des textes réglementaires concernant le personnel et la vie scolaire.

Il comprend deux bureaux :

le bureau des affaires générales ;

It shall comprise three bureaux :

- the Pedagogic Index and School System Control Bureau;
- the Continuing Training and Relations with the Profession Bureau;
- the Bureau for Rural Handicrafts Sections and Home Economics Sections and Schools.

Chapter VI

The Department of Primary and Nursery School Education

32. Placed under the authority of a director assisted by a deputy, the department of primary and nursery school education shall be responsible for :

- the administration of public primary and nursery schools;
- the administration of teacher training colleges (ENI-ENIA);
- the technical and pedagogic supervision of public and private primary schools ;
- the organization and supervision of nursery schools,
- the continuing training of teaching personnel,
- the preparation and co-ordination of courses and conferences;
- the distribution of pedagogic documents in order to ensure a harmonious development of primary and nursery school education;
- studies relating to setting up of new schools.

It shall comprise three services :

- the general affairs and legislation service,
- the pedagogic affairs and training service,
- the education by correspondence service.

33. Placed under the authority of a service head, assisted if need be by a deputy, the general affairs and legislation service shall be responsible for :

- studies relating to the preparation and execution of the budget,
- studies relating to the setting up of new schools,
- the examination of personnel problems (recruitement - absorption - promotions - transfers),
- the study of problems relating to the functioning of training institutions for primary and nursery school teachers;
- the preparation of regulations governing educational personnel and systems.

It shall comprise two bureaux :

- the general affairs bureau ;
- the regulations and technical and administrative control bureau.

34. Placed under the authority of a service head, assisted if need be by a deputy, the pedagogic affairs and training service shall, in conjunction with the national pedagogic inspectors of primary and nursery education, be responsible for :

– le bureau de la réglementation et du contrôle technique et administratif.

Art. 34.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des affaires pédagogiques et à la formation est chargé en collaboration avec les inspecteurs pédagogiques nationaux de l'enseignement primaire et maternel :

– de la réforme et de l'adaptation des programmes et des méthodes de l'enseignement primaire et maternel. Dans ce domaine, il travaille en relation avec l'institut national d'éducation et les instituts de pédagogie appliquée à vocation rurale,
– de l'élaboration et de la diffusion des documents pédagogiques,
– du choix des manuels et du matériel didactique en relation avec l'inspection générale de pédagogie,
– du contrôle pédagogique des personnels des établissements d'enseignement primaire et maternel,
– de l'évaluation des méthodes pédagogiques et du rendement scolaire,
– de la préparation et de la coordination des stages et des conférences pédagogiques.

Il comprend trois bureaux :

– le bureau de la recherche de la documentation et de la diffusion,
– le bureau du contrôle pédagogique,
– le bureau de la formation, des stages et des conférences.

Art. 35.– Placé sous l'autorité d'un chef de service, assisté d'un adjoint, le service de télé-enseignement est chargé :

– de la préparation et de l'exécution de son budget autonome,
– de l'enseignement par correspondance en vue de la formation permanente des maîtres de l'enseignement primaire et maternel,
– des émissions radiophoniques destinées aux élèves et au personnel enseignant.

Il comprend trois bureaux :

– le bureau financier,
– le bureau de l'enseignement par correspondance
– le bureau des émissions scolaires.

Chapitre VII

De la direction des examens et concours.

Art. 36.– Placée sous l'autorité d'un directeur assisté d'un adjoint, la direction des examens et concours est chargée de l'organisation générale des examens et concours des enseignements primaire et secondaire et de la délivrance des diplômes officiels.

Elle comprend trois services :

– le service de l'organisation et de l'information,
– le service des études et de la mécanographie,
– le service des diplômes et des archives.

Art. 37.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service de l'organisation et de l'information est chargé :

– de l'information des candidats et de la diffusion des règlements des examens et concours,

– the reform and adaptation of primary and nursery education syllabuses and methods. In this connection, it shall work in collaboration with the national institute of education and the institutes of applied rural pedagogy;
– the preparation and distribution of pedagogic documents,
– the selection of manuals and teaching material in conjunction with the general inspectorate of pedagogy,
– the pedagogic supervision of primary and nursery school personnel,
– the assessment of pedagogic methods and school efficiency;
– the organization and co-ordination of pedagogic courses and conferences.

It shall comprise three bureaux :

– the research, documentation and distribution bureau;
– the pedagogic supervision bureau;
– the training courses and conferences bureau.

35. Placed under the authority of a service head, assisted by a deputy, the education by correspondence service shall be responsible for :

– the preparation and execution of its autonomous budget;
– correspondence courses designed to ensure the continuing training of primary and nursery school teachers;
– radio programmes for pupils teachers.

It shall comprise three bureaux :

– the finance bureau;
– the correspondence courses bureau,
– the school programmes bureau.

Chapter VII

Department of examinations and competitive examinations

36 Placed under the authority of a director assisted by a deputy, the department of examinations and competitive examinations shall be responsible for the general organization of examinations and competitive examinations in primary and secondary education and for the issue of official certificates.

It shall comprise three services :

– the organization and information service;
– studies and computer service;
– certificates and records service.

37. Placed under the authority of a service head assisted if need be by a deputy, the organization and information service shall be responsible for :

– the information of candidates and the distribution of the regulations for examinations and competitive examinations;
– the examination of candidates' applications.

It shall comprise three bureaux :

– the primary education examinations and competitive examinations bureau,

de l'instruction des dossiers des candidats.

Il comprend trois bureaux :

- le bureau de l'organisation des examens et concours de l'enseignement primaire,
- le bureau de l'organisation des examens et concours de l'enseignement secondaire général,
- le bureau de l'organisation des examens et concours de l'enseignement technique.

Art. 38.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des études et de la mécanographie est chargé :

- des travaux d'impression;
- de la perforation des fiches mécanographiques;
- de la publication des annales.

Il comprend deux bureaux :

- le bureau des études;
- le bureau de la mécanographie.

Art. 39.– Placé sous l'autorité d'un chef de service éventuellement assisté d'un adjoint, le service des résultats et des archives est chargé :

- de l'exploitation des résultats des examens et concours,
- de la délivrance des diplômes;
- des statistiques et des archives;
- du contentieux.

Il comprend trois bureaux :

- le bureau des résultats des examens de l'enseignement primaire;
- le bureau des résultats des examens de l'enseignement secondaire général;
- le bureau des résultats des examens de l'enseignement technique et professionnel.

Chapitre VIII

De la direction de l'enseignement privé

Art. 40.– Placée sous l'autorité d'un directeur, assisté d'un adjoint, la direction de l'enseignement privé est chargée :

- des relations entre le ministère et les organismes d'enseignement privé;
- du contrôle administratif et financier des établissements d'enseignement privé qu'ils relèvent de l'enseignement primaire et maternel, de l'enseignement secondaire général ou de l'enseignement technique et professionnel.

A ce titre, la direction de l'enseignement privé est chargée :

- de l'étude de toutes les demandes d'ouverture et de réouverture des établissements d'enseignement privé en relation avec la division de la planification et les directeurs des enseignements concernés;
- de l'inspection des établissements privés;
- de l'exploitation des travaux de la commission de répartition des subventions;
- du contrôle de l'utilisation par les responsables des établissements privés des subventions qui leur sont accordées.

Elle comprend deux services :

le service des affaires administratives et financières comportant deux bureaux :

- the general secondary education examinations and competitive examinations bureau,
- the technical education examinations and competitive examinations bureau.

38. Placed under the authority of a service head, assisted if need be by a deputy, the studies and computer service shall be responsible for :

- printing work;
- the punching of computer cards;
- the publication of annual reports.

It shall comprise two bureaux :

- the studies bureau,
- the computer bureau.

39. Placed under the authority of a service head, assisted if need be by a deputy, the certificates and records service shall be responsible for :

- processing examination and competitive examination results;
- issuing certificates;
- keeping statistics ans records;
- examining disputes.

It shall comprise three bureaux :

- the primary education examination results bureau,
- the general secondary education examination results bureau;
- the technical and vocational education examination results bureau

Chapter VIII

The department of private education

40. Placed under the authority of a director, the department of private education shall be responsible for : new line relations between the ministry and private education bodies :

- the administrative and financial supervision of private institutions in the spheres of primary and nursery education, general secondary education or technical and vocational education.

Pursuant to the above, the department of private education shall be responsible for :

- the study, in conjunction with the planning division and the directors of the institutions concerned, of all applications to open or re-open private education institutions,
- the inspection of private education institutions, the execution of the decisions of the board responsible for allocating grants;
- the supervision of the use made by private school authorities of the grants they receive.

The department shall comprise two services :

the administrative and financial affairs service comprising two bureaux ;

– le bureau des études et du fichier,

– le bureau financier.

le service des affaires pédagogiques comportant deux bureaux :

– le bureau de la documentation réglementaire et pédagogique,

– le bureau du personnel.

TITRE II

Les services extérieurs.

Art. 41. Les services extérieurs du ministère de l'éducation nationale comprennent :

– les délégations provinciales de l'éducation nationale (et les sous-délégations qui en dépendent);

– les inspections départementales de l'enseignement primaire et maternel;

– les établissements scolaires publics des enseignements secondaire général, technique et professionnel, primaire et maternel, et tous les établissements publics de formation relevant du ministère de l'éducation nationale.

Chapitre I

Des délégations provinciales de l'éducation nationale.

Art. 42. Les délégations provinciales de l'éducation nationale sont créées par décret présidentiel.

Le ressort territorial d'une délégation provinciale est celui d'une province administrative.

La délégation provinciale est placée sous l'autorité d'un délégué provincial de l'éducation nationale nommé par arrêté présidentiel et ayant rang de sous-directeur de l'administration centrale.

Le délégué provincial est éventuellement assisté d'un adjoint et d'un ou plusieurs sous-délégués provinciaux ayant rang de chef de service.

Art. 43.- Dans le cadre de sa compétence territoriale, le délégué provincial de l'éducation nationale, est investi, pour le compte de l'éducation nationale, d'une mission permanente et générale d'information, de coordination pédagogique, administrative et de synthèse.

Art. 44.– Le délégué provincial est chargé sur le plan pédagogique :

– de coordonner à l'échelon de la province les activités pédagogiques des enseignements primaires et maternel, secondaire général et technique afin d'assurer leur développement harmonieux ;
– de réunir à des périodes déterminées les inspecteurs départementaux et les conseillers pédagogiques de ces enseignements afin d'étudier sur le plan provincial les inter-relations entre les divers niveaux d'enseignement et les relations inter-disciplinaires ;
– d'appliquer les programmes et méthodes définis par le ministère de l'éducation nationale ;
d'animer l'équipe de conseillers pédagogiques et des inspecteurs départementaux en vue d'obtenir une plus

– the studies and card-index bureau ;
– the finance bureau,

– the pedagogic affairs service comprising two bureaux ;

– the regulations and pedagogic documentation bureau ;
– the personnel bureau.

PART II

External services

41. The external services of the ministry of national education shall comprise :

– the provincial delegations of national education (and the sub-delegations falling under their jurisdiction);
– the divisional inspectorates of primary and nursery school education;
– the public schools in the sectors of general secondary education, technical and vocational education and primary and nursery school education, and all government training schools falling under the jurisdiction of the minister of national education.

Chapter I

Provincial delegations of national education

42. Provincial delegations of national education shall be created by presidential decree.

The territorial jurisdiction of a provincial delegation shall be that of the administrative province.

The provincial delegation shall be placed under the authority of a provincial delegate of national education appointed by presidential order and ranking as central administration sub-director.

The provincial delegate shall be assisted if need by a deputy, and by one or more provincial sub-delegates ranking as service heads.

43. Within the context of his territorial jurisdiction, the provincial delegate of national education shall be charged, on behalf of the minister of national education, with the continuing and general duties of information, pedagogic and administrative co-ordination and overall supervision.

44. The provincial delegate shall be responsible, in the pedagogic sphere for :

– co-ordinating at the provincial level the pedagogic activities involved in primary and nursery school education and general secondary and technical education, in order to ensure their harmonious development;
– organizing meetings, at fixed intervals, of divisional inspectors and pedagogic counsellors of these branches of education so as to study the relations within the province between the various levels of education and between the various disciplines;
– applying the syllabuses and methods defined by the ministry of national education.

grande efficacité dans les divers enseignements dispensés dans les établissements scolaires publics et privés ;

- de proposer au ministre tout projet de réforme susceptible d'améliorer la qualité ou le rendement des enseignements primaire et secondaire.

Art. 45.— Pour accomplir cette mission, le délégué provincial dispose au siège de la délégation provinciale d'une équipe de conseillers pédagogiques de toutes les disciplines et de tous ordres d'enseignement chargés d'une mission permanente d'encadrement, de contrôle, de conseil et d'animation auprès des inspecteurs départementaux, des chefs d'établissements et des professeurs et maîtres de tous les établissements scolaires situés dans la province.

Ces conseillers pédagogiques dont le nombre est fixé au début de chaque année scolaire par arrêté conjoint du ministre de l'éducation nationale et du ministre des finances, ont rang d'adjoint au chef de service d'administration centrale.

Le délégué provincial établit pour chaque conseiller pédagogique un calendrier trimestriel d'activités, et de mission. A la fin de chaque mission, le conseiller pédagogique adresse au délégué provincial un rapport de mission auquel sont annexées les copies de bulletins de visite des professeurs ou des maîtres. Des copies de ce rapport de mission sont envoyées à l'inspecteur pédagogique national et aux directeurs concernés au ministère de l'éducation nationale.

Art. 46.— Le délégué provincial de l'éducation nationale s'occupe en outre à l'intérieur de la province, des problèmes concernant :

- les bourses d'enseignement;
- la santé scolaire;
- les examens;
- le télé-enseignement;
- l'administration des établissements scolaires,
- l'exécution des projets d'investissements réalisés dans la province (études, constructions par entreprises ou régie etc...);
- le logement du personnel enseignant des établissements relevant de sa compétence, en liaison avec le gouverneur de la province et le contrôleur provincial des finances;
- tout le personnel enseignant et administratif (national et étranger) des établissements publics dans le ressort territorial qui est placé sous son autorité.

Art. 47. — Dans le cadre de l'exercice de ses fonctions, le délégué provincial reçoit éventuellement délégation de signature du ministre de l'éducation nationale.

Art. 48.— La délégation provinciale comporte les bureaux suivants :

le bureau des affaires administratives et financières
le bureau de la planification, des statistiques et de l'orientation scolaire;
le bureau de télé-enseignement, des stages et des conférences pédagogiques;
- le bureau des examens.

Les chefs de bureaux des délégations provinciales de l'éducation nationale sont nommés par arrêtés du ministre de l'éducation nationale. Ils ont rang de chef de bureau d'administration centrale.

Art. 49. Les sous-délégations provinciales de l'éducation nationale peuvent être créées par décret présidentiel.

- organizing the team of pedagogic counsellers and divisional inspectors with a view to obtaining greater efficiency in the various courses given in the public and private schools,
- recommending to the minister any reforms with a view to improving the quality and efficiency of primary and secondary school teaching.

45. In order to accomplish this mission, the provincial delegate shall have at the head office of the provincial delegation a team of pedagogic counsellors in all disciplines and all branches of education who shall be permently responsible for the administration and supervision of masters and teachers of all schools situated in the province, and for providing them with advice and guidance.

The pedagogic counsellors, whose number shall be fixed at the beginning of each school year by joint order of the minister of national education and the minister of finance shall rank as central administration service head.

For each pedagogic counsellor, the provincial delegate shall fix a quarterly time-table of activities and visiting tours. At the end of each tour, the pedagogic counsellor shall forward a report to the provincial delegate accompanied by copies of masters' or teachers' result-of-visit sheets. Copies of the above report shall be forwarded to the national pedagogic inspector and to the directors concerned in the ministry of national education.

46. Furthermore, the provincial delegate shall be responsible within the province for matters concerning :

- scholarships;
- school health;
- examinations;
- correspondence courses;
- the administration of schools;
- the implementation of investment projects carried out in the province (studies, building projects carried out under contract or under government control, etc.);
the housing of the teaching personnel of establishments falling under his jurisdiction, in conjunction with the governor of the province and the provincial controller of finance;
- all teaching and administrative personnel (national or foreign) of public schools established in his territorial area shall be placed under his authority.

47. As required for the performance of his duties, the provincial delegate shall if necessary receive delegation of signature from the minister of national education.

48. The provincial delegation shall comprise the following bureaux :

- the administrative and financial affairs bureau;
- the planning, statistics and school guidance bureau;
- the correspondence courses, training courses and pedagogic conferences bureau;
- the examinations bureau.

Heads of bureaux of provincial delegations shall be appointed by order of the minister of national education They shall rank as central administration heads of bureau.

49. The provincial sub-delegation of national education may be created by presidential decree.

Le décret portant création d'une sous-délégation provinciale de l'éducation nationale en déterminera le ressort territorial.

Art. 50.– Le sous-délégué provincial est le représentant du délégué provincial dans la sous-délégation. Il est à la fois responsable devant le ministre et devant le délégué provincial des mesures prises dans sa sous-délégation. Le sous-délégué provincial est normalement chargé :

- de la coordination et du contrôle des activités des inspecteurs départementaux de la sous-délégation;
- de la ventilation des documents pédagogiques et administratifs destinés aux inspections départementales et aux chefs d'établissements d'enseignement secondaire,
- de la préparation du mouvement du personnel, le traitement des bulletins de notes de ce personnel;
- de l'organisation des conférences pédagogiques et des stages de recyclage du personnel enseignant en liaison avec les conseillers pédagogiques provinciaux;
- de l'organisation des activités post et péri-scolaires et du télé-enseignement;
- de l'étude des programmes et de la recherche des méthodes adaptées aux conditions locales dans l'optique de la réforme de l'enseignement.

Le sous-délégué provincial doit assurer auprès du délégué provincial une mission d'information permanente.

Il peut signer par ordre du délégué provincial de l'éducation nationale, tous les actes d'administration courante.

Chapitre II

Des inspections départementales de l'enseignement primaires et maternel.

Art. 51.– Les inspections départementales de l'enseignement primaire et maternel, ainsi que les sous-inspections qui en dépendent sont créées par arrêté du ministre de l'éducation nationale.

Le ressort d'une inspection départementale de l'enseignement primaire et maternel est celui d'un département.

L'inspection départementale est placée sous l'autorité d'un inspecteur départemental de l'enseignement primaire et maternel ayant rang d'adjoint au chef de service de l'administration centrale.

L'inspecteur départemental de l'enseignement primaire et maternel, est éventuellement assisté d'un adjoint, de un ou plusieurs sous-inspecteurs ayant rang de chef de bureau L'inspecteur départemental délégué dirige une sous-inspection dans le cadre d'un arrondissement. Ses attributions sont identiques à celles de l'inspecteur départemental

Art. 52.– L'inspecteur départemental de l'enseignement primaire et maternel, sous l'autorité du délégué provincial ou du sous-délégué, a la responsabilité de l'enseignement primaire dans le cadre de son département.

- Il informe le délégué provincial ou le sous-délégué dont il dépend, des besoins de son département en écoles et en personnel enseignant.
- Il tient la carte scolaire de son département et un fichier du personnel enseignant relevant de son autorité.
- Il organise le mouvement du personnel de son département.

The decree setting up a provincial sub-delegation of national education shall define its area of jurisdiction.

50. The provincial sub-delegate shall be the representative of the provincial delegate in the sub-delegation. He shall be responsible both to the minister and to the provincial delegate for measures taken in the sub-delegation. The provincial sub-delegate shall ordinarily be responsible for :

- co-ordinating and supervising the activities of the divisional inspectors of the sub-delegation;
- forwarding pedagogic and administrative documents to the various divisional inspectorates and to the heads of secondary schools;
- preparing the transfer of personnel, and processing the personnel assessment reports;
- organizing pedagogic conferences and refresher courses for teaching personnel in conjunction with the provincial pedagogic counsellors;
- organizing post-curricular and extra-curricular activities and correspondence courses;
- examining syllabuses and finding the methods best adapted to the local conditions with a view to school reform.

It shall be the constant duty of the provincial sub-delegate to keep the provincial delegate informed on all pertinent matters.

The provincial sub-delegate may sign any routine administrative documents on the orders of the provincial delegate of national education.

Chapter II

Division inspectorates of primary and nursery education.

51 The divisional inspectorates of primary and nursery education, as well as the sub-inspectorates coming under their jurisdiction shall be set up by order of the minister of national education.

The area of jurisdiction of a division inspectorate of primary and nursery education shall be a division.

The divisional inspectorate shall be placed under the authority of a divisional inspector of primary and nursery education ranking as a central administration deputy service head.

The divisional inspector of primary and nursery education shall be assisted if need be by a deputy and by one or more sub-inspectors ranking as heads of bureau. The divisional inspector-delegate shall be the head of the sub-inspectorate in a sub-division. His responsabilities shall be the same as those of the divisional inspector.

52. The divisional inspector of primary and nursery education, shall, under the authority of the provincial delegate or sub-delegate, be responsible for primary education with in his division

- He shall inform the provincial delegate or sub-delegate under whose jurisdiction he falls, of the needs for schools and teaching personnel in his division.
- He shall keep the school map of his division and a card-index of the teaching personnel under his jurisdiction.
- He shall organize the transfer of the personnel of his division.
- He shall visit each school or school group at least

– Il visite au moins une fois l'an chaque école ou groupe scolaire et recense leur équipement en matériel et moyens pédagogiques.

– Il assiste et conseille des directeurs d'écoles.

– Il inspecte chaque maître au moins une fois l'an, lui établit une fiche de conseils et d'instructions et lui attribue une note pédagogique.

– Il anime la vie pédagogique de son département en organisant des journées pédagogiques et des stages de recyclage. Dans ce domaine, il collabore étroitement avec les conseillers pédagogiques provinciaux de l'enseignement primaire.

– Il est chargé de la mise en application de la réforme et accorde un soin particulier aux écoles pilotes et à leurs maîtres.

– Il organise et contrôle les examens et concours sur instruction du délégué provincial.

Chapitre III

Des établissements scolaires et des établissements de formation.

Art. 53.– Les établissements scolaires publics (écoles maternelles, écoles primaires, lycées et collèges d'enseignement secondaire général et technique, établissements de formation) sont créés par arrêté du ministre de l'éducation nationale, conformément aux prévisions du plan de développement économique et social et à la carte scolaire.

Le statut, l'organisation et le fonctionnement des établissements sont fixés par arrêtés ministériels.

Les établissements d'enseignement secondaire général et technique sont classés en trois catégories par arrêté ministériel.

La première catégorie comprend :

– les écoles normales d'instituteurs;
– les lycées d'enseignement général et les lycées techniques ne comportant qu'un second cycle si ce cycle est complet.
– les lycées comportant un premier et un second cycles et ayant plus de 1.000 élèves.

La deuxième catégorie comprend :

– les écoles normales d'instituteurs adjoints.
– les lycées de second cycle lorsque ce cycle est encore incomplet.
– les lycées comportant un premier et un deuxième cycles et ayant moins de 1.000 élèves.
– les C. E. S. (collèges d'enseignement secondaire et les C.E.T. (collèges d'enseignement technique) ayant plus de 1.000 élèves.

La troisième catégorie comprend :

– les C.E.S. et les C.E.T. ayant moins de 1.000 élèves.
– les C.E.G. (collèges d'enseignement général).

Art. 54. Les chefs des établissements publics, les censeurs, les directeurs des études, les chefs de travaux, les surveillants généraux, les intendants, sont nommés par arrêté du ministre de l'éducation nationale.

once a year and make an inventory of the pedagogic equipement and material at their disposal.
– He shall help and advise school headmasters.

– He shall supervise each teacher at least once a year, draw up a list of recommendations and instructions and assess his teaching performance.

– He shall develop the teaching system of his division by organizing pedagogic days and refresher courses. He shall, in this sphere, work in close collaboration with the provincial pedagogic counsellors of primary education.
– He shall be responsible for implementing reforms and shall give special attention to experimental schools and to teachers in such schools.

Chapter III

Schools and training schools.

53. Public school establishments, (nursery schools, primary schools, lycées, general secondary and technical colleges, and training schools) shall be set up by order of the minister of national education, in accordance with the provisions of the economic and social development plan and the school map.

The status, organization and functioning of such establishments shall be fixed by ministerial orders.

General secondary and technical education establishments shall be classified in three categories by ministerial orders.

The 1st category shall comprise :

– the teacher training colleges ;
– general education lycées and technical lycées having only cycle 2 if cycle is complete;
– lycées having cycles 1 and 2 and more than 1,000 pupils.

The 2nd category shall comprise :

– Junio teacher training colleges ;
– Lycées having a still incomplete cycle 2 ;
– Lycées having cycles 1 and 2 and fewer than 1.000 pupils,
– CES (secondary education colleges) a CET (technical education colleges) with more than 1.000 pupils.

The 3rd category shall comprise :

– The CES and CET with fewer than 1,000 pupils ;
The CEG (general education colleges).

54. The heads of public schools, vice-principals, directors of studies, heads of projects, masters of discipline and bursars shall be appointed by order of the minister of national education.

They shall receive an allowance to be paid by order of the president of the republic.

Ils perçoivent une indemnité fixée par arrêté du Président de la République.

Art. 55.– Les directeur des écoles primaires et maternelles sont et demeurent régis par les dispositions du décret n° 65-125-COR du 21 juillet 1965 et les textes modificatifs subséquents dont l'application est étendue aux provinces du nord-ouest et du sud-ouest.

TITRE III

Dispositions diverses.

Art. 56.– Des arrêtés du ministre de l'éducation nationale préciseront en tant que de besoin les attributions des différents services et bureaux prévus par le présent décret.

Art. 57.– Sont abrogées toutes dispositions antérieures contraires notamment celles du décret n° 72-381 du 7 août 1972 portant organisation du ministère de l'éducation nationale.

Art. 58.– Le présent décret sera enregistré, communiqué partout où besoin sera et publié au *Journal officiel* de la République unie du Cameroun en français et en anglais.

Yaoundé, le 24 avril 1974.

Le Président de la République,

El Hadj Ahmadou Ahidjo.

Décret n° 74-407 du 24 avril 1974

portant organisation du ministère du développement industriel et commercial.

LE PRÉSIDENT DE LA RÉPUBLIQUE,

Vu la constitution de la République unie du Cameroun ;

Vu le décret n° 72-281 du 8 juin 1972 portant organisation du gouvernement de la République unie du Cameroun ;

Vu le décret n° 72-304 du 3 juillet 1972 portant nomination des membres du gouvernement de la République unie du Cameroun ;

Vu le décret n° 72-DF-136 du 16 mars 1972 portant organisation et fonctionnement des services économiques régionaux ;

Vu le décret n° 73-65 du 27 février 1963 portant organisation des missions économiques du Cameroun à l'étranger ;

Vu l'ordonnance n° 72-18 du 17 octobre 1972 portant régime général des prix ;

Vu les nécessités de service ;

DÉCRÈTE :

Article premier.– Le ministère du développement industriel et commercial comprend :

– un secrétariat particulier ;
– deux postes de conseillers techniques ;
– une administration centrale et des services extérieurs.

Chapitre premier

De l'administration centrale.

Art. 2. – L'administration centrale comprend :

– le secrétariat général ;
– la direction des produits de base ;

55. The headmasters of primary and nursery schools shall continue to be governed by the provisions of decree No. 65/125/COR of 21 july 1965 and subsequent amendements whose implementation shall be extended to the north-west and south-west provinces.

PART III

Miscellaneous provisions.

56. Orders of the minister of national education shall set out as and where necessary the founctions of the various services and bureaux provided for by the present decree.

57. All previous provisions which are repugnant hereto, especially decree No. 72/381 of 7 august 1972 to organize the ministry of education are replead.

58. This decree shall be registered, notified wherever necessary and published in the *Official Gazette* of the united republic of Cameroon in French and English.

Yaounde, 24 April 1974

El Hadj Ahmadou Ahidjo

President of the Republic

Decree No. 74-407 of 24 April 1974

to organize the Ministry of Industrial and Commercial Development.

THE PRESIDENT OF THE REPUBLIC,

Mindful of the Constitution of the United Republic of Cameroon ;

Mindful of Decree No. 72-281 of 8 June 1972 to organize the Government of the United Republic of Cameroon ;

Mindful of Decree No. 72-304 of 3 July 1972 to appoint members of the Government of the United Republic of Cameroon ;

Mindful of Decree No. 72-DF-136 of 16 March 1972 to organize the functioning of Regional Economic Services ;

Mindful of Decree No. 73-65 of 27 February 1973 to organize Cameroon Economic Mission abroad ;

Mindful of Ordinance No. 72-18 of 17 October 1972 to institute General Price Regulations ;

Considering the needs of the service ;

HEREBY DECREES AS FOLLOWS:

1. The Ministry of Industrial and Commercial Development shall comprise :

– a Private Secretariat ;
– two Technical Advisers ;
– a Central Administration and External Services.

Chapter I

The central administration.

2. The Central Administration shall comprise :

– The Secretariat General ;
– The Department of Staple Products ;

PAIX - TRAVAIL - PATRIE

LE PREMIER MINISTRE,
CHEF DU GOUVERNEMENT

DECRET N° 69-157/COR
portant création et organication de l'Institut de Pédagogie Appliquée à Vccation Rurale -

LE PREMIER MINISTRE,
CHEF DU GOUVERNEMENT DU CAMEROUN ORIENTAL,

VU la Constitution du 1er septembre 1961 ;
VU la Loi n°61/LO/1 du 1er novembre 1961 portant organisation des pouvoirs publics dans l'Etat Fédéré du Cameroun Oriental ;
VU le décret n° 65/DF/517 du 20 novembre 1965 portant nomination du Premier Ministre, Chef du Gouvernement du Cameroun Oriental ;
VU le décret n° 65/DF/519 du 22 novembre 1965 portant nomination des Membres du Gouvernement du Cameroun Oriental ;
VU le décret n° 69/COR/155 du 30 juillet 1969 portant réorganisation du Secrétariat d'Etat à l'Enseignement ;
VU le décret n° 67/1/COR du 17 janvier 1967 portant organisation du régime financier des Ecoles Normales Primaires du Cameroun Oriental ;
VU le décret n° 66/22/COR du 20 janvier 1966 portant organisation des Ecoles Normales du Cameroun Oriental ;
SUR proposition du Secrétaire d'Etat à l'Enseignement ;
Le Conseil de Cabinet entendu ;

D E C R E T E :

Article 1er.- Les dispositions du décret n°67/205/COR du 7 avril 1967 portant création de l'Ecole Normale d'Instituteurs à Vocation Rurale sont abrogées et remplacées par celles du présent décret.

TITRE 1
INSTITUTION - SIEGE - OBJET

Article 2 .- Il est créé à NGOUMOU, département de la MEFOU, un établissement d'enseignement public dénommé INSTITUT DE PEDAGOGIE APPLIQUEE A VOCATION RURALE (IPAR).

Article 3 .- Placé sous l'autorité du Secrétaire d'Etat à l'Enseignement, l'Institut de Pédagogie a pour but :

- de procéder à une réforme des structures, programmes et méthodes de l'enseignement primaire pour les adapter aux exigences du développement économique et social du pays ;
- de former des instituteurs et institutrices spécialisés dans l'éducation de l'animation en milieu rural ;
- de perfectionner les enseignants en exercice et d'informer leurs cadres en vue de l'application de la réforme ;
- de produire tous les documents pédagogiques nécessaires aux maîtres et aux élèves des écoles primaires.

TITRE II

ADMISSION, DUREE ET SANCTIONS DES ETUDES

Article 4 .- Le recrutement des élèves instituteurs et des élèves institutrices de l'IPAR a lieu sur concours.

L'organisation, les épreuves et le déroulement de ce concours sont fixés par arrêté du Secrétaire d'Etat à l'Enseignement.

Article 5 .- Tout candidat au concours d'entrée à l'IPAR doit remplir les conditions suivantes :

1°) être de nationalité camerounaise ;
2°) avoir 17 ans au moins et 25 ans au plus au 1er janvier de l'année du concours ;
3°) être titulaire soit du BE ou du BEPC, soit d'un diplôme équivalent ;
4°) être apte physiquement à la fonction enseignante. L'aptitude physique est constatée par un médecin agrée de l'Administration immédiatement après admission au concours.

Article 6 .- Les dossiers de candidature sont adressés au Secrétariat d'Etat à l'Enseignement.

Ces dossiers doivent comprendre :

1°) Une demande timbrée d'admission avec curriculum vitae ;
2°) un extrait du casier judiciaire datant de moins de trois mois ;
3°) un extrait d'acte de naissance ou toute autre pièce en tenant lieu ;
4°) une copie certifiée conforme du BE ou du BEPC ou du diplôme équivalent ;
5°) une attestation par laquelle le candidat s'engage de servir dans l'enseignement public pendant 10 ans après la sortie de l'IPAR, sous peine de rembourser toutes les allocations reçues pendant la scolarité ;
6°) une déclaration sur l'honneur certifiant que le candidat n'a pas été renvoyé d'une école normale pour indiscipline notoire ;
7°) un récepissé du versement des droits d'inscription fixés par la réglementation en vigueur.

Article 7 .- Le Secrétaire d'Etat à l'Enseignement arrête la liste des candidats admis à concourir.

Il fixe en fonction des besoins et des crédits disponibles le nombre de places mises au concours et après avis du Secrétaire d'Etat aux Finances.

Article 8 .- La durée des études à l'IPAR est de trois ans.

Les programmes d'enseignement sont établis par le Secrétaire d'Etat à l'Enseignement qui consulte à cet effet les départements ministériels ainsi que les services techniques intéressés.

Article 9 .- Le passage des élèves-maîtres de 1ère en 2ème et 2ème en 3ème année est prononcé par le conseil des professeurs. Pour chaque élève-maître il est tenu compte des résultats obtenus à l'examen de passage dans chaque discipline, affectée de son coefficient, et de la moyenne annuelle des notes.

Lorsque le conseil des professeurs dans sa majorité émet un avis défavorable au passage d'un élève-maître d'une classe à l'autre, la proposition est soumise pour décision finale au Secrétaire d'Etat qui peut :

- autoriser le redoublement pour des causes exclusivement médicales ;
- proposer la nomination à un poste d'instituteur-adjoint de 3ème classe 1er échelon titulaire, si l'intéressé a terminé la 2ème année avec une moyenne inférieure à 10/20 ;
- proposer soit la nomination à un poste d'instituteur-adjoint stagiaire si l'intéressé a eu en fin de première année une moyenne inférieure à 10/20, soit le licenciement au cas où cette moyenne serait inférieure à 9/20.

Article 10 - A l'issue des trois années d'études, les élèves-maîtres subissent les épreuves écrites, orales et pratiques du Brevet Supérieur de Capacité (BSC).

Un arrêté du Secrétaire d'Etat à l'Enseignement fixe les modalités de cet examen.

Article 11 - Les élèves-maîtres admis au BSC sont intégrés dans le cadre des instituteurs et nommés instituteurs titulaires de 3ème classe 1er échelon.

Article 12 - Les élèves-maîtres n'ayant pas obtenu le BSC sont intégrés dans le cadre des instituteurs au grade de stagiaires.

TITRE III

REGLEMENTS

Article 13 - Le régime de l'IPAR est l'internat. Toutefois, les élèves-maîtres mariés peuvent bénéficier éventuellement, sur demande écrite, de l'externat.

Quel que soit leur statut, les élèves-maîtres bénéficient des allocations mensuelles dont le taux est déterminé par décret portant organisation du régime financier de l'IPAR.

TITRE IV

DISCIPLINE

Article 14 - Indépendamment des cas prévus au réglement intérieur de l'IPAR les sanctions disciplinaires susceptibles d'être infligées aux élèves-maîtres sont :

a) l'avertissement ;
b) le blâme ;
c) l'exclusion temporaire d'un mois au maximum, avec suspension d'allocation scolaire ;
d) l'exclusion définitive.

Article 15 - L'avertissement, le blâme et l'exclusion temporaire sont prononcés après avis du conseil de discipline par le Directeur de l'IPAR, après que l'élève concerné ait été invité à fournir des explications écrites sur les faits qui lui sont reprochés.

Article 16 - L'exclusion définitive est prononcée par arrêté du Secrétaire d'Etat à l'Enseignement après avis motivé du conseil de discipline notamment pour :

- indiscipline caractérisée, inconduite ou immoralité flagrante ;
- éthylisme notoire ;
- dans tous les cas le licenciement de tout élève-maître dont la conduite s'avère indigne d'un éducateur est de droit.

Article 17 .- La qualité d'élève-maître de l'IPAR peut également se perdre par inaptitude physique constatée au cours de la scolarité par un médecin agréé de l'administration, soit par démission écrite de l'intéressé.

En cas de démission volontaire, l'élève-maître sera tenu de rembourser la totalité de l'allocation perçue durant sa scolarité.

A cet effet le Secrétaire d'Etat aux Finances émet, sur proposition du Secrétaire d'Etat à l'Enseignement, un ordre de recette à l'encontre de l'intéressé, de son père ou de son tuteur. Ce remboursement sera exigé par voie judiciaire dans le cas où l'intéressé embrasse une carrière privée.

TITRE V

ADMINISTRATION - CONSEIL - GESTION

Article 18 .- L'administration générale de l'IPAR est assurée par un Cons composé comme suit :

Président : Le Secrétaire d'Etat à l'Enseignement ou son représentant .

Membres : - un représentant du Premier Ministre, Chef du Gouvernement du Cameroun Oriental ;
- le représentant du Ministre des Fiances ;
- le représentant du Ministre du Plan et du Développement
- le représentant du Ministre de l'Education, de la Jeunesse et de la Culture ;
- le Secrétaire d'Etat à la Fonction Publique ou son représentant
- le Secrétaire d'Etat au Développement Rural ou son représentant
- le Secrétaire d'Etat aux Finances ou son représentant ;
- le Commissaire Général à la Santé Publique et à la Population ou son réprésentant ;
- le Directeur des Enseignements primaires et normaux ;
- le Directeur des Affaires Administratives et Financières du Secrétaire d'Etat à l'Enseignement ;
- le Directeur de l'Agriculture ;
- le Directeur de la Coopération et de la Mutualité ;
- le Directeur de la Jeunesse, des Sports et de l'Education Populaire ;
- le Directeur de l'IPAR et le Conseiller Technique principal ;
- les quatre sous-directeurs et leurs homologues internationaux, ainsi que trois représentants du corps enseignant de l'IPAR ; dont un technicien, désigné par le conseil des professeurs.

Les cadres de direction de l'IPAR ainsi que les représentants élus des professeurs ont voix consultative.

Le Secrétariat du conseil d'administration de l'IPAR est assur par un agent mis à la disposition de l'établissement par le Secrétaire d'Etat à l'Enseignement.

Le conseil d'administration de l'IPAR se réunit deux fois l'an sur convocation de son président.

Article 19 .-Les séances du conseil d'administration de l'IPAR ne sont pas publiques. Toutefois le conseil peut faire appel à toute personne qualifié choisie en fonction de ses compétences.

Article 20 .-Le conseil d'administration traite de toutes les questions relatives à la réalisation des objectifs de l'IPAR définis à l'article 3 ci-dessus.

Il définit le plan annuel de travail, approuve le reglement intérieur, les programmes d'enseignement, le budget, le rapport moral et le rapport financier annuels de l'IPAR.

Article 21.-Les décisions du conseil d'administration de l'IPAR sont prises à la majorité de voix des membres présents. En cas de partage de voix, celle du président est prépondérante.

Article 22.-L'IPAR est placé sous l'autorité d'un Directeur nommé par arrêté du Premier Ministre, Chef du Gouvernement du Cameroun Oriental sur proposition du Secrétaire d'Etat à l'Enseignement.

Il est responsable de la gestion de l'Institut et de son fonctionnement. Il élabore le plan de travail et veille à son exécution.

Article 23.-Le Directeur de l'IPAR est assisté :

a) d'un sous-directeur chargé des études, responsable de la bonne marche de l'Ecole Normale à Vocation Rurale; qui veille à l'application des programmes et des méthodes de cet établissement de formation, et exerce son autorité administrative et pédagogique sur les écoles annexes et les maîtres d'application ;
b) d'un sous-directeur chargé de la recherche pédagogique appliquée, responsable des études relatives à la réforme des programmes et des méthodes de l'enseignement primaire qui dirige et coordonne les travaux pour la conception des moyens pédagogiques nouveaux ;

c) d'un sous-directeur technique responsable de la prévision de l'exécution et de la coordination des travaux dans les divers ateliers qui réalisent et diffusent ces moyens pédagogiques ;

d) d'un sous-directeur chargé du recyclage responsable des stages et séminaires qui s'effectuent à l'IPAR, de la coordination et du contrôle du travail dans les centres régionaux de recyclage (CRR de la préparation du bulletin pédagogique, du fonctionnement du centre des cours par correspondances de l'IPAR (CCC) et de la production des documents didactiques.

Article 24.-Le Secrétaire d'Etat à l'Enseignement fixé par arrêté, les attributions détaillées des quatre sous-directeurs prévue à l'article précédent.

Article 25.-Nul ne peut être nommé aux fonctions de Directeur de l'IPAR, ni à celles de sous-directeur :
- s'il n'est âgé de 30 ans révolus ;
il n'est titulaire selon le cas, soit du certificat d'aptitude à l'inspection des écoles primaires et à la direction des écoles normales ou du professorat d'école normale, soit des diplômes techniques appropriés.

Article 26.- Les Professeurs : de l'IPAR sont nommés par arrêté du Secrétaire d'Etat à l'Enseignement. Nul ne peut être professeur de l'IPAR, s'il n'est pourvu du titre de professeur d'école normale. Toutefois, pourront être nommés professeurs de l'IPAR, les titulaires d'une licence d'enseignement, les adjoints d'inspection et les professeurs de C.E.G.

Article 27.- L'Econome, le Surveillant Général, les directeurs des écoles annexes et le maître d'application sont nommés par arrêté du Secrétaire d'Etat à l'Enseignement.

Article 28 .- L'IPAR peut admettre des ressortissants étrangers présentés par leur gouvernement dans les mêmes conditions que celles des Camerounais sous réserve de l'observation préalable de la procédure diplomatique.

Toutefois, des dérogations particulières peuvent être accordées par le Secrétaire d'Etat à l'Enseignement à certains candidats étrangers. Dans ce cas ceux-ci ne peuvent être admis qu'en qualité d'auditeurs libres, et, à ce titre ne reçoivent qu'une attestation de l'institut.

Les frais d'entretien des ressortissants étrangers sont en principe à la charge des gouvernements qui les envoient.

TITRE VII

DISPOSITIONS TRANSITOIRES

Article 29 .- En attendant que soient entrepris des aménagements nécessaires à Ngoumou, l'IPAR fonctionnera provisoirement à Yaoundé.

Article 30 .- Jusqu'à l'intervention du décret portant régime financier particulier à l'IPAR, celui-ci reste soumis au régime financier défini par la règlementation en vigueur.

Article 31 .- Le Secrétaire d'Etat à l'ENSEIGNEMENT, le Secrétaire d'Etat aux FINANCES et le Secrétaire d'Etat à la FONCTION PUBLIQUE sont chacun en ce qui le concerne chargés de l'exécution du présent décret qui sera enregistré, communiqué partout où besoin sera et publié au journal officiel du Cameroun Oriental.

YAOUNDE, le 11 Août 1969

POUR LE PREMIER MINISTRE, CHEF DU GOUVERNEMENT DU CAMEROUN ORIENTAL EN MISSION,
LE VICE-PREMIER MINISTRE,
(é) EL HADJ Y.M. LAMINE

LE SECRETAIRE D'ETAT AUX FINANCES,

(é) VROUMSIA TCHINAYE

LE SECRETAIRE D'ETAT A LA FONCTION PUBLIQUE P.I.

(é) EL HADJ Y.M. LAMINE

LE SECRETAIRE D'ETAT A L'ENSEIGNEMENT,
(é) J. TETANG

Pour Ampliation :
Le Directeur de la Législation,

- DOUMBE - MOULONGU -

REPUBLIQUE UNIE DU CAMEROUN
Paix - Travail - Patrie

UNITED REPUBLIC OF CAMEROON
Peace - Work - Fatherland

Ministry of National Education,
Divisional Inspectorate,
BAMENDA, Mezam Division

SCHOOL INSPECTION FORM

(Headmaster of the School)

Name of School: ..... Sub-Division ..... Division .....

Date of opening: ..... Date of last Inspection: ..... Date of this Inspection: .....

Name of Proprietor: ..... Agency .....

The Headmaster:

Name: ..... Grade: ..... Matricule Number: .....

Date and Place of birth: ..... Sub-Division: ..... Division: .....

Family Situation: .....

Category: ..... Class: ..... Echelon: ..... Date: .....

Date of appointment as Headmaster: ..... Class taught (if any) .....

Enrolment and distribution of pupils:

N° of pupils registered (Boys .....
(Girls .....
(Total .....

N° of pupils present (Boys: .....
(Girls: .....
(Total: .....

Class One			Class Two			Class Three			Class Four			Class Five			Class Six			Class Seven	
Registered			Registered			Registered			Registered			Registered			Registered			Registered	
B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G

N°. of Teaching staff:

Grade One: .....

Grade Two: .....

Grade III: .....

CTR: .....

SSL: .....

PT : .....

TOTAL _____

N°. of Specialist Teachers:
(English, French, Domestic Science etc...)

Grade One: .....

Grade Two: .....

Grade III: .....

CTR: .....

SSL: .....

PT : .....

TOTAL _____

ADMINISTRATION:

Admission Register: .....

Log Book: .....

Cash Book: .....

Minutes Book: .....

Visitors' Book: .....

Files: .....

Transfer Certificates: .....

General Punishment Book: .....

General Time-Table: .....

Duty Record Book: .....

General Organisation of the School: .....

Other Records: .....

S A N I T A T I O N :

Site and compound: .....

Buildings and furniture: .....

Latrines: .....

Urinals: .....

M A N U A L W O R K :

School Farm: .....

School Garden: .....

Domestic Science: .....

Any other Practical Work: .....

O T H E R A C T I V I T I E S :

Socio-educative activities (Choir, [illegible] etc...) .....

.....

Parent/Teacher Association: .....

.....

[illegible]ing or Adult Literacy C[illegible]s: .....

.....

Particular initiatives of th[illegible] eadmaster: .....

Sporting Activities: .....

HEADMASTER'S ASSESS[illegible] TEACHERS WORK:

Notes of Lessons: .....

Teachers' Records in [illegible]: .....

Supervision: .....

Discipline: .....

General Remarks: .....

.....

.....

.....

.....

.....

.....

.....

Read and noted:
The Headmaster

Signature: .....

[illegible] ..... out of 20

The Inspector of [illegible] Nursery Education,
OR The Assistant [illegible] Primary and
Nursery Education, [illegible]

NAME .....

.....
Signature and Stamp

REPUBLIQUE DU CAMEROUN

---O---

ETUDE DE CARTE SCOLAIRE

(Enquete à retourner à l'Inspection)
(Départementale de l'Enseignement)
(Primaire et Maternel BP.233 GAROUA)

Ecole.....de.....village.....Lamidat.....

Arrondissement.....Cycle complet - Incomplet - Cours.....

Nombre enfants scolarisables.....Scolarisés.....Taux (%).....

Nombre de Maîtres (80-81)_____Nombre de classe (80-81)_____

I HISTORIQUE.

1 - Année où la première salle de classe fut construite en paille.....en dur.....

2 - Année où le premier maître prit service, même sans classe.....

3 - Nom de ce maître .....

4 - Nom du premier élève régulièrement inscrit au Matricule..... .....

5 - Date de cette inscription .....combien d'élèves cette année-là?.....

6 - Qui a demandé l'Ecole ?Population? (oui-non).Chef de village? (oui-non) un homme politique? (oui-non).Un fonctionnaire? (oui-non) De quel service?_____ une Mission? (oui-non).Laquelle?_____une société? (oui-non) Laquelle?_____L'Etat (L'Administration)?(oui-non)Un organisme interntional ? (oui-non) Lequel?_____

7 - Pourquoi a-t'on senti le besoin de créer cette école?

Beaucoup d'enfants?(oui-non).En avoir comme la Tribu voisine?(oui-non)

Besoin d'éducation? (oui-non)- Volonté du chef (oui-non).Plan de l'Administration? (oui-non).Raison politique? (oui-non).Raison religieuse?(oui-non)En avoir une parallèle à l'Ecole coranique? (oui-non).Oeuvre sociale d'une société (oui-non)

Autres raisons _____

8 - L'Ecole a-t-elle connu des périodes d'interruption? (oui-non).

Périodes et causes _____

_____

9 - Nombre d'élèves à chaque fermeture si possible_____,_____,_____,_____

à chaque reprise _____,_____,_____,

10 - Populations dont les enfants fréquentent votre école._____

Noms des tribus						
Nombre des imposables (1)						
Nombre enfts scolarisables (1)						
Nombre enfts scolarisés (1)						

(1) Nombre à donner pour chaque tribu citée.

.../...

11 – Populations à moins de 10 km dont les enfants fréquentent pas une école.

Nom des tribus						
Nombre imposbbles (1)						
Nbre enfts scolarisables (1)						

(1) par tribu.

12 – Ecoles les plus voisines (situer sur une carte topologique:celle qui indique les lieux sans préciser le kilomètrage) joindre cette carte.

Direction	Noms des Ecoles	Publiques Privées	Cycle	Distance	Nombre élèves	Nombre maîtres
Nord						
Sud						
Est						
Ouest						

13 – Evolution des effectifs des CINQ DERNIERES ANNEES

	1975-76	1976-77	1977 78	78-79	79-80
Nombres élèves total					
SIL					
CP					
CE					
CM					
Nombre des Maîtres					
Nombre d'élèves envoyés à l'Internat EP					
Admis au CEPE					
Amdis en 6e et CET.					

II. DIFFICULTES DE SCOLARISATION :

A) 1 – Ecole éloignée des villages peuplés ?(oui-non)-Distance approximative _____ Km

2 – Région de montagnes?(oui-non) de grandes inondations?(oui-non)

3 – Brousse peuplée d'animaux dangereux? (oui-non) Manque d'eau ?(oui-non).Chaleur ?(oui-non)

4 – Autres difficultés géographiques _____

B)

1 – Habitat dispersé ? (oui-non)Mode d'agglomération _____

2 – Les parents ont-ils peur du lieu où est implantée l'Ecole ?(oui-non) Pourquoi?_____

3 – Les élèves ont-ils la possibilité d'aider les parents aux travaux ?(oui-non) A quelle période ?_____ceci défavorise-t-il la fréquentation ?(oui-non)

4 – Les enfants partis aux travaux reviennent-ils ?(oui-non).Pourquoi?_____

5 - Les parents donnent-ils des fournitures ? (oui-non).Pourquoi? _____

_____

6 - Les parents amènent-ils volontiers leurs enfants ? (oui-non) Pourquoi?_____

_____

7 - Les enfants aiment-ils l'école ?(oui-non) Pourquoi?_____

_____

8 - Se pose-t-il des problèmes d'entretien des élèves ?(oui-non) Pourquoi?_____

C.

1 - La tribu (ou le clan) où l'école est implantée s'entend-elle (il) avec les autres tribus (ou clan)?(oui-non) Pourquoi?_____

2 - Comment chaque tribu voit-elle l'école?_____

_____

_____

3 - Si on déplaçait l'école de l'endroit actuel pourrait-on améliorer la fréquentation? (oui-non) Pourquoi?_____

D)

1 - Quelle est la principale religion pratiquée dans les familles?_____

2 - Y a-t-il des religions occidentales?(oui-non).Lesquelles? (les classer par ordre d'importance si possible le % par rapport aux autres)_____

_____

3 - Y a-t-il des religions traditionnelles?(oui-non).Quelle est leur importance sur le plan de l'école occidentale? _____

4 - Admettent-elles l'existence de l'Ecole occidentale?(oui-non).Pourquoi?_____

_____

5 - Y a-t-il des religions qui ignorent l'école ?(oui-non).Lesquelles?_____

6 - Quelles sont les religions qui refusent l'école? (oui-non)Lesquelles?_____

7 - Fonctionne-t-il des écoles coraniques dans le village?(oui-non).Combien?_____

Nombre d'Elèves_____

8 - Le marabout a-t-il des contracts avec le Maître d'Ecole?(oui-non)Pourquoi?_____

E)-

1 - Y a-t-il d'autres difficultés?(oui-non).Lesquelles?_____

_____

_____

2 - Les Responsables locaux font-ils un effort pour favoriser la scolarisation?(oui-non)___

3 - Quelles actions concrètes font-ils ?_____

_____

III CONSEQUENCES

1 - Sur le plan intellectuel des enfants? _____

_____

2 – Sur le plan social ? _____

_____

3 – Sur le plan économique ? _____

_____

4 – Su le plan politique ? _____

_____

IV QUELQUES SOLUTIONS ENTREVUES

1 – Structures d'accueil ? (oui-non).Lesquelles? _____

2 – Campagnes de persuasion ? (oui-non) Comment les organiser ? _____

_____

3 – Encouragements aux élèves ? (oui-non). Lesquels ? _____

_____

4 – Associations des parents ?(oui-non).Comment? _____

_____

5 – Actions des élites ?(oui-non).Dans quelles directions ? _____

_____

6 – Actions des Responsables religieux ? (oui-non).Comment ? _____

_____

NOTE IMPORTANTE

A _____, le _____

Ces réponses ne vous engagent pas,vous pouvez ne pas signer,mais soyez très franc, objectif et complet.Les solutions peuvent dépendre de la pertinence de vos réponses et suggestions. Ne laissez aucune question sans réponse.Profitez de vos vacances pour faire ce travail.Vous pouvez le faire en groupe,même avec les jeunes gens du village Interrogez tous ceux qui vous semblent posséder une réponse.Nous attendons la réponse de ce questionnaire jusqu'au Samedi le 18 Avril 1981.Inutile de recopier.Répondez directement sur la liasse.Merci d'avance de votre sincère collaboration.

GAROUA, LE 10 MARS 1981

L'INSPECTEUR DEPARTEMENTAL DE L'ENSEIGNEMENT PRIMAIRE ET MATERNEL,

– A.H. NGOUNOU IDO –

Technical Exhibit G 8: Samples of Current TTC Curricula

- Curriculum of TTCs in the light of Presidential Decree No. 80/195 of 9/6/80
- French and Mathematics Syllabuses in Grades One and Two Teacher Training Colleges: Circular No. 05/G/49 - MINEDUC/DERM
- G.T.T.C., Bamenda: Second Term Teaching Practice-1981. Information to the Staff.

G.B
P1

Curriculum of TTCs in the light of Presidential Decree No. 80/195 of 9/6/80.

Preamble: Broadly and basicly speaking, the curriculum of any given instructional institution or situation constitutes a a circular movement viz: Aims; organisation of these aims content of the aims, Methods of achieving the contents of the aims and finally evaluation, i.e. check on whether the aims have been achieved.

Taken one by one and in relation to Teacher Training in Cameroon as stipulated by Decree quoted earlier on

1. What are the envisaged aims of Teacher Training:
   - To train a new form of teachers/teaching personnel that would help train children to the quality of their life where they are born (rural areas); be able to solve everyday problems of the community; be self sufficient and be economically independent; serve the needs of the local community socially, culturally and economically etc. To properly staff existing & would be created primary schools.
2. If these and all other unnamed aims are the the target, what form of organisation should they take or be adopted.
   - Training should be descentralised and localised. Following this - Admissions should be localised; school structures of institutions should be in accordance with the aims and needs of the community; Teaching personnel should be such that suits and understands the needs of the community in which it operates. In the present Cameroonian concept of Teacher Training, the aims are as spelt out under (1) above and therefore its organisation should be something as follows:-
   Descentralise admission; structures should consist of those for formal and informal lectures; personnel should as much as possible be of indegines of the community (More practical approach than theory) more of technical education-arts and crafts-men.
3. Basing on above form of organisation the training content should look something like this and must as much as possible be of immediate usefulness to the community. Few bookish subjects (tool subjects) which should form the formal instructional section of the training e.g. Mathematics, English Language or languages - local and or foreign, should mostly be such that should help the trainees be able to do ogriculture, metal work cookery, homecraft etc, local blacsmithing; house construction etc.

- The type of work has to be very carefully thought about and the Time Table(s) drawn up to suit the course content and pattern
- The type of institutions in which the trainees would have to work have to be such that would offer opportunities, encouragement and atmosphere to be fully operative and utilised.

4. Now come the Methods to be adopted to achieve these aims. In our present situation both formal and informal instructional methods should be used equally. The trainees should be given enough formal instruction on general education to equip them for reading simple material and being able to interprete it fairly accurately; be able to think effectively and be able to transfer knowledge from one situation to another without much difficulty. There should in addition to this formal instruction, be a lot of practical work based on what is taught formally so as to familiarise the trainees to real life situations using available structures and material - labs, manual and craft centres, farms and gardens etc. They should be allowed to do a lot of experimentation with a view to finding solutions to life situations.

5. How Test or evaluate degree of success or achievement of conceived aims?

   By:- Periodic tests-theoretical and practical
   - Personal experimentation exercises
   - Ability tests to find out ability to carry out and complete given assignments
   - Final course tests - By Government or local exam boards.

NB: The idea of some other Ministry testing for admission or at end - of - training should be completely discouraged.

6. Training: This should consist in long and short term training
   - 3 or 4 years for FSLs - Grade Two)
   - 2 years for SSLs & Grade 111 Grade Two) Long Term
   - 2 years for Alls & Grade 11 Grade One)
   - 3 - 6 - 9 months retraining (refresher courses).

NB: In doing this the Government would keep very close watch to the strict application of laid down principles and the judicious use of available structures and material. It is necessary to mention here that there should be very strict observance as to unnecessary infiltration of unwanted aspects of foreign culture and other foreign educational aspects.

Proposed Draft Syllabus - Grade Two

English

1st Year

1st Term

1. The Tenses (detailed study of all)
2. Nouns (detailed study)
3. Pronous (detailed study)

2nd Term

1. The Definite Article
2. The Indefinite Article
3. Adjectives (detailed study)
4. Verbs (detailed study)
5. Adverbs (detailed study)
6. Passive and Active Voice
7. Sentence combinations.

3rd Term

1. Composition
2. Comprehension
3. Idioms
4. Proverbs

2nd Year

1st Term

Summary
Punctuations
Spelling and usage
- Spelling rules
- Prefixes, suffixes
- The final 'e'
- The plural of nouns
- Words frequently confused
- words frequently misspelled

2nd Term

Question tags
Phonetics
Countable and uncountable nouns
Indirect Speech

3rd Term

Indirect Questions
Letters
Reports
Prepositions

3rd Year

1st Term

The use of a dictionary
Phonetics (review)
Sound and word building
Reading, Writing } How to conduct in class

2nd Term

Writing of composition
Comprehension - How to teach
Marking and testing in English
Story telling in schools - values and methods of teaching.

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3rd Term

The teaching of nursery ehymes
How to teach new English items
Dictation - How to conduct it.
Planning the English Lesson- meterial and content
Correlation of English with other subjects of the curriculum.
Teaching Aids - the text book and audio visual aids
The teaching of drama and English games.

Literature

1st Year

Ferdinand Ogono - Houseboy
The Old Hand and the Medal

2nd Year

Achebe - Girls at War
Things Fall Apart
Elementary Poetry

3rd Year

Elechi Amadi - The Great Ponds
The Concubine

Assignment for Both ENI and ENIA

1. Drawings to illustrate stories
2. Alphabetical chart
3. Sound and Word Building chart
4. News paper cuttings
5. Drawings of classroom objects
6. Drawings to illustrate the teaching of various grammatical structures e.g. tall taller tallest
   long long longest
   Stand - John is standing.
   Sit - The teacher is sitting on a chair
7. Shopping - types of goods found in our local markets.

Proposed Draft Syllabus - Grade Two

French

1st Year

1st Term

- The French Alphabet
- Cardinal numbers
- Question (introduction)
- The definite, Indefinite and Partitive Articles.
- Pronouns (Subject Personal Pronouns)
- Nouns (General)

2nd Term

- Verbs (Infinitive)
- The Present Tense:- Avoir and Etre
  - Verbs of -er group
  - Verbs of -ir group
  - Verbs (irregular)
- The present participle.

3rd Term

- Punctuation (introduction) and Common French speech signs.
- The Perfect tense and the introduction of the Past Historic.
- The future tense
- The Conditional

2nd Year

1st Term

- Questions (continued)
- Pronouns (General)
- Nouns (Number and Gender)
- The Imperfect tense
- The Pluperfect tense

2nd Term

- The Past Participle Tense
- The Subjunctive Tense
- The Past Historic.

3rd Term

- Adjectives:- Number and Gender.
  - Agreement and Position
  - The Past Participle (as Adjective)
  - Cardinal Numbers (as adjectives)
  - Nationality and Adjectives.
  - Comparison.
- Adverbs:- Formation
  - Position
- Prepositions
- Dictation (introduction).

3rd Year

1st Term

- The Imperative
- Time:- Telling Time
  - Days, Months, Seasons.
- Translation
- Dictation and Punctuation

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2nd Term

- Composition:- essays
  - Letter-writing
  - Telephoning

3rd Term

- Present Tenses (revision)
- Past Tenses (revision)
- Future Tenses (revision)
- Revision (General)

Proposed Draft Syllabus - Grade Two

Mathematics

1st Year

1st Term

Logic and sets

- Writing sets
- finite and infinite sets
- Subsets and power sets
- Intersection and Union of sets
- Difference and complement
- cardinality of a set
- Representing sets diagramatically.
- Product of sets and cartecian diagram
- Special sets of numbers.

Number operations

- Addition subtraction multiplication and division
- Other dependent operations
- Closure of a set
- commutative associative and distributive laws
- Identity and inverse elements.
- Operations tables.

Functions relations and ratio

- Function as a one to one and or many to one relation
- Function as a set of ordered pairs
- Direct and inverse proportional relations
- Indirect and compound proportional relations
- Ratio and proportional relations.
- Percentage as a ratio.

2nd Term

Open numerical Statements.

- Conditional and inconditional simple equations in N and R.
- Conditional and inconditional simple inequalities in N and R.
- Representation on the number line.

Numbers and numeration

- Base ten numeration
- Other bases less than ten
- A base greater than ten
- Simple fractions in any base
- Conversion from one base to the other.

Finite Arithmetic

- Clock-face arithmetic (mod 12)
- Arithmetic modulo 7 (7 day week)
- Addition and subtraction tables

Measurement

- Metric units of length, area and volume
- Metric units of weight
- Elementary measurement of angles in degrees and radii.

3rd Term

Statistics

- Measures of central tendency for grouped and ungrouped data.
- Measures of dispersion for grouped and ungrouped data.
- Frequency tables and ogives
- Graphical representation of data.

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Plane geometry

- Properties of common plane geometrical shapes
- Perimeter and area of parallelograms, rectangles, and triangle.
- Use of pythagoras theorem
- The circle
- Surface area and volume of cuboids, cylinders and cones.

Fractions

- Additon subtraction, divison and multiplication of rational and decimal fractions.
- Conversion of decimal fractions to rational fractions
- Fractions and percentages.

2nd Year

1st Term: Review of classes 1 to 3 syllabuses.

2nd Term : Review of classes 4 and 5 syllabuses.

3rd Term: Review of classes 6 and 7 syllabuses.

3rd Year

1st Term

- The nature of Mathematics
- Why we include Maths in the Primary school curriculum
- The essence of preparation in Maths teaching
- Motivation appropriate to Maths.
- Discipline appropriate to Maths.
- Writing instructional objectives in Maths.

2nd Term

- Teaching methods for Mathematics.
- Teaching aids
- Teaching games
- Problem - solving as an instructional objective
- The value of non-verbal communication in Maths classes.

3rd Term

- The general development of number.
- The foundation of Maths in the infant school
- Maths in the middle and senior primary.
- Micro-teaching.

Proposed Draft Syllabus - Grade Two

Child Psychology

1st Year

Topics.

1st Term

1. The working of the mind
2. Sensation and Perception
3. Imagination
   a) Make-believe stage
   b) Adventurous stage
   c) Idealistic stage
4. The memory
   a) Types of Memory
   b) Memory Training
   c) Helping the Memory.

2nd Term

5. Association
   a) Similarity
   b) Contrasts
   c) Close connexions in time and space.
6. Attention.
   a) The strength and attraction of the subject.
   b) Duration, or length of time during which attention is demanded.
   c) Extention of attention
7. The Intellect.
   a) Analogy
   b) Induction
   c) Deduction

3rd Term

8. Instincts(innate, Tendencies) and Emotions.
   a) Social
   b) Play
   c) Imitation
   d) Curiosity
   e) Expression
9. Character Formation
   a) High ideals of conduct.
   b) Strength of will
   c) Friendliness
   d) Dignity
   e) The training of character
10. Habits and Habit Formation
    a) Habits.
    b) The importance of habit formation
    c) Habit formation
    d) Breaking bad habits.

2nd Year

1st Term

1. Optional Lecture: Basic Hints on How to Study.
2. What Psychology is all about (The Scope of Psychology).

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a) Definition of the term Psychology
b) Divisions of psychological studies.
c) The Scientific Mehtod in Psychology
d) The nature of Educational Psychology and its relevance to all concerned with the education of children.
e) The limitations of Psychology

3. The Pre-School child

a) The period covered by pre-school development.
b) Motor development
c) Social and Emotional Development.
d) Language development
e) Perceptual and Intellectual Development
f) Psycho-analytic Theory of Infancy.

4. The Primary School child

a) The period covered by primary education.
b) Motor Development
c) Social and Emotional Development
d) Developmdnet of Reading
e) Interests and Activities.
f) Teaching bright and gifted children

2nd Term

5. The Adolescent

a) PPhysiological changes and physical abilities.
b) The adolescent and adults.
c) The importance of social acceptance.
d) Adolescent groups.
e) Interests and Activities of the adolescent.
f) The effect of culture patterns on the problems of adolescents.
g) Physiological changes and intellectual growth.
i) Language structure and social class.

6. The Idea of Development.
7. Child Study

a) About child study
b) Methods of child study
c) The Normal child
d) Heredity and Environment
e) Innate tendencies of man.
f) The wholeness of the individual

8. The child's innate tendencirs (revisited)

a) Innate tendencies - curiesity, construction, acquisition etc.
b) Innate Tendencies and Education

9. Physical Development.

a) Stages in physical development
b) Heredity and physical development
c) Environment and physical development
d) Physical maturation
e) Physically handicapped children.

3rd Term

10. Mental Development

a) Stages in Mental Development
b) Heredity and Mental Development
c) Environment and mental development
d) Mental Maturation
e) Intelligence
f) Children of high and low intelligence

11. The Development of Personality

a) About personality
b) Emotional development
c) The effect of society.

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d) Child training.
e) Civic and moral education and society.

2nd Year

1st Term

12. Stages of Development - Comprehensive.
    a) Stages in the child's development
    b) Infancy
    c) Childhood
    d) Adolescence
    e) Individual variations
13. Learning - Principles of Learning
    a) About learning
    b) Stages in learning
    c) Pre-reguisites for efficient learning
    d) Learning processes.
14. Learning (continued) - The Pattern of learning
    a) Taking note of experience.
    b) Investigating experience
    c) Increasing in knowledge and skill
    d) Experimenting with knowledge and skill
    e) Putting knowledge and skill to work

2nd Term

15. The child's tools of learning
    a) The fire senses.
    b) Attention
    c) Interest
    d) Memory-pure memory and habit memory
    e) Aids to pure memory.
    f) Aids to habit memory
16. Living with other people- social Psychology.
    a) Communicating with others
    b) Socialisation and cultural Norms.
    c) Significant-others.
    d) Alienation
    e) The individual's social group
    f) Social and individual values.
17. Some aspects of the social behaviour of children.
    a) Some difficulties in the field of social behaviour
    b) Some general treads in the social behaviour of young children.
    c) Play
    d) Social relationship within a group of children,
    e) Popularity, friendship and leadership.

3rd Term

18. Revision (Book Review)- A qucik glance through "Looking at School" by Derek Bickerstaffe.

Reference Books

* 1. A Dictionary of Psychology by James Drever
* 2. Psychology (A Concept Book) by C.J. & N.V. Adcolk
3. Educational Psychology and children by K. Lovell
* 4. Principles and Practice of Education by J.S. Farrant
* 5. A West African Teacher's Handbook by S.A. Banjo
* 6. Looking at school by Derek Bickerstaffe.
7. The Teacher and His Pupils by Hubert Byrne.

* Compulsory Course Books.

Proposed Draft Syllabus - Grade Two

General Pedagogy.

1st Year

1st Term

1. The Meaning of Education.
2. The aims of the teacher
3. The teacher in the classroom
4. The syllabus, schemes and the Time-table

2nd Term

5. General teaching Methods.
6. Preparation of Lessons.
   a) facts
   b) Amount
   c) Class knowledge
   d) Time
   e) Sequence.
   f) Layout
   g) Introduction and layout
   h) Equipment and apparatus.
   i) Summary.
7. Criticising a lesson

3rd Term

8. Setting and marking examinations.
9. The teacher and-child relationship
10. Preparation for Teaching Practice (if any, and at the appropriate time of the year).

2nd Year

Topic

1st Term

1. The concept of Education.
   a) What Education is.
   b) Processes of Education.
   c) General Aims of Education.
   d) Objectives (Specific Aims) of Education in our schools.
2. Agenties of Education.
   a) The Home
   b) The Town and village community
   c) The Church, Mosque etc.
   d) The School
   e) The School and the community.
3. The Curriculum.
   a) What a curriculum is
   b) Principles underlying the curriculum.
      i) Usefulness - content
      ii) Complete development of the child.
      iii) Number and Qualification of teachers.
      iv) Adeptation to the Needs and Circumstances of the locality.
4. The School Time-table.
   a) What a timetable is
   b) Advantages of a time-table
   c) Principles of a good time-table.

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i) The length of each lesson
ii) The number of lessons per week.
iii) The distribution of lessons.
iv) The succession of lessons.

2nd Term

5. Principles and Types of lessons.

a) What a Principle is
b) Some Principles of Education.
c) Types of lesson.

6. Mehtods of Teaching

a) What method is
b) The aim of method
c) Influences on the choice of method.
d) Combination of methods.
e) Devices.
f) Various teaching methods.
g) Summary.

7. The Art of Questioning

a) What a Question is
b) Advantages of questioning.
c) The art of good questioning.

i) Clearness
ii) Definiteness
iii) Interest
iv) Fair distribution

d) Answers.

8. Some points on how to make class teaching more effective (1-19).

3rd Term

9. The Art of Teaching (part 1).

a) What teaching is
b) Activity
c) Direct teaching
d) Indirect teaching
e) Questioning
f) Setting, supervising and marking of work.
g) Making provision for bright and dull children.
h) Diagnosing and treating backwardness
i) Testing learning

10. The Art of Teaching (Part II).

a) The class
b) Groups
c) Individual Assignments.
d) Team Teaching
e) Class Activities
f) Recording Information.

11. Preparing for Teaching Practice (A summary of "A Student's Guide to Teaching Practice", by Alan Cohen and Norman Garner) this comes up at the appropriate time of the year.

3rd Year

1st Term

12. Lesson Preparation (Part 1) - A word about preparation

a) The importance of planning
b) Planning ahead.
c) The need for aims.
d) Aims and objectives.

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13. Lesson Preparation. (Part II) Lesson Planning

a) Class details
b) Lesson topic
c) Aim of lesson (specific aim or Objective)
d) Material and equipment - Apparatus.
e) Organisation of the class
f) Presentation of lesson notes
g) Division of a lesson
h) Evaluation
i) Length of lesson Notes.
j) Sample Lessons.

14. Lesson Criticism.

a) The Lesson Note
b) The Lesson
c) The Teacher.

2nd Term

15. Class Control

a) Misbehaviour
b) Discipline and control
c) Factors affecting control.
d) Failure of control
e) Punishment.

16. Visual Aids.

a) What Visual Aids are
b) Why are visual aids used?
c) The Blackboard
d) Charts, maps and posters
e) Projected pictures
f) Actual objects, visits, models.
g) Copying machines.
h) Other visual aids
i) Sources of visual aids.

17. Some teaching problems.

a) Problems with suggested remedies
b) Was it a good lesson? Evaluation

18. Evaluation (Examinations).

a) Teachers and Examinations.
b) Forms of Examination
c) The qualities of a good examination
d) Benefit of examinations.

3rd Term

19. General Principles of Modern Pedagogy.

a) The principles of adaptation, motivation activity and organisation
b) Statistics and school returns.
c) School and professional orientation
d) Programmed teaching
e) The planification of education

20. Educational Reform

a) The structure of I.P.A.R.
b) I.P.A.R. and the Ruralisation of Education
c) I.P.A.R. and Teacher Education

Reference Books

1. Principles and Practice of Education by J.S. Farrant.

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2. A West African Teacher's Handbook by S.A. Banjo
3. And So To Teach by Derek Bickarstaffe
4. Hints on Methods of Teaching by D. Mck Malcolm (Marianhill)
5. School Methods with Younger Children by Magaret Grant
6. Introduction to Teaching by Wilkins
7. The Teacher and His Pupils by Hubert Byrne.

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Proposed Draft Syllabus for Grade Two:

School Legislation and Administration:

Year Three:

1st Term:

1. What the 1972 constitution States about Cameroon Education.
2. The Main characteristics of Cameroon Education.
3. The Organization of the Ministry of National Education.
4. The structure of a Primary School.

2nd Term:

5. The Curriculum of the Primary School
6. Documents to be kept by both the Headmaster and the class teacher.
6. The Social aspect of the primary school.
8. The Tone of the School: What it is, how to enhance it and what may destroy it.

3rd Term:

9. The P.T.A., its structure and role
10. The Teacher: His various qualities.
11. School Offences
12. Institution concerned with improvement of Education in Cameroon.
13. The General Rules and Regulation dealing with the Public Service.

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Proposed Draft Syllabus for - Grade Two

PROFESSIONAL MORALS AND ETHICS

1st Year

1st Term

1. Professions
   (a) What is a profession
   (b) What is a trade
   (c) A profession as a vocation
   (d) A professional
2. The teaching Profession
   (a) Is teaching a trade or a profession
   (b) The vocation of teaching
   (c) The career of a teacher: a professional

2nd Term

3. The training of teachers (to become professionals)
   (a) Teacher Training Colleges: Statut, organisation
   (b) Selection and admission of student-teachers.
   (c) The student-Teacher's career - Course training, Boarding life etc.
   (d) The student-Teacher's relationship with Staff and other Students.
   (e) The Student-Teachers' behaviour as regards smoking, drunkeness
   Use of drugs, tea time dances, demonstrations and strikes.
4. The training of teachers
   (a) Practising to teach: Teaching Practice.
   (b) The student-teacher staff- (His colleagues) relationship
   (c) The student-teacher and class or School pupils relationship
   (d) The student-teacher staff - (Staff of the school) relationship

3rd Term

5. Moral lessons discussed during morning assemblies:
   (a) Punctuality, to school and at work
   (b) Obedience and faithfullness
   (c) Honesty and loyalty
   (d) Love or greed
   (e) Co-operation
6. Discussions arising from situations and problems experienced in the course of the year.

2nd Year

1st Term

1. Education and the Teaching Profession
   (a) The aims of education
   (b) Principles and practice of education
   (c) Education and the role of the teacher.
2. The Teaching Profession
   (a) The qualities of a teacher
   (b) The Influence of a teacher
   (c) The teacher's authority and power.
3. The teacher and his conduct, his behaviour.
   (a) The teacher's relationship to the pupils
   (b) The teacher's relationship with other colleagues - the Staff.
   (c) The teacher's relationship with authorities, the Headmaster
   (d) The teacher's relationship to his profession.

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2nd Term

4. The teacher and his conduct:
   (a) Towards parents: Teacher - Parents relationship.
   (b) Towards the community or society
   (c) Towards Civic affairs

5. Permanent or continued training or education.
   (a) The teacher's attitude towards work-duty mindedness
   (b) The teacher and extra-curricular activities: special responsibilities.
   (c) Increase of intellectual, or academic) and professional (methodology) growth. Updating and up-grading himself; through constant learning, refresher courses, seminars, research.
   (d) The teacher and the use of leisure time.

3rd Term

6. Teacher's co-operation and Association
   (a) The eduzative value
   (b) The moral and pedagogic value.
   (c) The social and economic value.

7. The student-teachers experiences during Practice.
   (a) The conduct of moral instructions or lessons
   (b) Co-operation in the School used for practice
   (c) Luter-school co-operation, for sports, exchange visits, exhibitions/cultural display, youth activities, youth groups.
   (d) Animation of the school and the community

3rd Year

1st Term

1. Professional Consciousness.
   (a) What is professional consciousness
   (b) The concepts of professional consciousness
   (c) The teacher and the falling standards in education
   (d) The teachers' behaviour as regards supervision, marking, compiling Exams

2. Moral Value and morality
   (a) What aspects are of moral value or appreciation of moral value
   (b) Aspects of moral value acceptable the world over.
   (c) African culture and our moral values.
   (d) Could our african moral value or aspects of it under go change

3. Education and the teaching Profession.
   (a) Teachers' shortage and demand is great, (worldwide)
   (b) The qualifications of a teacher: academic, Professional, moral 9
   (c) His Human qualities.

2nd Term

4. The Agents of Education
   (a) Formal Education: The role of the school
   (b) Informal Education: Other agents the home, the church, the society.
   (c) The influence of the teacher
   (d) The teacher's neutrality. Sense of Justice
   (e) The teacher's authority and power.

5. Education and the community.
   (a) The influence of the school in the community
   (b) The teacher's role in the community - agent of development.
   (c) Animation of the school and the school animation of the community

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3rd Term

6. Education and General Culture
   (a) The Statute of Schools
   (b) The Public Service: General Rules and Regulations
   (c) Duties and obligations of the Civil Servant.
   (d) The teacher's career as a civil servant.
   (e) The teacher's general culture i.e. outlook or understanding of issues such as religion, secret societies, credit unions Njangi ((isusu)) groups, self reliant developments.

7. Discussions arising from experiences and problems during the entire course.

Reviews and research on professional [illegible]

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Proposed Draft Syllabus for - Grade Two

ANIMATION

1st Year

1st Term

1. The Simple definition of Animation - to animate
2. Animation as a subject - (a discipline)
3. The Animation of our society
4. Our society - its organisation
5. Our society - its structure

2nd Term

6. Our Society - The traditional and modern
7. The role of animation to blend the two-traditional and modern
8. Education and the society

3rd Term

9. Animation as an aspect of education
10. Sports animation
11. Cultural animation
12. Animation of the college.

2nd Year

1st Term

1. Animation in the primary school
2. Importance and aspects of animation of the school.
3. Animation of the environments in which the school is situated
4. Educational animation: The School as a centre of collective animation.

2nd Term

5. Animation and mobilisation for development
6. Animation and the transformation of the school
7. Animation as a means of enhancing development.
8. The stages and conditions favourable to carry out animation

3rd Term

9. Animation and human resources for economic growth
10. Animation and human resoureces for social progress
11. The teacher as an animator.

3rd Year

1st Term

1. Classification of animation projects to be carried out by School pupils.
   (a) Decorations. (b) Compound and property care.
2. Classification of animation projects:-
   (a) The farm; (b) The School canteen
3. Classification of animation projects:-
   (a) School clubs-sports, drama (b) School magazines

2nd Term

4. Classification of animation projects:-
   (a) Craft-works, (b) Paintings
5. Classification of projects: Health and Sanitation aspects.

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6. Creation and functioning of associations in the School e.g. B.S.
7. Creation and functioning of co-operativies in the School

3rd Term

8. Teaching Aids and other ways of animation of lessons.
9. Animation and Adult or Popular education
10. Animation in general-as a stimulant, as a popular or mass education. media

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Proposed Draft Syllabus For - Grade Two

GEOGRAPHY

1st Year

The overall objectives for the first two terms of year One is to lead the student to acquire thematic knowledge of Cameroon in the area of Physical and Human Geography. In the third term this knowledge would be broaden to a regional approach in the study of Cameroon.

1st Term

1. Position, shape and size of Cameroon.
2. Relief and drainage
3. Climate and vegetation
4. Transport and communication
5. The people of Cameroon: their distribution
6. Commercial Agriculture in Cameroon: Plantation farming.

2nd Term

1. Commercial Agriculture: Peasant Farming
2. Subsistence Agriculture
3. Animal Breeding
4. Power, Industries and Mines
5. Commerce and Trade.
6. The Main Administrative units and the major Urban centres.

3rd Term

1. The Campo- Ndian Coastal Region and the Manyu Basin
2. The Cameroon Mountain
3. The Central low Plateau Region
4. The High Plateau Region
5. The Benue Basin Region
6. The Lake Chad or Duck's Beak Region and the Mandara Highlands.
7. The Provinces.

2nd Year

1st Term

Physical Geography

The Earth
1. Shape, lines of latitude and Longitude.
2. Continents, Oceans, seas, rivers, lakes, mountains and mountain ranges (principal features only).
3. Revolution and Rotation; causes of day and night.

Africa

4. Relief and Drainage
5. Climate - Temperatures, rainfall and winds.
6. Vegetation
7. Main agricultural Products and cattle breeding.

2nd Term

Africa Continued.

1. The Nations of Africa
2. Our Neighbours - Nigeria, Chad, Central African Republic, Congo, Gabon, Equatorial Guinea.

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3. The Peoples of Africa.
4. Minerals and Power.
5. Important industries.

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3rd Term

This Term will be devoted to an outline study of the Main Natural Regions of the world so that at the end of the Course, the student should be able to describe their climate, products and vegetation.

1. The Hot or Torried zone: The Equatorial climate.
2. The Hot or Torrid zone: The Tropical Monsoon
3. The Hot or Torrid zone: The Sudan climate
4. The Hot or Torrid zone: The Hot Desert climate
5. The Warm Temperate climate
6. The Cool Temperate climate
7. The cold climates.

3rd Year

(Methods)

1st Term

1. Principles that underlie the making of a Primary School syllabus.
2. The teaching of Physical Features in the Primary School.

2nd Term

3. Geography Teaching Aids, characteristics, use and storage.
4. Organising Geography in the Primary School-objectives, Fundamental concepts, geographical skills and abilities.

3rd Term

5. Field work in geography
   (a) Field study of Geography Features.
   (b) Village survey
6. Forming a geography club for the primary school Pupils.

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Proposed Draft Syllabus - Grade Two

History

1st Year

1st Term

1. The evolution of Man from the prehistoric age to the beginning of the 20th century.
2. The Discoveries of early man and their importance.
3. Causes and Consequences of migrations in Medieval Africa.
4. Settled life and its Consequences
5. The African Middle ages.
6. The Dark Ages.

2nd Term

1. Feudalism
2. The Bantu Migrations
3. Europena Contact with the African Coast.
4. The scramble for Africa -Causes and consequences.
5. The partition of Africa.
6. The Berlin Conference - aim and Resolutions.

3rd Term

1. The German Protectorate in Cameroon - annexation.
2. Zintgraff's explorations.
3. German administration in Cameroon. Rule of Governors.
4. Economic and Social development of Cameroons under the Germans.
5. Christian Missions and Western education in Cameroon.
6. Njoya and the Bamoun Civilisation. Relation with Europeans.

2nd Year

1st Term

1. Egypt and Babylon - The importance of the River Nile, Tigris and Euphrates.
2. The methods of farming in Egypt and Babylon - irrigation system
3. The effects of these methods on the people's way of life - rich nobles, poor peasants, slaves etc.
4. The national advantages of Egypt and Babylon.
5. Israel and Palestine - The Jews and their belief in One God.
6. The stories of the Greeks - love of beauty, love of freedom, like to play games.

2nd Term

1. The phoenicians - Hanno.
2. Stories about the Romans: How Rome was founded; how Rome brought civilisations to barbarous lands by establishing law and order.
3. How the Romans built their cities and constructed roads to link up their towns.
4. Honesty, justice and a good sense of duty among the Romans.
5. Christian life and the teaching of Christ.
6. How Christianity was spread in the Roman Empire St. Paul and Augustine.

3rd Term

1. Causes of the fall of the Roman Empire.
2. The rise and spread of Islam- Mohammed.
3. The renewal of the Western Roman Empire by Charlemagne.
4. The Crusades - Richard the lion Heart and Saladin.
5. The Renaissance - Michael Angelo, Gutenburg and Caxton.
6. The Renaissance - Galileo etc.

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3rd Year

1st Term

1. The voyages of discovery, Henry the Navigator, Christopher Columbus.
2. The voyages of discovery - Bartholomew Daiz, Vasco da Gama, Ferdinand Magellan.
3. The Reformation - meaning and causes.
4. The Reformation -Zwingli, Martin Luther, John Calvin and Erasmus
5. The Counter Reformation - Ignatius Loyola.
6. The Empires of the Western Sudan - Ghana, Mali, Songhai.

2nd Term

1. Slavery and slave trade in Africa.
2. The slave trade across the Atlantic Ocean.
3. Life in an American slave plantation.
4. Why the slave trade was bad.
5. The struggle for the abolition of the slave trade - William Wilberforce.
6. The American Civil War-Abraham Lincoln.
7. The abolition Acts of 1807, and 1833 and the part played by British government in suppressing the slave trade.
8. Colonies for freed slaves-Sierra Leone, Liberia, and Fernando Po.

3rd Term

1. The establishment of peaceful trade in west Africa after the abolition of the slave trade - palm produce, Spices, groundnuts, elephant tusks, ostrich feathers, hides and skins cotton goods, soap, spirits etc.
2. The Industrial Revolution-meaning and factors influential to it and why it began in England.
3. The effects of the Industrial Revolution.
5. The exploration of West Africa to find markets for European manufactured goods-Mungo Park.
6. The Stories of Clapperton, Richard and John Lander.

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Proposed Draft Syllabus for - Grade Two

CIVICS

1st Year

1st Term

1. The citizen and citizenship
2. The activities or occupations of the people
3. The town and village
4. The verious meetings of our parents
5. Some youths organisations
6. Some public holidays e.g. Youth day

2nd Term

1. Some moral lessons e.g. Honesty, cleanliness, loyalty
2. Some sport organisations
3. Some publ ic services or functions, e.g. Health, social w welfare, the police.
4. Some exhibitions e.g. Agric show, crafts exhibitions.
5. The duties of a chief and village council
6. The duties of the District Officers
7. The role of schools in the community
8. Some simple road signs and sofety rules.

3rd Term

1. The duties of the departmental inspector of education.
2. The various parts of plan of the village or town.
3. The activities of the national day
4. Discussion on General knowledge topics class III and IV
5. Discussion on civics IV - Vi
6. Teaching and lesson preparation - Civics topics VII

2nd Year

1st Term

1. The family-Importance of the family unit and types of families.
2. The tribe and the clan
3. Ethnic groups
4. The students and his community.
5. The party
6. Rural and urban life-rural Exodus.

2nd Term

1. Council or municipal organisation
2. Administrative organisation of the U.R.C. The Provinces
3. Provincial set up
4. Duties of provincial Governors.
5. Divisional set up
6. Duties of the S.D.O.
7. The Government of the U.R.C. - The executive Power.

3rd Term

1. The presidency
2. The Ministries
3. The Ministery of national Education
4. The Delegation of national Education
5. The Inspectorate of Primary and Nursery Education
6. Some Educational institutions
7. The role of Education in the community or self reliance development.

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3rd Year

1st Term

1. The Legislative Power.
2. The National Assembly
3. The Economic and Social council
4. The Judiciary Power
5. Types of courts and their functions
6. The discovery of Cameroon.

2nd Term

1. German Annexation of Cameroon
2. Cameroon under British and French mandate and Trusteeship
3. The formation of the Cameroonian state
4. The Federal Republic of Cameroon
5. The symbols of the state
6. The institutions of the state
7. Sources of state revenue and expenditure.

3rd Term

1. Some state owned co-operations
2. The right and duties of the civil services
3. African regional groupings UDAC
4. The O.A.U.
5. Liberation movements
6. The U.N.O. and specialised organs or agencies.

Proposed Draft Syllabus - Grade Two

Natural Sciences.

1st Year

1st Term

1. Measurement - measuring units, powers in ten, significant figures, area, volume.
2. Matter, what it is, properties of matter, physical State of matter properties of matter which depend on its state, change of state.
3. Matter and gravity, mass and weight, Units of mass, surface tension, capillary attraction Density, law of Archimedes, Relative density, Floating objects.
4. Levers, equilibrium, the Spring balance.
5. Force and pressure, units of force, pressure, pressure in a fluid, Air pressure, air compression.

2nd Term

1. Physical and chemical properties of matter.
2. Chemical change, physical change.
3. Elements, compounds and mixtures.
4. Purification techniques.
5. Water-properties, volume and composition of water, water of crystalisation.
6. The atmosphere-composition of air, preparation and examination of Co2 and ammonia, showing that air has Co2.
7. Atomic structure - metals and non-metals, classification of elements, structure of the atom arrangement of the electrones, symbols for elements, atomic mass and atomic number, molecules valency.

3rd Term

1. What biology is, characteristics of living things.
2. Classification of living things.
3. Fruits and seed disperaal.
4. Roots kinds, stems - kinds, functions; leaf - cells in leaf.
5. Water cycle
6. Transpiration
7. The environment - adaptation to change.
8. The animal body - skeleton, muscles and movement, body co-ordination.
9. Classification of animals - Invertebrates, vertebrates.
10. Interdependence of plants and animals.
11. Vegetative reproduction
12. Buds on hedges and trees in spring
13. Seeds - monocots and dicots - germination conditions for seed germination.
14. Flowers - structure, pollination, fertilisation.

2nd Year

1st Term

1. Classification and characteristics of living organisms. Differences between plants and animals.

2. Vertebrates - classification and characteristics.
3. The human body-shape and general characteristics. Hygiene of the human body.
4. The human skeleton - parts and functions of the skeleton in general. Hygiene of the skeleton.
5. Human muscles and how joints work to cause flexion and extension.
6. The muscular and Nervous systems. Hygiene of these.
7. The circulatory system and the hygiene of it.
8. The digestive system and the hygiene of it.
9. The respiratory system and its hygiene.
10. The excretory system and its hygiene.

2nd Term

1. Invertebrates - classificati[illegible].
2. Insects - characteristic[illegible]ises etc.
3. The Amoeba and/or Paramec[illegible]
4. The parasitic tape worm - l[illegible]ory
5. Germs - mode of infection, their action in the body.
6. Body defences against germs-common Infectious diseases.
7. Common Infectious and contageous diseases continued - mode of infection, prevention, treatment.
8. Food - classification, cooking and preservation methods.
9. Beverages - preparation; Drinking water - qualities, sources, purification methods, care of sources.
10. Alcoholic Drinks, smoking and effects of these on nerves.

3rd Term

1. Non-flowering plants - classification with examples.
2. The detailed study of the fern, mucor, and spirogyra.
3. Flowering plants - classification and functions of parts of a plant.
4. Structure of flowering plants - monocots and dicots.
5. Flowers - parts, pollination and fertiflisation
6. Seed - germination - types and tropisms.
7. Methods of seed dispersal
8. Main types of rocks. Sedimentary rocks in connection with coal and petroleum production.
9. Adaptation in plants and animals.

1st, 2nd and 3rd Terms

- How to write lesson notes based on the primary school syllabus.
- Principles guiding the drawing up of schemes of work.
- Drawing up schemes of work for the primary schools using the primary school syllabus.
- How to teach the various aspects of Rural Science - hygiene, Nature Study, Agriculture in the primary schools.
- Classroom Teaching by the students.
- Practical Farm and garden work continued as in the first year.
- Planting or maintaining ornamental trees and flowers for beautifying the compound.
- Apparatus making and learning how best to use the apparatus.

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Proposed Draft Syllabus For Grade Two:

Agricultural Sciences:

Year One:

1st Term:

1. Farm and Garden management
2. How to care and attend to growing crops
3. Gardening - choice of site and preparation of garden beds.
4. Methods of planting seeds
5. Inorganic manures and uses.

2nd Term:

1. Kinds and food value of vegetables
2. Cropping systems
3. Crop husbandary - classification of crops
4. Methods of pest control, common garden pests.

3rd Term:

1. Ways to improve agriculture - formation of co-operatives and groups, running research schemes (disease control, research, various crop schemes, free or subsidized training schemes etc)
2. Soil formation and rock types - sedimentary rocks and formation of coal and oil.
3. Animal husbandary - pigs, sheep, cattle, poultry, inland fishery.
4. Grass culture - factors of production, production of hay, silage forage, clover, legumes.

Year Two:

1st Term:

1. Farm records and why we keep them.
2. Farm and garden tools and how to care for them.
3. Crop Rotation - what it is, its laws, advantages, terms in connection with it.
4. Shifting cultivation - why still preferred, advantages and disadvantages.

2nd Term:

1. Plant diseases, insect pests, insecticides.
2. Common garden pests
3. Soil formation - organic matter in soils water and air in soils.
4. Soil erosion - meaning, causes, kinds, prevention.

3rd Term:

1. Soil conservation methods
2. Soil fertility and soil conservation
3. Methods of plant propagation
4. Manures - Organic types, preparation.

Year Three:

1st, 2nd and 3rd Terms:

Practical farm and garden work continued.
How to prepare lesson notes using topics from the primary school syllabus.

How to make and use apparatus.

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Teaching demonstration lessons.
Actual classroom teaching.
Techniques of framing and using of questions in teaching.

G.T.T.C ENI/ENIA Bamenda.

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Proposed Draft Syllabus - Grade Two

Home Economics

1st Year

A. Needle Work

1st Term

1. Needle Work equipment
   Parts of a machine
2. Body measurements.
   Use of paper patterns

(a) Adjustment of patterns-Enlarging and decreasing

(b) Preparation of paper patterns for Apron; Needle Work string bag, Fringed mats, Baby's pinafore or feeder, pitch knickers, child's petticoat, Baby's matine coat, Baby's dress with fullness, House wife's pillow case, Child's shirt and trousers.

B. Food And Nutrition

1. Introduction of the kitchen and Equipment

(b) Types and care of cookers.

2. Classification of foods

II Balance Diet

III Functions of the various food nutrients to the body.

3. Diseases caused by defficiency of nutrients.
4. Food Groups: Carbohydrates; Proteins; Fats and oils; Vitamins, Minerals and Water.

2nd Term A. Needle Work

3. Practical Sewing of the following

(a) Fringed mats: Decorative stitches of various kinds

(b) Apron with a patch pocket with edges using crossway stripes.

B. Food and Nutrition

1. Planning of Meals

(a) Importance of balanced meals to the family.
(b) Members of the family to be fed.

2. Budgetting and marketing
3. Methods of cooking food
4. Meal Times and meals in courses.
5. Laying the table for various meals and table manners.

3rd Term A. Needle Work

Sewing of Pillow cases: French seamy Hem stitches and - seam simple embroidery designs.

B. Food and Nutrition

1. Breakfast and breakfast dishes.
2. Lunch, Supper or Dinner dishes in Courses.
3. Babies and Toddlers and childrens' cookery
4. Invalid and convalescent cookery.

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2nd Year

1st Term A. Needle Work

4.(a) Sewing of baby's pinafore or feeder - Binding Bias, Setting of straps or button and loop, Button holes and stitches.

(b) Pitch knickers and petticoat: Run and fell seam, turning down hems. Shell hemming on petticoat and legs of knickers Elastic casing petticoat.

B. Food and Nutrition

1. Vegeterian Cookery
2. Packed meals - Theory discussion.
3. Practical food preparation of the dishes involed.

2nd Term A. Needle Work

5. (a) Practical Sewing of Matinee coat: open seam - Finishing of raw edges.

(b) Night dress: Flannel seams:- Finishing of raw edges,

(c) Baby's dress: Disposal of fullness:- gathers, Pleats, tucks, darts, smocking etc. Inserting of sleeves and peter pan collars, Button and Button hole.

B. Food and Nutrition

1. Sweet Dishes - Puddings - Steamed Puddings, Baked Pudding.
2. Recipes for Puddings and sweet Dishes.
3. Cold sweets - Recipes
4. Stocks and Soups
   (a) Meat Stock
   (b) Fish Stock
   (c) Vegetable Stock
5. I) Classification of soups
   II) Food value of soup
   III) Important Points in soup Making.
   IV) General Points in soup Making
   V) Thin and thick soups - Recipes.

3rd Term A. Needle Work

6. (a) Sewing of small boy's shirt:- Inserting long sleeves and curves - straight collars, curved patch pocket.

(b) Chils's trousers: Making of a simple trousers with elastic casing.

(c) Self made dress to fit or blouse and skirt - Turning down of round hems, setting bands into skirts, placket or skirt opening.

B. Food and Nutrition

1. Sauce and Gravies.
   a) Hourschold sauces
   b) Sauce thickened with conflour, etc.
2. I) Cooked Egg Sauces
   II) Cold sauces
   III) Cameroonian Sauces.
3. Raising Agents: varieties kinds, how to use.

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3rd Year

Crochet Work

1st Term A. Needle Work

7. (a) Babies garments - bonnets, caps, matinee coats, booteees. etc.
   (b) Household articles e.g. Table mats, chair bags, table runners, etc.

B. Food and Nutrition

1. Cake, scones and biscuits.
   Cake making - Methods of making cake. Simple plain cakes. Recipes.
2. Fish cookery:
   (a) Types of fish
   (b) Nutritional values
   (c) Simple preservation of fish

2nd Term A. Needle Work

8. (a) Babies garments
   (b) Pullovers for men and cardigans for men

B. Food and Nutrition

1. Methods of cooking fish.
   Recipes and discussions - Theory work.
2. Improved Local Dishes for Rural families.
   Recipes and method of preparation.

3rd Term A. House Craft

9. (a) Various rooms in the house and their furniture.
   General discussion. Daily and weekly care - compound care - beautifying the compound - lower - beds or flower garden.
   (b) Wood Work: Care of plain wood, polished and vanished wood. Painted wood.
      1. Making of furniture polish.
      2. Care of glass - Mirrors, drinking glasses, pictures, window panes etc.

Metals - Care

A) Cleaning of zinc or galvanised iron buckets, Aluminium Iron, steel, Enamel and plastic articles;gold and silver article, brass ornament.

B) Local cleaning agents for the above kinds of floors and floor coverings - care and their care and their cleaning.

C) Making of floor polish

D) Water containers - Filter, Water pots, calabashes etc.

E) Care and cleaning of these articles.

F) Care of household Linen e.g.
Table cloths, dish cloths, towels, dusters, etc.

G) Care of baby articles - clothes, cots, beddings, feeding bottles, etc.

Mother Craft

10. Adolescent Stage
   A. Early adolescence
   B. Middle adolescence

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C. Late adolescence
Problem of adolescence.

B. Food and Nutrition

1. Egg cookery:
(a) Nutritional value - Freshness, uses and preservation.
(b) Mehtods of cooking eggs - recipes.

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Proposed Draft Syllabus - Grade Two.

Manual Arts

1st Year

1st Term

Woodwork using simple bench tools for planing, ripping, mortising, guaging etc. Making of simple wood joints.
Local crafts e.g. weaving, claywork etc.

2nd Term

Woodwork continued. Making of book-ends, foot stools,
Introduction to technical drawing - isometric projection.
Local crafts, ceramics, wood carving.

3rd Term

Potatoprint, block printing, woodwork continued.
Metalwork e.g. funnels, metal boxes, local crafts.

2nd Year

1st Term

Ceramics - clay pots, sheetmetal work continued.
Local crafts practised in Cameroon.

2nd Term

Ceramics contined.
Wood work continued.
Sheefmetal work
Local crafts
Methods of teaching crafts in school

3rd Term

Wood carving e.g. relief carving, tie-dye.
Canework, trays, basket etc.
Teaching Practice

3rd Year

1st Term

Wood carving - simple sculptures e.g human heads, lizards, birds et
Wood printing or lineprinting
tie - dye continued.
Ceramics, bamboo work etc.

2nd Term

Carpentary - tables, chairs, stools, Sheetmetal - buckets.
Wood work - finishing processes.
Preparation for teaching practice.

3rd Term

General revision of course work.
Preparation for Final Practical Teaching,
Preparation for End of course Art Extribition.
Examination.

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Proposed Draft Syllabus - Grade Two

Drawing and Writing

1st Year

1st Term
Animals of the home e.g. dogs, cats, goats, cows. Writing -Script.
Birds of the home e.g. fowls, ducks etc.

2nd Term
Animals and birds of the home continued: fowls, ducks, parrots.
Houses - different kinds of houses in Cameroon e.g. Bamenda local houses, Bakossi round houses etc.
Writing - Script

3rd Term
Things used in the home: pots, local pots, pans, decorated calbashes, bowls, tables, chairs, local stools etc.
Writing: Capital lettering - stencilling.

2nd Year

1st Term
Creative drawing based on last year's work. Free activities.
Woodprint or Linoprint on subjects of interest.
Writing - Script

2nd Term
Scenes e.g. farming, hunting, school compound, surroundings.
Woodprint or lineprint continued.
Writing - sign board writing

3rd Term
Portrait and figure drawing.
Free painting using water colours.
Woodprint on subjects of interest.
End of Year Art Exhibition.
Writing - Gothic

3rd Year

1st Term
How to teach drawing and writing in the primary school - simple practical methods. Apparatus making, collage, string paintings etc
Free paintings and printing.
Writing - Round - hand.

2nd Term
Teaching Practice - Apparatus making, Free paintings, printing etc
More teaching methods. Writing - General principles of each pattern.

3rd Term
Free drawing and painting based on course work.
Final Practical Teaching.
End of course Art Exhibition
Examinaiton.
Writing - cursive.

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Proposed Draft Syllabus - Grade Two

Agricultural Sciences

1st Year

1st Term

1. Farm and garden management.
2. How to care and attend to growing crops.
3. Gardening - choice of site and preparation of garden beds.
4. Methods of planting seeds.
5. Inorganic manures and uses.

2nd Term

1. Kinds and food value of vegetables.
2. Cropping systems
3. Crop husbandary - classification of crops.
4. Methods of pest control, common garden pests.

3rd Term

1. Ways to improve agriculture - formation of co-operatives and groups, running research schemes (disease control research, various crop schemes, free or subsidized training schemes - etc.)
2. Soil formation and rock types - sedimentary rocks and formation of coal and oil.
3. Animal husbandary - pigs, sheep, cattle, poultry, inland fishery.
4. Grass culture - factors of production, production of hay, silage, forage, clover, leggumes.

2nd Year

1st Term

1. Farm records and why we keep them.
2. Farm and garden tools and how to care for them.
3. Crop Rotation - what it is, its laws, advantages, terms in connection with it.
4. Shifting cultivation - why still preferred, advantages and disadvantages.

2nd Term

1. Plant diseases, insect pests, insecticides.
2. Common garden pests.
3. Soil formation - organic matter in soils, water and air in soils.
4. Soil erosion - meaning, causes, kinds, prevention.

3rd Term

1. Soil conservation methods.
2. Soil fertility and Soil conservation.
3. Methods of plant propagation
4. Manures - Organic types, preparation.

3rd Year

1st, 2nd and 3rd Terms

- Practical farm and garden work continued.
- How to prepare lesson notes using topics from the primary school syllabus.
- How to make and use apparatus.
- Teaching demonstration lessons.
- Actual classroom teaching.
- Techniques of framing and using questions in teaching.

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Proposed Draft Syllabus - Grade Two

Music

Introduction:

1. The courses last for 2 and 3 Years respectively, and it is intended to familiarize the students with the rudiments on the Theory of Music by the end of each course, in order to enable them follow up and capable of doing little compositions themselves on local topics for use in the Primary Schools.

2. Therefore, emphasis should be put on the collection, organisation and use of local songs and/or compositions.

3. Most of the lessons in each Course should be followed up by the methods and practice of teaching them in the Primary Schools.

1st Year

1. Definition of: a) Musical sound,
   b) Rhythm
   c) Melody
   d) Harmony
   e) Canon
   f) Verse or stanza

   Why we teach music.

2. Examples of: a) The Canon (White sand & dry Sand; Pray God Bless all friends here etc.)
   b) Harmony
   c) Verse or Stanza etc.

3. The Qualities of Sound : - Pitch
   - Power
   - Quality

4. Pitch:- The musical alphabet
   - The Great staff
   - Lines and spaces of the great staff.
   - The leger lines.

5. Kinds of Notes and their values
   - The Semibreve
   - The Minim
   - The Quaver
   - The Semi-quaver
   - The Semi-Semi-quaver.
   - Dotted Notes.

6. Bars and Bar Lines:
   - The Full Bar Lines
   - The Half Bar lines
   - The Quarter Bar lines
   - The Virgula or Pulse
   - The Full Breath
   - Exercises.

2nd Year

1. The Scale:- The Modulator
   - The Octave
   - Chromatics.
   - Exercises to determine the above.

2. The Major Scale:- Tones and Semi Tones,
   - The Sharp - How to write it.
   - The Flat - How to write it.
   - The Natural - How to write it.

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3. "Fixed Pitch:"- As applied to the staff -
   The C, G, and F. Clefs.
   - As applied to the Piano -
   The White keys-Naturals
   The Black keys- Accidentals
   - The effect of sharps and Flats.

4. Accent & Time:- Duple Time, - How to Beat it
   - Triple Time - How to Beat it
   - Quadruple Time- How to Beat it
   - Exercises.

5. Time Signatures:- Common Time: 2/2, 2/4, 4/2, 4/4, $\frac{3}{4}$ etc.
   - Compound Time: 6/8, 9/8, 12/8 etc.
   - Triple Time: $\frac{3}{4}$, 6/8, etc.
   - Exercises.

6. Keys:- The key of C, Y, D, A- (~~4~~)
   - The key of F, B etc - (5)
   - How to determine them.
   - Exercises.

3rd Year

1. Intervals and Triads:
   - The simple chord - Definition of.
   - Formation of composition of-
     (The Root, 3rd and 5th.)
   - Tonality in music.

2. Simple sequences:
   - Explanation of Tone, Tune and intone.
   - Use of the modulator to sing or practice simple sequences: e.g
   a) d' r' d'; t, d' t; etc
   b) d' t d'; t l t; etc
   c) d' r' m' t' d'; t l s l t, etc.

3. - Tied Notes .....d-d= 0 etc.
   .....d-d= d. etc.
   - Phrase marks ..... ties
   ..... slurs etc.
   - Exercises.

4. a) Speed and expression marks.
   b) Simple musical signs.
   c) Exercises.

5. a) Simple songs and Hymns.
   b) Simple practice in Transposition:
   From staff Notation to Solfa Notation,
   From Solfa Notation to Staff Notation.

6. General Exercises on both theory and Practice in music as well as on General Methods of Teaching Music in Schools.

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- MOC -

MINISTRY OF NATIONAL EDUCATION

DEPARTMENT OF PRIMARY AND NURSERY EDUCATION

UNITED REPUBLIC OF CAMEROON

PEACE - WORK - FATHERLAND

CIRCULAR N° 05/C/49 /MINEDUC/DEPN.-

French and Mathematics Syllabuses in Grades One and Two Teacher Training Colleges.

- FRENCH SULLABUSES

The current syllabuses in the Grade One Teacher Training Colleges (3-year course) and the Grade Two Teacher Training Colleges (One-year course) are well defined as much in their objectives as in their content and the time - tables pertaining to them. The recommended methodology is in keeping with the ultimate aims of training in Teacher Training Colleges : it shows to the would-be teachers how to conduct later on the progressive teaching of the English language in their classes. We will insist that the tutors revert to the traditional notions of parsing and clause-analysis so useful to the mastery of the language and training of judgment and rational thinking. We will equally insist on the importance of the teaching of everyday vocabulary and theoretical vocabulary, teaching which can bear its fruits only if it is closely and constantly associated with the teaching of reading and speaking ; knowledge in spelling and composition will be further strengthened.

It seems therefore important to draw more strongly the attention of the tutors of French, of Principals of Grade One Teacher Training Colleges and of the National Inspectors of Education to the strict application of these syllabuses.

- MATHEMATICS SYLLABUS

The current syllabus of mathematics for Grade Two Teacher Training Colleges (One-year course) is based on Arithmetic, Geometry and the Metric system as envisaged for the primary school with an introduction to modern Mathematics. Details of this syllabus are given here in order to help the tutors of Teacher Training College apply them better.

The mathematics syllabuses in Grade One Teacher Training Colleges (3-year course) are conceived with the aim of giving a more advanced introduction

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to modern mathematics which is gradually replacing that of classical mathematics.

It is more important, however, not to forget that the teaching of this subject in Primary Schools is still based on the knowledge of mathematics termed classical. To learn to " calculate " in the old and common meaning of the term remains the constant preoccupation of everyday life. Knowledge of calculation in Arithmetic, Geometry and the Metric system, the safe handling of the four operations in the occupations of everyday life must be for the teachers conclusive and true acquisitions. Their reinforcement in the third year of the Grade One training course will therefore enhance the acquisition of their pedagogy.

We are then right to think that the programme of mathematics for Grade Two Teacher Training Colleges (One-year course) such as has been outlined hereunder will constitute a sound basis for the programme of this course in the third year of Grade One Teacher Training Colleges (Three-year course).

The remark which we made concerning the application and supervision of the French syllabus is still more valid here. The National Inspectors of Education in charge of Primary Education would have to be commissioned for the implementation of the teaching schemes in Teacher Training Colleges. The tutors of Grade One Teacher Training College still require permanent logistic and intellectual support in order to succeed in the correct training of our future teachers. It is important to base the efforts of the reform of primary education on this requirement which to us seems fundamental.

Mathematics syllabuses thus outlined appear long. It should not be forgotten that they comprise several already known items. Practice of the working and the solution of problems of everyday life constitute the main framework of this course. But we will nevertheless give some cultural justifications drawn from the history of sciences and philosophy to certain mathematical considerations which are required for it to be well understood.

MATHEMATICS SYLLABUS FOR GRADE TWO TEACHER TRAINING COLLEGES
(ONE-YEAR COURSE)

A - ARITHMETIC

NUMBER AND NUMERATION

1 - Whole numbers :

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The notion of unit. Natural sequence of whole numbers. Numeration • number classes - writing of numbers : arabic figures, roman figures. Notion of base 10,6,12,60. Decimal numbers.

Notion of aquality and inequality - the signs.

2 - Addition - the sum, meaning and properties of addition. Writing conventions relating to workingsigns in a sequence of addition;use of brackets, factors in a sum of products.

Practical problems of addition : proof of addition.

3 - Multiplication : the product.

-Meaning and propertis of multiplication - multiplication terms.
- Writing conventions relating to the working signs in a multiplication series, use of brackets, product of sum by one number,product of two sums, proving a multiplication sum.
- Pratical problems of multiplication.
- Square, cube, power of a number, the multiple of a number.

4 - Subtraction : The difference - the remainder, meaning and properties of subtraction ; negative and positive numbers. Writing conventions relating to working signs in subtraction.
- Practical problems of subtraction - how to prove subtraction.

5 - Division : The quotient
- Meaning and properties of division, the terms of division.
- Writing convention relating to working signs in a division sum ; round quotient and approximate quotient - proof of division.
- Divisibility : definition and characteristics of numbers divisible by 2, 4, 5, 25, 3, 9 .
- The square root in arithmetic : definition and extraction of table of squares.

6 - Fractions and improper fractions : Definition of terms.
- Meaning of fractions, equal fractions, unequal fractions; comparison of fractions and improper fractions.
- Operations on fractions : simplification, reduction to a common denominator,multiplication of a number by a fraction, of a fraction by a

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number, of a number by a fraction, of a fraction by a number, of two fractions; addition between a number and a fraction, subtraction between a number and a fraction, division between a number and a fraction.

- Some operations between fractions.

II - PRACTICAL PROBLEMS OF ARITHMETIC

1 - Notions of common multiples and common divisors deduced from the comparison of tables of divisors and multiples.

2 - Notions of ratio and proportions : proportional size ; the rule of three ; percentages.

3 - Mixtures

4 - Investment : interest rates, capital, interest, discount.

5 - Cost, selling, profit.

Grade One Teacher Training 3 rd year : Discount, money, International Monetary fund.:

B - GEOMETRY

1 - Geometrical construction : definition of elements and basic figures.

- definition and handling of basic instruments for geometric drawing. Study and construction : of a straight line, of a half straight line, a segment the mediator of a segment ; of the angle, of a bi sector of an angle, of parallel lines, of perpendicular lines : of triangles from known elements (angles, sides) ; of the circumference : its elements : of regular and irregular quadrilaterals, of regular polygons in a circle.

2 - Finding Perimeter, Circumference and Area. Establish the demonstration, determine the formula and apply to cases of squares, of rectangles of paralllograms, of trapezia, of rectangular parallelepipeds, regular prism, pyramid of circle, of a cylinder, of a cone of revolution, of a sphere.

3 - Finding Volume

Work out the demonstration, determine the formula and apply to cases of a cube, of a rectangular parallelepiped ; of a sphere.

State the formula and apply it to cases of a regular, prism, of a come of revolution, of a cylinder of revolution.

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4 - Finding of a dimension given the perimeter or the surface area and one side.

THE METRIC SYSTEM

The Units and the Instruments of measurement.

A knowledge of units and the instruments of measurement and evaluation of objects constitutes in all teaching of mathematics a set of mental and manual operations which we must be certain about. The question first of all is to get the definition of units of measurement and evaluation learnt, as well as the organic relationship between them and their field of utilisation.

In this perspective we will show the right instruments used in the relevant operations, and will use them first in class during lessons and then, during manual work and on various other occasions. It is necessary to constantly show with preciseness the handling of concepts and the instruments.

Successively we will study :

1 - The Units and the instruments

- Measurement of length.
- Measurement of area and land-measures
- Measurement of volume and capacity
- Measurement of weight
- Measurement of time and of angles
- Money
- Intensity

2 - Relevant Problems of application

- Calculation of distance : intervals, movements.
- Tonnage and density
- Calculation of volume
- Calculation of areas
- Plans, scale and maps
- Calculation of output
- Calculation on commodities
- Calculation of consumption

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B - Correspondence table : Weight, Volume, Capacity

D - NOTIONS OF MODERN MATHEMATICS

1 - Notions of sets and elements

- The sets N - Z - Q - R, definition in connotation and in extension
- expression and writing of sets
- Expression and writing in connotation
- Expression and writing in extension
- Representation of sets with the aid of Venn's diagrams
- Symbol of belonging and negation
- Equality of two elements
- Equality of two sets

2 - Notions of sub-sets

- Notion of inclusion : symbol
- Subsets of a set
- Finding the Subsets of a set
- Number of subsets of a set, application to the solving of some problems
- Complementary sub-sets, notion of reference
- Notation.

3 - Operations on sets

- Intersection - union - difference
- Partitioning of a set
- Cardinal of a set
- Product of two sets
- Cartesion product
- Sagital diagram and table
- Graph
- Notion of pairs

4 - Operations on sets

- Union of sets and numerical expressions
- Intersection or union
- From the union of disjoint sets to the sum of two numbers
- Finding the complement

N.B. - The notions of modern mathematics studied in this programme should begin with concrete examples taken from different areas of current and school life : laguague (Grammar), Nature (Geography, Botany, Zoology, etc), mathematics (Geometry, Arithmetic, etc).

From these examples one can envisage solutions of ~~equations, or inequalities~~. Each time, we will insist on the notions of diagram, symbols and properties.

Mathematics Programme for the 3rd year, and the one year of the Grade One Teacher Training Course.

A - ARITHMETIC

I - NUMERATION

1 - Whole numbers - Decimal numbers

-The Unit : definition and meaning
-The different systems of numeration - notion of base
-Decimal numeration and class of numbers
-Decimal numbers
-Writing of numbers - arabic figures, roman figures; separation of plain numbers.

2 - Fractions and mixed fractions

- Definition of fraction, meaning, terms ; simple fractions
- Decimal fraction
- Improper fractions - definition and meaning

3 - Comparison between quantities expressed by numbers

- The significance of the equality of two numbers - the sign and the consequence
- Inequality between two quantities, sign and consequence.

II - THE FOUR OPERATIONS

1 - Meaning of operations : addition, subtraction, multiplication and division

2 - Writing and reading convention relating to operative signs

- Setting an operation and reading it
- Writing a sequence of operations
- Use of brackets

.../...

3 - Tables of operations

- How to build a table of addition, of subtraction, of multiplication of dividion
- Knowlege of tables and comparison between them : consequences
- The square and the cube of numbers from 1 to 20.

4 - Pratical Operations

- The operative conventions
- The terms of operation
- Continuation of operations of the same kind - continuation of different operations
- Use of brackets - factorisation
- The rule of three - simplification
- L.C.M. and HCF : research and application in the simplification of fractions
- Radicals and square roots
- Operations on radicals, extraction of square roots in one unit, to one or two decimal places
- Various applications

III - ARITHMETICAL PROBLEMS

- Problems tending to discover one of the terms of an operation when the other terms are known.

VALUES

- From unitary value to global value
- Looking for the quality on knowing the unitary value and the global value.
- Purchase prise, cost price, selling price, profit, etc.
- Operation of the Saving Bank = capital, interest rate, time, etc.
- Proportion
- Equal proportion- unequal proportion - use of graphs
- Out-put
- The notion of out-put
- Calculation of out-put

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B - GEOMETRY

I - I - Geometrical tracing

- Definition of elements and of the fundamental figures in Euclidean geometry.

- Definition and manipulation of the principal instruments in geometrical drawing.

- Construction of parallel straight lines, perpendicular lines, the mediator of a segment.

- Drawing an angle using a protractor ; construction of an angle using a compass construction of the bi sector of an angle

- Construction of angles of 45 and 60 degrees

- Tracing the circumference, the elements of the circumference

- Drawing regular and irregular quadrilaterals, regular polygons in a circle (circumscribed polygons)

- Notions of a plane and the positions of a straight line in relation to a plane.

II - GEOMETRICAL CALCULATIONS

- Perimeters of regular figures : demonstration, formula - application

- Perimeter of the circumference ; the notion of time

- Volumes of cubes and of rectangular parallelepipeds, formula, application

- Volume of a sphere : formula and application

- Volume of a regular prism, the cone and the cylinder of revolution, formula and application, cubic capacity of wood.

III - PRACTICAL PROBLEMS

- Problems on segments sectors, area, the ways

- Calculation of irregular surfaces, state lands

- Calculations of solids : practical methods of calculating a solid of irregular shape.

C - THE METRIC SYSTEM

I - MEASUREMENT AND EVALUATION

- Notions of measurement and evaluation

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- Notions of units and unreal units
- Notions of the complex unit : pressure, speed and intensity
- Precision and error : their causes and their evaluation.

II - UNITS AND INSTRUMENTS OF MEASUREMENT AND EVALUATION

1 - Units and instruments : their knowledge and their manipulation.

In addition to these units and the effective measuring instruments already known to us and whose definitions we can recall as well as their constitutive principal and usage, we will pratise using complex measuring apparatus and to effect manipulations of precision in different fields. We shall demonstrate the meaning of this precision in calculations.

We shall thus study principally :

The palm-tree, slide rule and the the theodolite
The balance, the letter balance
Manometres, altimetres
Speedometres of vehicules, etc.
The study of monetary values that will permit the knowledge of the principal currecies and their relations (parities).

2 - Problems of Application

They will be linked to those of Geometry and Arithmetic and related to calculation of distances, intervals and displacements, tonnages of volumes and densities, areas. planes, scales and charts, duration, intensity, consumption, output, economic values and bank operations.

GENERAL CONCLUSIONS

The teaching of mathematics in teacher training classes will promote the acquisition of a presise mathematical language, correct conventional operative ways, sound habits of writing and reading of numbers and units of measurement. The working and presentation of solutions to problems in the exercise-book must be given close attention.

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One initiation in the keeping of simple accounts books the use of accounting machines will show the connection of this type of education with professional life.

These instructions do not offer programmes, they merely take up the current syllabuses which appear to be poorly taught or badly assimilated, judging from the results of the Teachers' Grade One and Grade Two written Examinations.

We wish to draw the attention of tutors in Teacher Training Colleges to the necessity of perfectly assimilating these syllabuses which the student-teachers will soon be called upon to teach in the primary school classes while awaiting the new syllabuses now being worked out in the Inspectorate General of Education.

YAOUNDE, 11 th JANUARY, 1[illegible]

THE MINISTER OF NATIONAL EDUCATION,

(Sgd) ADAMOU [illegible]

YAOUNDE, the 21ST OCTOBER 1980

Certified True Copy

The Director of Primary and Nursery Education

NDZINO JOSEPH

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G.T.T.C., BAMENDA.

SECOND TERM TEACHING PRACTICE - 1981.

INFORMATION TO THE STAFF.

1. The second term teaching practice for the 1980/81 session shall begin on Monday 23/2/81 and end on Friday 6/3/81.

2. Schools. Teaching Practice shall be conducted in Catholic School, Bayelle, Catholic School, Mankon (Girls), P.S. Ntamulung and C.B.C. School, Nkwen.

3. Supervision. (a) The tutors have been grouped for the supervision of the students as follows;

Group 1	Group 2	Group 3	Group 4
Mr. P. Mzeka *	Mr. A.F. Ndenge*	Mr. C.J. Salla*	Mr. A.A. Fombu *
Mr. M. Tangu	Mr. J. Manyong	Mrs. T.W. Layu	Miss C.K. Chinda
Mr. P.W. Nkabyo	Mr. S.A. Awasom	Mr. C.J. Ginti	Mr. Fonged

* Group Leader.

(b) Movement of staff from school to school is as follows:

Date	C.S. Bayelle	C.B.C.S. Nkwen	C.S. Mankon (Girls)	P.S. Ntamulung
23/2/81-25/2/81	Group 1	Group 2	Group 3	Group 4
25/2/81-27/2/81	4	1	2	3
2/3/81-4/3/81	3	4	1	2
4/3/81-6/3/81	2	3	4	1

(c) Mr. Neba-Fuh J. will take charge of practical P.E. in all schools. Messrs. J.C.Wanzie and J. A. Ngwa will evaluate pupils' books in all schools.

(d) Each tutor should see at least 8 students a day, and each student should be seen by all tutors in the group.

(e) The aim of this teaching practice is to guide and help these students who have not taught before to learn how to teach. You should therefore discuss the students' errors in a friendly atmosphere, and suggest ways of improvement.

4. Marking Lesson Notes. See information sheet to students attached. Discuss matter and method with the students in detail.

5. Grading Forms. These should be submitted to the Director of Studies daily by the group leaders.

J.A. Ngwa
Director of Studies.

Date: 4/2/81.

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G.C.E.C. BAMENDA.

End-of-Course Practical Examination.

May 11th - May 19th

Exam Schedule

1. Physical Education - 11th to 13th
2. Classroom Teaching - 13th to 15th
3. Orals - 18th to 19th.

School: Catholic School, Bayelle.

No.	Student	Grade	Class	Remarks
1.	Awi Raphael Nformi	TNI	6A	Asst. Headmaster
2.	Asaah Susan Ajah	"	6A	
3.	Chombeng Joseph B. Fuh	"	6B	Headmaster
4.	Nsairun Dorothy Bonayuyi	"	6C	
5.	Emeline Ending Njinimbam	"		
6.	Ita John Oben	"		
7.	Njob Maurice	"		
8.	Helen Timia Njinimbam	"		
9.	Matiga Christy Tita	"		
10.	Ncham Christopher Ghei	"	5B	
11.	Shey Denis Suwun	"	4A	
12.	Anna Ambang Vilahlayu	"	4B	
13.	Ashu Lucy Ebot	"	4B	
14.	Atem Obi Beatrice Ndum	"	4B	
15.	Betah Grace Puta	FNI	4C	
16.	Milla Ndifor Mathias	"	4C	
17.	Acha Rosaline Embell	"	3A	
18.	Ndosiri Esther Takwi	"	3A	
19.	Tanjong Roma Oliver	"	3B	
20.	Ngomesia Dorothy Bro	"	3B	

J.A. Ngwa
Director of Studies.

G.T.T.C. BAMENDA.

End-of-Course Practical Examination

May 11th - May 19th

Exam Schedule

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1. Physical Education - 11th to 13th
2. Classroom Teaching - 13th to 15th
3. Orals - 16th to 19th.

School: Catholic School Mankon (Girls').

No.	Student	Grade	Class	Remarks
1.	Anye Mary Matimamah	DNI	6A	Headmistress
2.	Ayimngeh Paul Achidi	"	6A	
3.	Chongwain Rose Ndim	"	6B	
4.	Kubri Suh Joseph	"	6B	
5.	Nchanji Moise Nfor	"	5A	
6.	Ndi Theresia Nyeng	"	5B	
7.	Tumenta Joseph Nsaryi	"	5B	Asst. Headmaster
8.	Fombo Ferdinand	"	5B	
9.	Nforchig Mbonge Lucy	DNIA	4A	
10.	Sopse Citoyen Michael	"	4A	
11.	Kashia Edia Colomba	"	4B	
12.	Mbunwe Polycarp Tantoh	"	4B	
13.	Ngamo Lucy Ngangum	"	3A	
14.	Yekabong Majoh Paul	"	3A	
15.	Nana Odilia Gemnwo	"	3B	
16.	Semoni John Fombutu	"	3B	
17.	Chi Lawrencia Wakonga	"	2A	
18.	Mbapoh Andrew	"	2A	
19.	Ndi Mary	"	2B	
20.	Nguesap Kenfac Margaret	"	2B	

J.A. Ngwa
Director of Studies.

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G.T.T.C. BUEA.

End-of-Course Practical Examination

May 11th - May 19th

Exam Schedule

1. Physical Education - 11th to 13th
2. Classroom Teaching - 13th to 15th
3. Orals - 18th to 19th.

School: Presbyterian School Ntamulung.

No.	Student	Grade	Class	Remarks
1.	Chu Martin Neba	FTI	6A	
2.	Tangwa Paul Nzelamonyuy	"	5A	
3.	Nchintuh Denis	"	5B	
4.	Gani Mirngo Blasius	"	5C	Asst. Headmaster
5.	Ambe Collins Paul Che	"	5A	
6.	Yongo Nchih Nichodemus	"	5A	
7.	Yai-Philips [illegible]	"	5C	
8.	Mbacham Lucas Mbah	"	5C	Headmaster
9.	Aloh Roland Lewis Anye	FTI	4	
10.	Gwanyalle Marilyn Lema	"	4A	
11.	Nde Samuel Che	"	4C	
12.	Yenyika Tvo Dine	"	4B	
13.	Ambuban Awamba N.	"	3A	
14.	Tafuh Martins Nche	"	3A	
15.	Ntaribo-Tataw Ayuk E.	"	3B	
16.	Charles Lwanga Mirsy	"	3B	
17.	Foutu Dah Gallus Nkwetta	"	2A	
18.	Maria Vivu Yufanyi	"	2A	
19.	Ngwaku Mathew	"	2B	
20.	Tabuwe Agnes Lum	"	2B	

J. A. Ngwa
Director of Studies.

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G.C.T.C. BAMENDA.

End-of-Course Practical Examination

May 11th - May 19th

Exam Schedule

1. Physical Education - 11th to 13th
2. Classroom Teaching - 13th to 15th
3. Orals - 18th to 19th.

School: C.T.C. Nkwen

No.	Student	Grade	Class	Remarks
1.	Amabo Peter Ngwa	FNI	6A	
2.	Blate Rosaline Bhumu	"	5A	
3.	Shu Manaseh Che	"	6B	Headmaster
4.	Banang Christine	"	6B	
5.	Nyongoben Jonas Besong	"	5A	
6.	Njei Grace Endam	"	5A	Asst. Headmaster
7.	Asang Julia Ngekwi	"	5B	
8.	Patrick Ntiekiang Tamagoh	"	5B	
9.	Akwaji Comfort Enono	FNIA	4A	
10.	Galega Chelimine Bola	"	4A	
11.	Nkenganyi Dorothy	"	4B	
12.	Njilin Thomas Tia	"	4B	
13.	Mforgham Dorothy Munue	"	3A	
14.	Tube Godlove Ngwa	"	3A	
15.	Nimba Susan	"	3B	
16.	Diangha Samuel Ndi	"	3B	
17.	Menyong Frida Chindo	"	2A	
18.	Jilla Lukong Vitalis	"	2A	
19.	Regina Nsangle	"	2B	
20.	Mforbekeoh Joseph Ambe	"	2B	

J.A. Ngwa
Director of Studies.

Technical Exhibit G 9: The Primary School Curriculum

- Suggested Primary Syllabus/Younde 18, 30th June, 1979 : Dr. A.N. Boma, Director of IPAR-Buea

- Information and Reflections on the Reform of Primary Education and Operational Strategies in Progress: A Paper Presented by Dr. A.N. Boma, Director IPAR-Buea, August 25, 1980

- Report on the Reform of Primary Education: Buea - April 1977

- In-service training plan for introducing primary school teachers and support staff (e.g., inspectors, provincial MINED representative) to primary education reform materials.

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IPAR-BUEA
INSTITUTE FOR THE REFORM OF PRIMARY EDUCATION

Report on the Reform of Primary Education

Buea - April 1977

PRINTED BY THE NATIONAL PRINTING PRESS ANNEX—BUEA

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TABLE OF CONTENTS

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PART ONE

FOREWORD
AND
ACKNOWLEDGEMENTS

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FOREWORD

The liberal arts curriculum which was inherited from the colonial masters and which prepared the nation's youth for white collar jobs in government departments and in other offices seems to have outlived its usefulness. Such education has stimulated a gravitation from rural areas to the towns, and since the supply of employment has never met the demand, many teenagers are faced with a life of squalid urban subsistence, an existence made even worse by their own contempt for manual work. In view of these phenomena it became clear that the educational system needed reform.

The Head of State, President Ahidjo, sharing this concern, called for the establishment of IPAR-Yaounde (Institut de Pédagogie Appliqée a Vocation Rurale) in April 1967 to consider ways and means of reforming education in the Francophone Provinces so that it would meet the needs of Cameroon, which is a predominantly rural country, over 80% of the population being involved in agricultural activities.

By the same token, since the educational problems of Anglophone Cameroon are similar to those of Francophone Cameroon in most respects, the Head of State in 1974 promulgated the setting up of IPAR-Buea, 'Institute for the Reform of Primary Education', and urged it to live up to its name.

Under Presidential Order No. 277/CAB/PR of 10th October, 1974, four sections were created at IPAR-Buea:

> Environmental Studies (*Agricultural and Social Aspects*), English Language, Mathematics, and Village Technology (*other-wise known as Intermediate Technology*).

These four sections worked out research strategies and then set about collecting data on which they then based their recommendation for reform. The process has been an arduous one since it involved each research team in extensive field work, data, analysis and interpretation.

IPAR-Buea did not at the outset have adequate staff and supporting services, factors which inevitably complicated the field research. Nevertheless, this final report has now been completed at the end of two years of research.

The creation of IPAR-Buea was a joint undertaking between the Cameroon Government and UNDP/UNESCO. The two parties provided both financial and human resources to set up the programme. Bi-lateral aid was also enlisted from the German Agency for Technical Co-operation (G.T.Z.) and the British Council. Experts from these bi-lateral and multi-lateral agencies worked in close co-operation with a team of Cameroonian nationals to carry out the research and to compile the respective sectional reports.

The focal thinking of the researchers and the central themes of the report are based on the premise that in Cameroon as in most developing countries education is determined by the level of economic development in the country. Equality of opportunity in education is very limited. As the school remains an alien institution in the rural areas, equal access and opportunity in education cannot be guaranteed. The schools are not fully integrated into the economic and social system because of the historical and other reasons alluded to above. The present high drop-out rate of pupils at primary school level may be a consequence of this. The traditionally autocratic character of the home is out of step with the integrative aims of the school.

The vast agricultural and rural potential of Cameroon implies many employment opportunities, yet education has not been related to these potential areas of employment. The Cameroon Government's concern about youth unemployment poses the question which the process of education reform must seek to answer. This does not imply that solving the unemployment problem is the only focus for reform. Education means more than mere employment and educational problems cannot be solved in isolation. A concerted effort on the part of all organs of government and of the private sector is required.

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It is a central theme of the report that education should take note of differences in students' abilities, their different environment, social and economic background. It is education which should seek ways and means of reducing these inequalities. It is envisaged that educational systems should be flexible enough for students to be given individual guidance.

To accomplish these aims the new kind of education must have a new structure. Such structural changes have been suggested in the report. These new structures will present a challenge to existing economic monopolies. Education should be based on the concept of community development. Education should:

1. Meet economic and social needs;
2. Promote equity, equality and justice;
3. Provide more open access to crucial selection processes;
4. Provide opportunity for further learning; and
5. Provide the necessary facilities for effective education.

If education caters for these needs, then the citizenry should be intelligent and industrious, healthy and happy, good-natured and upright, and in the final analysis exhibit good citizenship and lead a satisfying life.

The Cameroon environment is very varied, and schools should reflect the social contradictions of a given society. The high drop-out rate at primary school level could be considerably reduced if educational opportunities are diversified.

The President's call for a productive Cameroonian is seen in these words:

> 'The school of today, particularly in Africa, should not concern itself with producing bureaucrats and technocrats for whom outlets are steadily dwindling. It should draw young pupils' attention to the many opportunities open to them in the primary and secondary sectors. This is why at the Garoua Congress I put special emphasis on the need for the ruralization of education' [1].

He stated further that the dual objective of I.P.A.R. is that:

> 'the ruralised school should at one and the same time enable the best pupils to pursue their studies while the remaining bulk of the pupils will have to be integrated into working life, using the same curricula and methods in both town and country' [2].
>
> 'From now on, and until these reforms are introduced, I hereby call for the institution in all schools and University establishments of a Grand Prize for Manual Labour and the setting up wherever possible, especially in rual area and around the cities, of school farms, orchards and handicraft workshops...
>
> It is our educational system that, in an essentially agricultural country, must tie intellectual training to manual activities if the environment is to be effectively transformed' [3].

The I.P.A.R. report has in a way attempted to provide comprehensive solutions to our educational problems. These solutions converge around educational concepts which are characterized by the level of economic and social development in the country.

The report is factual because it is based on empirical evidence. Data relating to the educational system of Cameroon have been systematically collected, analysed, and interpreted to provide a basis for recommendations regarding educational reform at primary school level in Cameroon.

The purpose of the study was to investigate ways and means of reforming an educational system which tended to alienate young people from their environment, and to make appropriate recommendations to Government.

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[1] *Address by Head of State at the IPAR-Yaounde Graduation Ceremony, Yaounde, June, 1970*
[2] *Interim Report, 1967-1972*
[3] *President Ahidjo, June, 1975*

The main objective is seen as preparing pupils during their time in primary school in such a way that they become integrated into their communities as useful and productive members. The more detailed objectives of IPAR-Buea, which are common to each of the sub-sections, namely Mathematics, Arts & Crafts/Technology, English Language, and Environmental Studies, can be summarised as follows:

1. To recognize and define the problems;
2. To form hypotheses relating to the problems;
3. To gather data to test the hypotheses;
4. To carry out the analysis of data gained through appropriate research work;
5. To make recommendations based upon the findings;
6. To suggest ways of implementing the recommendations with regard to the reform of primary education.

The research procedures as outlined below are in general terms. Each of the sectional reports will reveal in detail the specific procedures and instruments used, and the reader is advised to consult these. Therefore the general procedure range from the employment of a purposive to a random sample for Arts & Crafts/Technology, Mathematics, English Language and Environmental Studies Sections.

The limitation of these procedures will be explained under the subheading of limitations as applicable in general and specific terms. The questions to which the respective sections addressed the research procedures will be summarily presented under each of the sections.

The scope of the study extended over the schools and communities of the North West and South West Provinces of the United Republic of Cameroon; the English Language Unit also collected information from the West Province as this area has undergone considerable Anglophone influence as a result of migration.

As in any venture of this size, there have been certain limitations with regard to finance since priorities have to be established on a nationwide basis. Another limitation is that the validity of the research findings is restricted to the population surveyed. In addition, such tangible limitations as lack of transport and petrol, stationery supplies, etc., must always be taken into account. Data analysis could not always be carried out locally because of its complex nature. Consequently some exercises were carried out in Germany where the necessary computer facilities exist.

Acknowledgement

The report on the reform of Primary Education in the United Republic of Cameroon has been submitted by the four sections of IPAR-Buea namely: Environmental Studies (Agricultural and Social Aspects), English Language, Mathematics, and Village Technology. However, the reports have now been carefully edited by the whole staff working as a team. They follow a common style of presentation in the hope that this will make the essentials of the individual reports more easily accessible to the reader.

If some parts of the report appear somewhat obscure, the intention is to stimulate the reader to form his or her own opinion and conclusions (because each section used its own research instruments collating the reports was not a simple task). Should the report have the effect of prompting the educational sector as a whole to undertake further empirical research then we believe that a step will have been taken towards meeting the needs of our education system.

We who contributed to the report take full responsibility for its mistakes and errors; we make no claim to infallibility. The researchers and IPAR-Buea as an institute are deeply indebted to the many respondents who cooperated so fully in providing the information which was used for the compiling of this report which has now been submitted to Government for analysis.

G.9.8.

The researchers also benefitted from the writings of several authors. Full references are given where direct citations have been used.

The following staff members who have participated in the research and compilation of the Report in the programme are listed in order of appointment:

1. Dr. S. N. Shu, National Director, January—June, 1974
2. Mr. K. Robinson, Chief Technical Adviser, (UNESCO), January, 1974—June, 1975
3. Dr. H. Bergmann, Environmental Studies (Agricultural Aspects), (German Agency for Technical Cooperation), January, 1974—continuing
4. Mr. U. Bude, Environmental Studies (Social Aspects), (German Agency for Technical Cooperation), January, 1974—continuing
5. Mr. V. J. Divine, Assistant Director—Environmental Studies Specialist, (Agricultural Aspects), July, 1974—December, 1976; Acting Director, January, 1977—continuing
6. Mr. J. T. Kajih, Assistant Director—Teacher Training, English Language Specialist, July 1974—continuing
7. Mr. G. T. Ashuntantang, Assistant Director—Research, Environmental Studies Specialist, (Social Aspects), July, 1974—continuing
8. Mr. I. Urbani, Mathematics Specialist, (UNESCO), September, 1974—July, 1975
9. Mrs. C. Chouvet, Translator, (UNESCO) September, 1974—June, 1975
10. Dr. A. N. Boma, National Director, October, 1974—December, 1976 (from January, 1977 on secondment to UNESCO as consultant)
11. Mr. M. Kelly, English Language Specialist, (British Council), December, 1974—August, 1976
12. Mr. R. Gwankobe, Village Technology Specialist, January, 1975—continuing
13. Miss R. Nsong, Village Technology Specialist, January, 1975—continuing
14. Mr. T. Yinkfu, Mathematics Specialist, January, 1975—continuing
15. Dr. T. Helms, Chief Technical Adivser, (UNESCO), September, 1975—August, 1976
16. Mr. H. Sharp, Village Technology Specialist, (UNESCO) September, 1975—November, 1976
17. Miss C. Taylor (International Voluntary Service, Great Britain), Language Section, September, 1975—June, 1976
18. Mr. H. P. Mandoli, Mathematics Specialist, Acting C.T.A., (UNESCO), January, 1976—continuing
19. Mr. G. Ndeby, Translator, (UNESCO), June 1976—continuing.

I should like to express on behalf of the Cameroon Government her profound appreciation for the contributions of the following multilateral and bi-lateral donor agencies who have supported the project in terms of experts, and financial and material resources: UNDP/UNESCO, the German Agency for Technical Co-operation (G.T.Z.) and the British Council.

January, 1977

Dr. A. N. Boma
DIRECTOR OF IPAR
BUEA

PART TWO

ABSTRACTS

Abstract of the Environmental Studies Report

The Environmental Studies Report is based on a large scale survey involving a stratified ransom sample of 79 communities and primary schools from both Anglophone Provinces of the United Republic of Cameroon. Enviromental Studies, the authors believe, should 'aim at socialising the individual by providing the knowledge and techniques to become aware of one's environment and of the problems and changes taking place within it, and—if possible and feasible—to act within the environment to improve conditions.'

However, the Report emphasises the extent to which the environment varies, even within Anglophone Cameroon, and it maps these differences by reference to three criteria:

— access of communities/schools to government and non-government services,

— ethnic composition, and

— land use systems.

Since children have to face different environments, it is the task of I.P.A.R. to spell out which knowledge, skills and attitudes the pupils should develop during the course of Environmental Studies.

The authors then review the current state of school farm work and propose a series of measures for improving it and for making it an integral part of Environmental Studies. They discuss the needs expressed by rural communities and outline a plan by which senior primary schools could orientate part of their teaching programme towards meeting such needs. A number of alternative approaches to reform are presented, ranging from those which imply the least to the most change in present educational structures. The authors' own preferred strategy would involve:

— setting up Education Resources Centres for teachers which fully reflect the needs of a particular local environment;

— improved supervisions and guidance of teachers by peripatetic rural science experts;

— reforming the examination system;

— changes in the practice of training and posting teachers;

— bringing community members with skills to offer into the school.

In a later chapter they present evidence on the drift of young people to the urban areas and show that farming figures low on the list of job aspirations of most school leavers. However, while making its own recommendations for reform, the Report stresses that young people will never stay on the land and the needs of rural communities will never be met unless government action is taken to tackle wider social problems, notably the need to reduce the discrepancy in public service between the urban and rural areas, and the similarly wide discrepancy in the financial rewards and status obtained by primary school leavers on the one hand and by those who complete secondary and higher education on the other hand.

The Report urges that local culture and traditions be intergrated into the school curriculum and, while acknowledging the difficulties involved, makes its own series of detailed proposals.

The research findings confirm the current low morale of the primary school teachers, their convictions that educational standards are falling rapidly and their hesitant attitude towards the reforms advocated by I.P.A.R.

In order to make the reform of primary education and in particular the teaching of Environmental Studies a viable proposition, some expenditure on equipment, materials, and improved school building is essential. The Report therefore concludes by assessing the extent of the expenditure involved and the part which local communities could be asked to play if they were first convinced that the proposed reform would really benefit their children's life-chances.

G9.18.

Abstract of the Arts and Crafts/Technology Report

The Arts and Crafts/Technology team expresses concern that the existing primary school curriculum is not sufficient work-oriented with the result that students leaving school do not possess the necessary basic skills and attitudes which will enable them to find a place in and make a productive contribution to either the rural or urban economy.

Previous attemps to resolve this problem by the inclusion of manual activities in the school programme have been generally unsuccessful. Inappropriate training and equipment and objectives; shortage of materials; insufficient intergration with and support by the community; inadequate administrative support and follow-up, etc. have contributed to past failures to sustain and develop a meaningful programme of activities. However research shows that the major cause of the problem is the attitude of teachers themselves who are still generally committed to the "Ideal of a classical education embracing the Greek ideas of practical and experimental knowledge and of manual work as inferior to mental"[1] with the consequences we see today.

The aims of the Arts and Crafts/Technology team are to develop a programme of craft activities relevant to the needs of the individual and his community, to develop a more positive attitude towards craft education and its implication in terms of economic development on the part of the teacher, and to investigate the possibility of establishing small-scale village industries for school leavers.

An extensive and detailed survey has been carried out in North West and South West Provinces since early 1975 to find out which crafts are being practised, who the craftsmen and women are; their sources of materials; techniques; marketing arrangements etc.

Experimental work in connection with the development of village technology has been instituted. Feasibility trials of selected crafts are currently being carried out in various schools. In the course of the research the team noted that there were few specialist craft teachers in primary schools but that where children had the opportunity, and particularly where expert instructions was available, their enthusiasm for craftwork was apparent.

The team recommends that Arts and Crafts/Technology (which term includes the Arts and Technology teaching of domestic arts as well as traditional and contemporary crafts and technology) will be included in the reformed curriculum and that the syllabus be pursued by boys and girls for not less than 120 minutes weekly. The team further recommends that every senior primary school has a specialist teacher capable of teaching all aspects of the subject, supported by local craftsmen and other persons willing to offer their advice and assistance to the school.

Initial financial and material support will be required to establish the new programme together with in-service training of selected teachers. It is assumed that the support of the Provincial Delegates for Education can be relied on in helping to bring these proposals to fruition.

Abstract of the Mathematics Report

The Mathematics Report is based on a series of investigations involving primary school teachers, teacher trainers, pre-school children and primary school children, syllabi (both in current use and proposed) and examination results of the 1976 First School Leaving Certificate Examination. The study involved primarily the two Anglophone Provinces of the United Republic of Cameroon and the sample varied with each investigation.

[1] Fyrth, H. J., and Goldsmith, M., *Science History and Technology Book* 1, Cassell, London 1965, *p. 42.*

The major task as envisioned by the authors was to examine the existing state of mathematics education in the two Anglophone Provinces, analyse proposals and inputs for revision of the syllabi and begin the formation of a student profile. The ultimate objective was to propose a tentative syllabus in which "the Cameroonian child acquires a sound mathematics background through the problem solving approach which will aid him in being a useful and productive citizen whether he continues his education or seeks employment in the rural or urban sector" and which is "based on an involvement with real life situations (so that the child is better able to understand the world around him in concrete and abstract mathematical terms)."

In general terms the findings indicated that the present mathematics programmes do not contain consistent objectives and direction, the contents of the syllabi are varied and lack a core structure, the programmes do not appear to meet the needs nor reflect the background experiences of the children, and there is a lack of continuing guidance and direction offered to the teachers in terms of guide books and training in mathematics methodology.

From the general findings, the authors have submitted recommendations for the formation of a uniform primary school syllabus, for a programme of pre-service and inservice teacher training, for continuing research and trial testing of the proposed syllabus, and for continuing research on children in order to formulate a student profile. The authors have submitted a tentative skeletal proposal of a syllabus with accompanying behavioural objectives. It is to be noted that this proposal is not considered absolute nor complete. It is merely intended as an outline from which trial testing and modification in line with on-going research findings can be conducted.

The Report concludes with suggestions of further actions which the authors felt must be embarked upon in order to create a relevant teaching and learning situation in the primary school mathematics programme.

Abstract of the Language Section Report

English Language is used both as a subject and as a vehicle of other Primary School subjects in the Anglophone Primary Schools and Teacher Training Colleges. English is one of the official languages of Cameroon in the Cameroon Parliament and Administration throughout the Republic.

The burden and tension thrown on the Cameroonian child and teacher by an exclusive demand for an official language-medium instruction from the beginning of Primary School may have adverse effects on standards of achievement, morals, and integration with the local culture, within the school setting. The mother tongue could serve a useful purpose as a medium in the early years of schooling.

The current Evans Primary English Course by J. C. Gagg appears to be inadequate in terms of quality and of quantity. The course consists of many supplementary booklets which are rarely purchased as well as of basic textbooks acquired by only some of the pupils due to cost.

Research was carried out to improve on the existing course by incorporating cultural data from the environment so as to have a relevant and meaningful language course as well as provide adequate content with appropriate vocabulary and structures. Subject specific language was collected to serve the language needs of other disciplines at IPAR-Buea *viz* Environmental Studies, Arts and Crafts/Technology and Mathematics in an integrated approach.

Guidance has been gained from second Language English Courses in use in other Independent African countries where cultural materials have been incorporated into the course.

The section did more exploratory field research using the language map of Cameroon than library research. Schools and communities were visited in the language areas chosen and questionnaires were given in writing and orally to children and adult respondents. Class 7 children

G.9.B

in the terminal classes of the Primary Schools were used in the Anglophone Provinces while cours Moyen Deux pupils were used in the Francophone Western Province to elicit local vernacular lore, riddles, proverbs, songs and rhymes etc. Native speaking adults and other local resource personnel were used to explain orally, in the mother tongue the task demanded of the children, community chiefs, councellors, Parent-Teacher Associations, and members of cultural groups were visited in the areas where selected schools were located.

Material collected from the field was processed for subsequent use as language material. Children's competence in English was tested before experimental exercises were introduced into the experimental schools. Seventy exercises were designed and worked through with pupils in class seven of five experimental schools. Material collected in French in the Western Province was translated into Englsih for use in the experimental exercises.

Continued research should be carried out in Phase II while feasibility trials, modification of exercises and content writing are in progress. The integrated approach should be employed so that language vocabulary can be built round the various disciplines.

G.9. 14

INFORMATION AND REFLECTIONS ON THE REFORM OF PRIMARY EDUCATION AND OPERATIONAL STRATEGIES IN PROGRESS

A Paper Presented

by

Dr. A. N. Boma
Director
IPAR-Buea

25 August 1980

6.9.15

INFORMATION AND REFLECTIONS ON THE REFORM OF PRIMARY EDUCATION AND OPERATIONAL STRATEGIES IN PROGRESS

Permit me to begin this presentation by saying that, in my opinion, the reform of primary education may seem to be a nightmare--but only to those who are mesmerised by the thought that it is accomplishable solely by pronouncement or through rubber stamp techniques. Today we are talking about reflections and the formation of strategies in the reform. To some in this audience, the theme may be new. To those of us who have had prolonged acquaintance with educational reform in Cameroon, it may appear as a vindication of efforts made. For the benefit of the "knowing" and the"don't knows," the author would like to restate some background information which is considered pertinent to an exposition of such a broad-based theme. There is no doubt that many members of this audience are acutely unaware of what has and is taking place, to the extent that one frequently hears the question, "What about the reform?"

My colleague, the Director of IPAR-Yaounde, has already presented a paper on the establishment of that institution and the ancillary activities. I should not deny him the sole authorship of his exposition, while I confine this presentation to the work of IPAR-Buea where my knowledge of the subject can be regarded as authentic. Perhaps it would be well to preface this summary with a historical sketch of IPAR-Buea. First, one must acknowledge the fact that the problems of educational reform in Cameroon, while general in nature, also have environmental implications characterised by the post-colonial system of education, the economic advancement of the environment, the dominant agro-pastoral nature of the country, and the scholarisation potential.

During the post-colonial period, the Cameroonian educationists and decision makers who were concerned with the plight of youth, questioned what sort of future the sophisticated liberal arts education offered in a country which had been plagued by ignorance, disease, poverty, tribal divisions, and alienations. Their prognostications of the future of the youth of Cameroon lay bare the anatomy of the educational system insofar as it had failed to meet their societal and individual needs. In a previous report, this speaker advanced these views:

> "The liberal arts curriculum which was inherited from the colonial masters and which prepared the nation's youth for white collar jobs in government departments and in other offices seems to have outlived its usefulness. Such education had stimulated a gravitation from rural areas to the towns, and since the supply of employment has never met the demand, many teenagers are faced with a life of squalid urban subsistence, an existence made even worse by their own contempt for manual work. In view of these phenomena it became clear that the educational system needed reform. . . .
>
> "The vast agricultural and rural potential of Cameroon implies many employment opportunities, yet education has not been related to these potential areas of employment. The Cameroon Government's concern about

youth unemployment poses the question which the process of education reform must seek to answer. This does not imply that solving the unemployment problem is the only focus for reform. Education means more than mere employment and educational problems cannot be solved in isolation. A concerted effort on the part of all organs of government and of the private sector is required."[1]

Our Head of State, President Amadou Ahidjo, whose preoccupation has been geared toward economic, social, and political development of the country, put it in black and white when he authorised IPAR-Buea, by Presidential Decree No. 277/CAB/PR:

a) Under Presidential Order No. 277/CAB/PR of 10th October, 1974 four sections were created at IPAR-Buea: Environmental Studies (Agricultural and Social Aspects), English Language, Mathematics, and Village Technology (otherwise known as Intermediate Technology).

b) The creation of IPAR-Buea was a joint undertaking between the Cameroon Government and UNDP/UNESCO. The two parties provided both financial and human resources to set up the programme. Bi-lateral aid was also enlisted from the German Agency for Technical Cooperation (G.T.Z.) and the British Council. Experts from these bi-lateral and multi-lateral agencies worked in close cooperation with a team of Cameroonian nationals to carry out the research and to compile the respective sectional reports.

The process of the reform was preceded by research in order to make a situational analysis of the educational system and of the rural environment, so that an empirical system of evidence would evolve to provide a basis for sound reform strategies and implementation. The field research, in this instance that of IPAR-Buea, was completed in two years. Another year was spent on data analysis and the write-up of the report which was submitted to the Government in 1977. One would like to think that the report represented at least the beginning of serious considerations as to how to best proceed with the enormous task of reform. How many here have read the report? Although many of us may talk educational philosophy, even philosophers cannot hope to perform effectively if they do not interact with each other, using the empirical evidence available in formulating a design to copp with field problems. Much remains to be done to capitalize on some of the promising and provocative suggestions contained in that report. The specialized studies and recommendations which formed the framework of the project gave rise to several meetings, seminars and workshops reflecting and defining strategies for the implementation of the reform.

Effects at the Level of the Ministry of National Education

In evidence of the Minister's concern to implement the reform, several workshops and seminars have been conducted in Yaounde to define and understand the nature and form of the educational reform needed. In April 1977, a national seminar was held in Yaounde to establish timetables, programmes, and strategies for the training and retraining of teachers.

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[1] Dr. A. N. Boma, Director of IPAR-Buea, REPORT ON THE REFORM OF PRIMARY EDUCATION, Buea, April, 1977.

In October 1977, the Inspecteur Generale de Pedagogie met with the staff of IPAR-Buea and G.T.T.C.-Kumba. New programmes at the T.T.C. were proposed, based on the recommendations of IPAR-Buea. Efforts were made to integrate these new programmes with the "Operation Bilingualism"—CREFOB. G.T.T.C.-Kumba was placed at the disposal of IPAR-Buea as an "experimentation station" for new materials.

In January 1979, a tripartite review meeting was held in Buea to try to formulate a plan for action in the reform of primary education.

On the 6th of March 1979, the Honourable Minister of National Education summoned a meeting of educational personnel and experts to consider ways and means, i.e., strategies for implementation of educational reform at the primary school level in Cameroon. The meeting, chaired by the Inspecteur Generale de Pedagogie, reviewed a working document which had earlier been developed and circulated for study. After deliberating on the documents, four committees were set up, namely:

a) The committee for syllabuses (programmes)
b) The committee for the training of teachers (pre-service)
c) The committee for the training of teachers (in-service)
d) The committee for the production of educational materials.

In June 1979, a meeting was held at IPAR-Yaounde to ratify the syllabuses that had been developed from 1977-1979. These were [illegible]ly examined and agreed upon for use in primary schools, within a six-year [illegible] in Cameroon. They were to have been translated into both French and English and circulated, however to this date, the exercise does not seem to have been accomplished.

Effects at the Level of IPAR-Buea

Since the establishment of the two IPAR's (IPAR-Yaounde and IPAR-Buea) is differentiated by the varying dates of inception, social and environmental backgrounds, financial, and human capacities, it is only fair to expect differing methods and means of application or implementation of the reform strategies. At IPAR-Buea, activities have been pursued with a minimum of professional and material resources. An attempt to turn theory into practice only compromises the theoretical insights. These activities are vigorous and intelligent and demonstrate a capacity to initiate reform strategies without deterring the educational system as a whole. To the extent that the reform has been an ongoing activity, this unobtrusive report is now manifested so that the audience may be acquainted with what has transpired since the submission of the initial report in April 1977. These activities have involved a sensitizing of teachers and teacher trainers and the community at large. Whatever lines of action IPAR-Buea has adopted are based on the suggested reform programmes. When one course of action is chosen in preference to another, it is done because there is reason to believe that it offers a better potential for realization of the reform. Every section of IPAR-Buea has been involved in the conducting of seminars and in the production of educational materials. A summary of these activities includes the following—

In April 1977, IPAR submitted its final research report to the Government. IPAR also prepared syllabuses in mathematics; arts, crafts, and technology; and in English; for discussion at a national level. These syllabuses were envisaged for the six-year primary school cycle.

In February, 1978, the Environmental Studies section, in collaboration with other sections of IPAR, conducted a seminar on the Mile 17 Farm Project (The Maize Farm), applying the integrated approach in the training of teachers. About 60 participants, including farm masters, headmasters, inspectors of education, and the Provincial Delegates of the North West and South West Provinces were involved. The purpose of the seminar was to train the participants in using the school farm as an outdoor educational laboratory and to present IPAR-Buea's methodologies in teaching.

Weekly classes were held in the afternoons for teachers until June 1978 in Buea in the disciplines of mathematics and language while involving other sectors. The turnout was about 30 teachers who registered on a voluntary basis. Lessons were aimed primarily at the introduction of the CAMFEM course (Cameroon Primary English as a Medium). There were radio programmes by all sectors of IPAR explaining the activities.

In June 1978, the mathematics section staged a seminar at Mutengene. This seminar involved contributions from other sections of IPAR, especially the arts, crafts, and technology section. During the seminar, 29 mathematics competencies were selected to promote the teaching of mathematics in respective school localities. A news bulletin was initiated.

Also, in June 1978, the English Language section staged a seminar in Bamenda and one in Banso. The teachers participated on a voluntary basis. The purpose was to train interested teachers in the newly drafted CAMFEM course and to refresh teachers on the principles of education.

In July 1978, there was a second Environmental Studies seminar involving about 150 participants in the primary sector. These included inspectors of schools, headmasters, and farm masters. There were sectional contributions by IPAR members. The seminar was to train the participants in the Environmental Studies approach as well as to assist the farm masters in the establishment of school farms.

In August and September 1978, IPAR-Buea prepared an action plan which was submitted to the Ministry of National Education for consideration. The purpose of the plan was to outline the proposals and processes in materials production for implementation of the reform.

In October 1978, continued field trials were staged by the English Language section to test the Year One CAMFEM course in selected primary schools within the Buea area. Three schools (six classes) were selected for this purpose. Tryouts were evaluated by the English Language Adviser (British Council) and by IPAR staff under the direction of the sub-director for teacher training.

In May 1979, the Inspecteur Gencrale de Pedagogie, recognising the need to review the syllabuses that were compiled in May 1977 because of certain defects in

content, commissioned the staff of IPAR-Buea to prepare a syllabus in all subject areas as approved during the workshop held in Yaounde in March 1979. The staff of IPAR-Buea worked assiduously to produce the syllabus which was submitted in June/July to seminarists at IPAR-Yaounde for ratification. General approval of the syllabus was given and it was to have been compiled, translated, and distributed. The traditional classifactory system of subject matter was very much advocated and compromised but the actual compilation, translation, and distribution is still awaited.

In July 1979, IPAR-Buea forged ahead and began developing teachers guides for Year One in all the approved disciplines, following the tentatively adopted syllabus. These materials were field tested in several pilot schools within the Buea and Bamenda vicinities. The guides were fully discussed with the teachers and headmasters in the pilot schools. Successive formative evaluations led to the compilation of a composite teachers guide for Year One.

The preparation of teachers guides for Year Two, Term One, has been completed and, as was done for the introduction of the Year One guides, a briefing meeting will be held for the teachers in the pilot schools to ensure the effective utilization of the guides.

To assess the influences of these guides, as well as to gather information as to the effective utilization of the materials being tried out, and to determine what succeeds best and with what limitations, evaluation forms were given to the teachers on which they might make feedback comments. The utilization of materials and the subsequent evaluation of the guides has been done under the direction of IPAR staff.

Spread Effects:

Happily, there appears to be a growing appreciation of the work of IPAR-Buea, at both the national and international levels. What are some discernible spread or multiplying effects? The work of the specific departments of IPAR-Buea and the results seen are gratifying in themselves. All these spread actions set the pace for future activities. None can be treated in isolation in a simple minded manner.

English Language:

IPAR-Buea has already produced Years One and Two of the English language course for teachers and pupils, known as CAMPEM (Cameroon Primary English as a Medium) course. The notion behind the development of CAMPEM is vested in such facts as listening, speaking, reading, and writing. The elements are drawn from local situations so as to enrich the classical use of words, as well as to create an interest in and awareness of cultural situations. The course, rich in nature, carries the uniqueness of the Cameroonian situation. It is not inferior to existing courses. To minimize the effect would be to deny the Cameroonian child what is functional within the school and after school life.

Year One covers a vocabulary of about 706 words and Year Two covers a vocabulary of about 375 words, progressively giving the primary school pupil a functional vocabulary of at least 3500 words at the end of the 6th year. The emphasis of each year's

course lies in its integrative nature since the child is expected to learn from real life situations before proceeding to abstractions. For the teacher, the course advocates the DSS approach (Direct method, Substitutional principle, and Situational approach). The procedures are explained adequately in the CAMPEM course for teachers. The child's learning is to be achieved through the play method, rhymes, stories, dialogues, and action games. All of these global items are based on the local culture and relevant school activities. Besides the global items, there are listening and speaking exercises, pre-writing, and breathing exercises which are conducted in a rhythmic sequence, thus adding much activity to the written exercises. The language elements including the poems and recital activities have been effectively and enthusiastically used. The teacher training college at Kumba has shown a great interest in this programme and has procured copies of the CAMPEM course for use with the student teachers. Ex-students from the college who are now teaching and who were introduced to the course while attending the training college have applied the techniques in their classes.

Agriculture Aspects: The success of the scheme known as IPAR-Buea school farm loan was started with six schools. This scheme was received with overwhelming joy and approval by teachers, students, and parent-teacher associations. Currently the number of schools participating has grown from 6 to 45 in the North West and South West Provinces. The revolving loan fund provides input to the individual schools for improvement or establishment of school farms. The success of the scheme is evident in the fact that three of the participating schools have won the Head of State's prizes for manual work. The expansion of the scheme results in funds from the repaid loans being given to other deserving schools that show an interest in and a capacity for agricultural work.

The Mile 17 IPAR Farm Project: Another project which involves the students of G.T.T.C.-Kumba is at Mile 17 where a separate programme has been designed for classes 5, 6, and 7 in Agriculture. Four schools near to Mile 17 were selected—Government School, Molyko; Government School, Muea; Catholic School, Muea; and C.B.C. School, Bolifamba. All class 5 students from all four schools come on the same day of the week, while class 6 students come the following week, and class 7 students the next week. The process is repeated with class 5, and so on. Lessons in Agriculture are delivered to the pupils in the demonstration farm classroom. Some lessons are presented by student-teachers from G.T.T.C.-Kumba, using prepared materials which had been produced at IPAR-Buea. Their delivery of the lesson was evaluated by their colleagues and by IPAR staff and other teachers present.

Mile 17 farm is used by students as a laboratory for science education and crop production techniques. The students, staff, pupils, and teachers have found this project to be valuable. The participating schools have benefited from the IPAR seed distribution scheme. School farms have adopted improved methods of cultivation. Because of the evident success of the Mile 17 project, a similar project is envisioned to be attached to G.T.T.C.-Bamenda, after it has been approved by the Ministry and the necessary financial arrangements have been completed.

Mathematics: The "two-step" multiplier training scheme adopted by the mathematics section is considered to be successful by the respective Provincial Delegates of Education. Results from the field show that the field competencies who were trained at Mutengene seminar have organised local seminars in the teaching of Maths in their local school districts. After discussion with staff at the Teacher Training College in Kumba and officials in the Ministry of Education, Yaounde, it was agreed that IPAR-Buea should introduce and operate new programmes in the college. The residual effect of this is reflected in the nature of Maths programmes in the college as well as in the favourable reaction to the materials being used.

Arts, Crafts, and Technology: In G.T.T.C.-Kumba, the programme for arts and crafts technology, including an evaluation model, has been designed, circulated, and discussed. The programme for crafts production of IPAR-Buea has been used in schools and by communities, e.g., tie-dye, bead work, etc. The notion of low cost/no cost activities has been inculcated in the schools to the extent that some are recycling waste materials such as, using saw dust and waste paper to produce notice boards, using discarded foil to make table mats, etc.

The NORDIC/IPAR-Buea Meeting: In June/July 1979, a 2-week meeting was held in Buea, attended by 11 visitors from four Nordic countries, by the IPAR staff, and other educationists. In a publication entitled EDUCATION AND SELF RELIANCE, the meeting and the IPAR-Buea programmes were acclaimed by the Nordics as excellent. The visitation was sponsored by UNESCO and other agencies. The document mentioned bears testimony to the fact that some ideas acquired in the meeting are considered worthy of emulation in the educational systems of the Nordic countries.

Training and Retraining of Teachers (Formation et du Recyclage): The section for training and retraining of teachers at IPAR-Buea has involved seminars for teachers in pilot schools around Buea and in supplying teacher guides to the Teacher Training Colleges. Since 1977, when a national syllabus was prepared, IPAR-Buea has been involved in:

a) Discussion of teacher guides and materials with headmasters of 8 pilot schools in conference room at IPAR-Buea.

b) Distribution of materials for Class One teachers through headmasters for briefing and for detailed study.

A meeting was held with Class One teachers to discuss Term 1 materials during the first week of the 1979/80 school year and evaluation forms were distributed so feedback could be obtained. Staff from IPAR-Buea visited the pilot schools to assist teachers and to collect and discuss the evaluation forms from time to time. Evaluation forms were studied for modification of the guides. This process was repeated during the 2nd and 3rd terms. A composite teacher guide for Class One for the entire school year has now been prepared which will be used on a larger scale for tryout in schools throughout the North West and South West Provinces.

Another phase of the training/retraining has been with students of G.T.T.C.-Kumba and Bamenda involving students of ENI and ENIA. At St. Piux, Tatum, only ENIA students are involved. Prepared teacher guides for Year One have been supplied to

these three teacher training colleges along with copies of CAMPEM One. The teachers discuss these materials with students who then use them in practising schools. There are two permanent IPAR staff members at G.T.T.C.-Kumba for the CAMPEM course. The English Language Teaching Adviser and Pedagogic Adviser at the Delegation for Education, North West Province, assist in this work at G.T.T.C.-Bamenda and at St. Pius-Tatum. Feedback has been given IPAR-Buea from all these sources. A great problem is in providing transport and per diem for staff to travel outside Buea to assist with and to evaluate the programmes. The guides for Class One have been used experimentally in a number of pilot schools in both Provinces so the present modified composite guide caters for a cross section of the schools in which further tryouts will take place.

Production of Pedagogic Materials: A crucial feature of the reform in education is the production of pedagogic materials. These materials have been produced purely on the initiative of the IPAR-Buea staff. The existing list is by no means exhaustive but suffice it to make the point that the staff is constantly seeking ways and means of remedying the shortage of pedagogic materials. Various sections have continued to be involved in their production in the areas of their specialisations.

English Language

1) CAMPEM, Year One
2) CAMPEM, Year Two
3) Notes on the principles of animation for teacher training
4) Large wall sheets to teach the global units of the books
5) Packets of cards and shapes to serve as pre-reading materials
6) Plywood boards to serve as easily handled teaching aids, etc.

Mathematics:

1) Primary Mathematics Syllabus
2) Comments on IPAR-Yaounde Mathematics Syllabus
3) The Maize Farm Plot, sample units on integrated mathematics
4) Sample Teaching Modules for Primary One
5) Resource Handbook for Teachers of Primary Mathematics
6) Drill and Its Role in the Teaching of Mathematics
7) Ideas for Making Aids in the Teaching of Mathematics
8) Inductive or Discovery Teaching in Mathematics
9) Papers for internal distribution and discussion relating to the methodology of developing integrated units, reflections on the interpretation of the term integration, and an attempt to show how to relate the curriculum and conditions of development.
10) Hectograph (duplicating device)
11) Hanging wall graph
12) Cloth working charts for teaching place value and operations in various bases
13) Apparatus for surveying--cross staff, angle finder, metre stick, trundle wheel
14) Aids for place value from nails and bottle tops, abacus, maize counters, and a variety of sorting equipment produced from local materials
15) Plywood for tangrams, fractions, and balance beams
16) Cane hoops for teaching sets
17) Local indoor playing games (Mbang)

Village Technology (Arts and Crafts)

1) Primary Arts/Crafts Syllabus
2) Tie/Dye Designs
3) Tie/Dye Crayons
4) Macrame
5) Doll making
6) Charts portraying balanced diets, utilizing locally produced foods.

7) Ragwork
8) Cornhusk articles
9) Beadwork
10) Fabric pictures
11) Paper construction
12) Grater
13) Thumb piano
14) Screwpine weaving
15) Sisal work

Environmental Studies

1) Syllabus for Agriculture, Nature Study and Observational Science, Hygiend and Sanitation, Morals Education, History, Geography, and Civics.
2) Community questionnaire for teachers
3) Measuring a local farm plot
4) Observation of yam growth
5) Evaluation of an agricultural experiment, e.g., pineapple farming
6) Koffa, the Story of a Community
7) Lesson notes on survey of farm plots (The use of the plane table)
8) Lesson notes, The Maize Harvest
9) What's Environmental Studies?
10) The work of a district officer
11) Food Taboos in Banyang Area
12) Farming Becomes Easier
13) Experimental Work on the School Farm
14) Involving Teachers in the Development of Curriculum Units
15) Community stories for Primary School Teaching in Cameroon
16) The IPAR-Buea School Farm Scheme
17) General guidlines for school agriculture
18) The integrated approach to school farm work
19) Crop calendar
20) Yam growing in Banyang area.
21) Traditional rites associated with the planting of Maize in Bali
22) Maize harvest with a difference
23) Tests on cultivation of yams, maize, pineapple
24) The use of farm records in teaching
25) Community stories: Kumbo, Obang, Victoria, Ngusi, Esoki Binn
26) Charts and maps

The artist-illustrators complement the themes of all the sections of IPAR, producing meaningful sketches and diagrammes.

EVALUATIVE COMMENTS

Since its inception, the research work and its results at IPAR-Buea have received recognition and have been acclaimed both nationally and internationally. This is attested to by the many messages IPAR-Buea has received, such as:

National:

1) Adamou Ndam Njoya, Minister of National Education (8 June 1978) "I appreciate the good work which is done in IPAR and should do my best to contribute to the further development of this activity which will contribute to develop the Cameroonian identity."

2) Dr. Mrs. D. L. Njeuma (3 June 1976) "Much work and reflection has gone into the work at IPAR Buea. The original ideas developed here should spread to the schools. I wish I had more time for a more detailed and less rushed visit." (17 March 1978) "The work in Buea continues to be very impressive. Keep it up."

3) Etongo Ndzengue Celestin (Chef de Division de la Planification MINEDUC) "Les initiatives, de votre institut assaient definitivement notre conviction en la possibilité de sortir du sous developpment sans attendre des comes colosales. Cette expérience a en plus le mérite de l'enracinement culturel. Bon courage."

4) A. Ndam Njoya, Minister of National Education (4 June 1980) "I would like to congratulate your team about the work which has been done in the field of experimentation for the Reform of primary education. From the beginning of next school year, any further plan for implementation of the Reform will have to be applied on a nation-wide scale. All instructions will come in due time from my Ministry."

5) M. Ndzinc Joseph, Director of Primary and Nursery Education, Yaounde (17 June 1980) "I am happy for this visit which permits me to see the very interesting work done by IPAR Buea. Please the staff receive my congratulations."

International:

6) Ravindra Dave IIEP, UNESCO, 75016 Paris. "The innovative and fundamental work being done by IPAR Buea is indeed excellent. This work has the potentiality to bring about educational regeneration in the country."

7) E. Sola Ogunseye, Secretary, Nigerian Educational Research Council, Lagos: "We have read the report with interest and found the wealth of the information therein very stimulating. As you are probably aware that our country is also currently trying to resolve the educational problems arising from the colonial/missionary type of curriculum bequeathed us. Hence we have been able to derive much inspiration from your report. We, however, observed that Religion was relegated to the background in your report. This is probably the only aspect that distinguishes your primary education curriculum from that designed for Nigerian schools."

8) Prof. Dr. W. Neville Postlethwaite, Department of Comparative Education, University of Hamburg (15 July 1977) "May I congratulate you and other members of IPAR Buea on such thorough research and on formulating your solutions for reform so carefully and based on such a wealth of information. The hard work you did was fantastic. What you have achieved is a model to all other countries. Of course, everyone will now be watching Cameroon very carefully to see what decision your politicians now take. For anyone interested in systematic curriculum development, this report makes fascinating reading."

9) Von Malsen, Ambassade de la Rep. Federale d'Allemagne (14 July 1977) "It is my very strong impression that the immense value of the report consists in the detailed observations of the concrete situation in African rural communities as well as in the equally concrete conclusions based on these findings, particularly those concerning the maintenance of traditional values as a part of new developments. As far as I can see, all these recommendations are valid not only for the Anglophone Provinces of Cameroon but for many African countries facing similar problems of adapting their rural and socio-economic structures to their economic needs."

10) Hugh Hawes, 1979, CURRICULUM AND REALITY IN AFRICAN PRIMARY SCHOOLS, Longman Group Ltd., Britain: "There can be no question that the project marks an important landmark in curriculum planning in Africa."

11) Roger Ircdale, Education Advisor, Overseas Development Administration, London (13 February 1980) "I am extremely grateful for this opportunity to visit such an exciting institution where the dedication of the staff to their professional interests is clearly transmitted by their spontaneity and enthusiasm."

12) The Hebrew University is already seeking cooperation with IPAR-Buea because of the commonality of ideologies.

These reflections are significant only in the hope that the Cameroon government will not let the momentum that has been gained go down the drain. The reflections offer reasonably numerous opportunities for achieving major advances, such as have been identified by these experts.

WHERE DO WE GO FROM HERE?

In accordance with well regarded academic and professional knowledge, a reform goes through several logical steps which cannot be by-passed. These involve:

a) Deciding on the objectives of education
b) Deciding on the content
c) Deciding on impart
d) Determining the capacity and effectiveness of impart
e) Making essential modifications

Simplified, this means that until we know what to teach, we cannot train teachers. Let's be careful that we do not "put the cart before the horse."

One important fact is assumed—If the organisation for impart has been proven effective, then the production of textbooks will emanate from existing materials complemented by the production structures. The production of textbooks and reference materials should be based on the needs of the consumer clientele, in this instance, the pupils and the teachers. Most African countries are exercising frugality in the production of textbooks by organising writing workshops. This is to ensure the relevance of materials as well as to conserve the scarce financial resources. This effort has enjoyed great success.

To obtain full freedom and qualitative education for our children, a judicious selection of textbooks should be conducted by education specialists after testing and evaluating the books. Books should be produced to meet the needs of children rather than moulding the children to fit the textbooks. We have much to learn from the experiences of other African countries in dealing with several problems.

NEW DIRECTIONS

Evidently, any new reform must see these prognostic statements as philosophies, not as a vogue. The epistimological component for the reform emanates from the empirical evidence or secondary factual data. Since the IPAR's have been involved in fundamental research, the programmes have been documented. It is a matter of coincidence to lift them and field test in pilot schools. The unavowed caution is that children should not be used as pawns in this educational process. Formative evaluation must become an integral part in any pilot school trials.

The resurrection of the dignity and values of the Cameroon youth lies in the true purposes and programmes developed for them. The educational system is a nucleus of change in any developmental system, hence the Minister's preoccupation for educational reform and advancement. To meet the goals and objectives of IPAR-Buea, the following activities are envisioned:

1) Production of teacher resource materials, teacher guidebooks, and pupil workbooks. These activities will be spread over a six or seven year period.
2) Write up of curriculum materials with greater emphasis on the production of integrated units.
3) Production of prototypes and feasibility trials in schools and community so as to extend the work of IPAR outside its immediate precinct.
4) Community education in order to evolve an educational component relevant to school and community. This will be an activity-centered approach with identifiable ramifications of educational inputs.

5) Continuation of the school farm project with the creation of Young Farmer programmes and the consequent evolvement of school cooperatives. This is in conformity with the President's prize for manual work.

6) Continuation of the Mile 17 project. This project serves as an outdoor educational laboratory for teachers and students in the immediate vicinity.

7) Expansion of the inservice teacher-training programme through seminars and workshops to attain a recycling output of approximately 5000 teachers in the North West and South West Provinces within six or seven years.

8) Participation in the pre-service teacher training programmes at the G.T.T.C.'s in Kumba, Bamenda, and Tatum, employing new methodologies and subject matter content.

9) Upgrading of IPAR staff through the attendance at in-country and international seminars and workshops and through training fellowships. This will be staggered in each of the sections and services of IPAR and eventually phased out. An extremely interesting innovation is the attitude of the Cameroon Government to train personnel. (IPAR-Buea has had the good fortune of having three of its personnel trained in the last few years, two at Ibadan, in evaluation techniques, and one in U.K. in education. These staff members are great assets to the project.)

10) Setting up of a professional library and documentation unit for the assembly and distribution of pedagogical materials.

11) Bi-monthly meetings, at least, between the two IPAR's for the exchange of technical and professional information.

12) With each of the IPAR's at differing levels of preparation and operation, the unique problems faced by each will be met and solved through a structured exchange of ideas.

13) Continued pursual of formative and summative evaluation employing internal and external evaluators at appropriate times (to be fixed). In order to attain the goals, aims, objectives, and activities, qualitative and quantitative, inputs are necessary for optimum realisation of the work to be done.

EDUCATIONAL REFORM IS, THEREFORE, NOT A NIGHTMARE. IT IS A CONTINUING AND ON-GOING PHENOMENON IN AN EVER-CHANGING SOCIETY!

LONG LIVE THE MINISTRY OF NATIONAL EDUCATION!

LONG LIVE THE UNITED REPUBLIC OF CAMEROON!

LONG LIVE AN EFFECTIVE EDUCATIONAL PROGRAMME FOR CAMEROON!

Dr. A. N. Boma
Director
IPAR-Buea

25-8-80

Annex G.11
Primary School Curricula

G.9.24

E.E.E.
MINISTERE DE L'EDUCATION NATIONALE

DIRECTION DE L'ENSEIGNEMENT
PRIMAIRE ET MATERNEL

REPUBLIQUE UNIE DU CAMEROUN
Paix - Travail - Patrie

PROGRAMME ET COUT DU RECYCLAGE

I - RECYCLAGE POUR LE 1er NIVEAU (1982-1986) : 4 STAGES.

DATE	ACTIVITES	PARTICIPANTS	NOMBRE	LIEU	ENCADREURS	PROGRAMME	COUT
Sept-1982 5 jours	Stratégie du recyclage et auto-recyclage des formateurs	Délégués et Délégués Adjoints, Sous-Délégués, Directeurs d'EN. et Directeurs-Adjoints, IDEN, CPP, Responsables Enst. Privé.	140	YAOUNDE	Services Centraux du MINEDUC IPARS ONE. ENS.	1) Informations sur la Réforme 2) Etude des programmes et des méthodes du 1er niveau. 3) Méthodologie du recyclage.	Frais de mission, Transport, Section Documentation et Secrétariat, Frais divers : 25 000 000 (1)
Déc-1982 5 jours	Informations sur la Réforme. Stratégie du recyclage.	Sous-Insp. et Adj. d'Inspection, Pro d'EN. Directeurs d'Ecoles Annexes, Responsables Ens. Privé.	360	Provinces ENI-ENIA TIC. IPARS.	IPARS Services Centraux du MINEDUC-Délégués-IDEN, CPP, Directeurs d'EN. (150).	-idem-	-idem- 47 700 000 (2)
Mars-Avril 1983 21 jours	-idem-	Directeurs d'écoles publiques et privées.	7 000	Départements.	-idem- (150)	-idem-	-idem- 321 250 000 (3)
Août 1983 21 jours	Stage de recyclage de tous les enseignants.	Tous les maîtres des écoles publiques et privées.	50 000	Départements et Arrondissements.	IDEN, Sous Insp, CPP, Directeurs d'écoles, Services Centraux et IPARS (200).	-idem-	-idem- 1 650 000 000 (4)
						IDEN Ets Ac	2 026 550 000

II - RECYCLAGE POUR LE 2è NIVEAU (1983-1984) : 2 STAGES.

DATE	ACTIVITES	PARTICIPANTS	NOMBRE	LIEU	ENCADREURS	PROGRAMME	COUT
Mars-Avr. 1984 15 jours	Mise au point de la stratégie du recyclage et auto-information des formateurs	Tous les encadreurs prov. et départementaux des précédents stages :	500	Provinces ENI-ENIA IIC. IPARS. CNE.	Délégués et Sous-Délégués. Services Centraux du MIN.DUC IPARS CNE. ENS. (150)	1) Informations sur Réforme. 2) Mise au point de la stratégie du recyclage et auto-informations des encadreurs. 3) Etude des programmes et méthodes du 2è niveau.	Frais de mission Transport Traduction Secrétariat et Documentation Frais divers 52 600 000 (1)
Août-1984 21 jours	Stage de recyclage de tous les enseignants.	Directeurs et maîtres des écoles publiques et privées.	30 000	Départements et arrondissements.	IDEN et Adj. Sous-Insp. CPP - Directeurs d'Ecoles -Services Centraux - IPARS. (200)	- Etude des programmes et méthodes du 2è niveau - Méthodologie de quelques disciplines. - Emploi des fiches pédagogiques.	-idem- 1 630 600 000 (2)
						TOTAL 2è Année :	1 683 200 000

III - RECYCLAGE POUR LE 3è NIVEAU (1984-1985) : 2 STAGES

DATE	ACTIVITES	PARTICIPANTS	NOMBRE	LIEU	ENCADREURS	PROGRAMME	COUT
Mars-Avr. 1985 5 jours	Mise au point de la stratégie du recyclage et auto-information des formateurs	Tous les encadreurs provinciaux et départementaux.	500	ENI-ENIA IIC IPARS. CNE.	Délégués et Sous-Dél, MIN.DUC, IPARS CNE (150)	- Etude des programmes et méthodes du 3è niveau. - Méthodologie de quelques disciplines.	Frais de mission Transport Secrétariat et Documentation Frais divers : 57 860 000 (1
Août-1985 21 jours	Stage de recyclage de tous les enseignants.	Dir. et maîtres des écoles publiques et privées.	30 000	Dép. et arrondissements.	IDEN, S/Insp. CPP Dir. d'Ecoles, Ser Centraux, IPARS. (200)	idem	-idem- 1 793 620 000 (2)
						TOTAL 3è Année :	11 851 520 000

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1) - RECYCLAGE POUR LE PREMIER NIVEAU : (1ère année)

1. Frais de mission	5 000 f x 140 x 10.....	7 000 000
Transport	25 000 f x 140	3 500 000
Traduction simultanée		10 000 000
Secrétariat et Documentation		1 000 000
Frais divers		1 500 000
		23 000 000
2. Frais de mission		
a) Encadreurs	5 000 f x 150 x 10...	7 500 000
b) Personnel	3 500 f x 360 x 10...	12 600 000
Transport personnel et encadreurs :		
	[illegible]	5 100 000
Secrétariat et documentation pour 35 centres de recyclage en province et à Yaoundé.....	500 000 f x 35.....	17 500 000
Frais divers pour 35 centres		5 000 000
		47 700 000
3. Frais de mission		
a) Encadreurs	5 000 f x 150 x 12...	9 000 000
b) Dir. d'Ecoles	3 000 f x 7 000 x 12..	252 000 000
Transport enseignants et encadreurs	5 000 f x 7 150.....	35 750 000
Documentation et secrétariat pour 45 centres de recyclage dans les départements.....	300 000 f x 45.....	13 500 000
Frais divers pour 45 centres		10 000 000
		320 250 000
4. Frais de mission		
a) Encadreurs	5 000 f x 200 x 25.....	25 000 000
b) Enseignants	2 000 f x 30 000 x 25....	1 500 000 000
Transport enseignants et encadreurs :		
	3 000 f x 30 200.....	90 600 000
Documentation et Secrétariat.....		10 000 000
Frais divers		10 000 000
		1 635 600 000
TOTAL : 1 + 2 + 3 + 4 = ...		2 026 550 000

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II) - RECYCLAGE POUR LE 2è NIVEAU : (2è année)

1. Frais de mission :

a) Encadreurs : 5 000 f x 150 x 10..... 7 500 000

b) Participants : 3 500 f x 500 x 10 ..... 17 500 000

Transport participants et encadreurs :

10 000 f x 510 ..... 5 100 000

Secrétariat et Documentation pour 35 centres de recyclage :

500 000 f x 35 ..... 17 500 000

Frais divers pour 35 centres 5 000 000

52 600 000

2. Frais de mission :

a) Encadreurs 5 000 f x 200 x 25..... 25 000 000

b) Participants 2 000 f x 30 000 x 25..1 500 000 000

Transports encadreurs et enseignants :

3 000 f x 30 200..... 90 000 000

Secrétariat et Documentation 10 000 000

Frais divers 10 000 000

1.630 600 000

TOTAL : 1 et 2 ..... 1 683 200 000

III - RECYCLAGE POUR LE 3è NIVEAU : (3è année)

Mêmes opérations que pour le 2è niveau.

Même coût plus une augmentation de 10 %

soit : 168 320 000 F.

Total : 1 683 200 000 f + 168 320 000 f = 1 851 520 000 F.

COUT TOTAL DU RECYCLAGE EN 3 ANS :

I 2 026 552 000

II 1 683 200 000

III 1 851 520 000

5 561 272 000

.../...

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SUGGESTED PRIMARY SYLLABUS

YAOUNDE 18 - 30TH JUNE, 1979

DR. A. N. BOMA
DIRECTOR OF IPAR-BUEA

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LANGUAGE TEACHING PROGRAMME FOR PRIMARY ANGLOPHONE SCHOOLS

(incorporated in the CAMFEM Course)

PREAMBLE

Language is a medium of thought, communication and learning. Lax reasoning prevents effective communication. Where effective communication fails so does the process of learning. Empty words (verbiage) develop mental inertia in both speaker and listener. On the other hand the most careful reasoning inadequately expressed due to insufficient mastery of the language or insufficient development of language skills can either mislead or bore the listener.

Language teaching therefore, must cover all aspects of thought that underlie the structures of verbal communication. It must include the mastery of those structures from the sound patterns through the morphological structures (words and affixes) to the syntactic patterning (sentence patterns) and must develop the skills needed for the various aspects of verbal communication at the receptive end (listening, reading) and at the productive end (speaking and writing) together with the sensitivities needed for verbal interaction with them.

THE PRIMARY SCHOOL LANGUAGE PROGRAMME

The primary school language programme in Cameroon consists of:-

1. teaching the first official language of the region from the first year of schooling.

2. using this same official language as a medium of instruction from the child's first day at school.

3. developing the various language skills connected with verbal communication i.e., listening, speaking, reading and writing - mainly through this official language.

4. teaching the second official language of the region from the fourth year of schooling.

The programme detailed below deals with 1 and 3 above bearing in mind the realities stated in 2 and 4 together with the demands those make on any programme drawn up to deal with 1 and 3.

Where point 4 is concerned, the reading is referred to the French programme drawn up for anglophone primary schools at the Buea Linguistic Centre.

DEFINITION OF TERMS

Listening : Where this refers to a word or a language structure it includes all of the following steps:-

(i) grasping the meaning of the oral or written symbol (word or structure) when it is presented in several verbal contexts.

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(ii) using an approximately correct pronunciation (in the case of oral expression) or correct spelling (in the case of writing expression) of the symbol understood.

(iii) remembering the relationship between symbol and meaning.

(iv) re-using the symbol (at the encoding or productive end) in varied contexts.

Mastering — refers to the pupil's correct unprompted use of the learnt items of language, according to his needs, in self-initiated utterance.

Skills Development — refers to practice of the language skills geared to a progressively growing development of precision, exactitude and economy in their use.

Reading — refers to making the link between graphic symbol and meaning. This can and should most frequently be done in silence. Silent comprehension of the written word can be developed and evaluated in various ways. Where reading aloud is referred to, this will be specifically stated.

Exposed to — this term can refer to the first oral use of a language item by the teacher when a long gap occurs between this and the actual teaching of the item. It most frequently refers to the presentation of the written symbol long before systematic teaching of the reading of it takes place. Step 1 of the learning process is always expected to take place under 'exposure' and step 3 in a certain proportion of cases.

GENERAL OBJECTIVES

The language programme aims at:

1. The development of all language skills so that the pupil may express himself with ease in speech and writing and understand all verbal communication in oral and written English - by the time he leaves school.

The school leaver should therefore be able to:

- follow oral directions; carry out oral instructions; listen to a talk sympathetically and with an open mind, grasping the salient points as well as the general tone of the speech and mood of the speaker, taking in relevant detail and differentiating between fact, opinion, persuasion and fallacy.

- speak with a pronunciation and intonation that renders his speech intelligible to English native speakers as well as to anglophone Cameroonians using a clear enunciation, varied modulation speed and volume of voice to suit the spatial and contextual situation.

- express himself simply and correctly in the style and register required by the given situation - with brevity and precision in 'functional' registers, and with a certain degree of colour and imagination in 'creative' registers.

- follow written directions, carry out written instructions, understand what he reads with the discernment already listed under the listening skills (see above) when doing intensive reading; skim rapidly to obtain the gist of a passage, scan swiftly to find specific information as well as read in a more leisurely manner for enjoyment.

- write with a legible and pleasant hand, express himself in writing with the same qualities as are demanded in his speech (see above) having furthermore mastered the artifacts of writing i.e., spelling, punctuation, paragraphing and the use of complementary morphological signals and syntactic specifications not employed in speech.

- appreciate the role of well developed language skills in effective communication; apply these skills in teaching himself to learn and transfer these same skills to the learning of other languages.

The above objectives will be reached in two major stages. In the first four years of primary schooling, the emphasis will be laid on

- the development of basic skills in listening, speaking, reading and writing.

- the mastering of a basic vocabulary of 2,000 - 2,500 words and of the most commonly used structures.

in order to allow the pupil in the second stage to:

- continue to develop his language skills on his own should he leave school after the fourth year (as often occurs)

- use the language with ease as needed for the study of other subjects in the upper primary.

- concentrate in the upper primary on the learning of various styles and registers needed for other subjects and for life situations in which the pupil will find himself after school.

2. The development of the mental processes so that the pupil leaves school with an enquiring mind, an ability to reason, a taste for broadening his imagination and a keen desire to extend his mental abilities to the full in verbal communication.

3. The development of the aesthetic and affective sensibilities so that the pupil leaves school with:-

- a taste for poetry, drama and well styled prose.

- a sensitivity to other people's opinions, feelings, reactions and motivations such as to facilitate communication.

4. An awareness, on the part of the pupil, of the non-verbal factors entering into effective communication and a practical ability to take part in mass communication through meetings, concerts, radio, newspapers etc.

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SPECIFIC OBJECTIVES -

YEAR ONE

Language

The vocabulary, morphological and syntactic structures learnt at the beginning of the course will be those most needed for the proper functioning of such activities i.e., those needed for mathematics, art and craft, cleaning, gardening, nature study, physical education, morals, hygiene and civics. After this, some vocabulary concerning family life will be introduced.

By the end of the year the child will have acquired a 600 word vocabulary - a little over a quarter of those belonging to the Verb-Phrase. He should make use of all subject and object pronouns; all possessive pronouns and adjectives; the most frequent prepositions; the present continuous, 'going to' future, imperative of verbs and the comparative of adjectives. He should be able to initiate a statement and use the question and answer forms with and without question words.

Listening :

The habit of careful listening will be developed by progressively lengthening the attention-time demanded of the child. Listening skills will be developed through the learning of new language items - for which 'listening' is the first stage; through listening to rhymes, dialogues and stories as well as through 'listening exercises' specifically designed for the task.

By the end of the year, the child should be able to listen to a 10 - 15 sentence story and be able to answer questions on it. He should also be able to correctly obey double commands - issued of course, in language already known.

Speaking

The child will practice his diction through varied speech organ and sound exercises as well as through the recitation of rhymes. He will use narrative in short stories and conversational speech in dialogues learnt by heart.

By the end of the year the child will have learnt a hundred or so rhymes, stories and dialogues of which he can be expected to retain a good half as a repertoire for speech practice and reference material for language structure.

Reading

At first the child will develop Pre-Reading skills such as careful observation, comparison, matching and interpretation of graphic material from large pictures to the printed word; the left to right eye movement etc. He will then move on to identification of word/sentence and meaning using both the visual and Look and Say methods applied to the situation and Global Approaches.

By the end of the year the child should be able to:-

(a) read (identify the symbol with its meaning) a hundred words and a dozen syntatic structures presented with numerous substitutions.

(b) distinguish and identify the written words and phrases of any global item already well known orally.

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(c) deduce the meaning of any written word shown for the first time as a label to an object or picture, the name of which is already well known.

(d) work on words and phrases presented as described in (b) and (c) above as to teach himself to read these when presented out of context and in a different context.

The skills (b) - (d) above the means by which the child should henceforth teach himself to read.

The child will, moreover have been exposed to a further 150 written words which he will learn to read systematically in class 2

Writing

The child will begin with writing patterns drawn to the rhythm of [illegible] rhymes, each set of patterns leading to the formation of one or more letters of the alphabet.

By the end of the year, the child will be able to form all the small letters of the alphabet and to copy any word written out for him.

YEAR TWO

Language

A large part of language learning in the second year will be devoted to the past tense since the most common verbs have the most irregular past tense forms. The present simple and the past continuous tenses will also be taught as well as the structure of the conditional. The use of conjunctions such as 'but, when, because' and of the Infinitival complement will also be introduced in that year.

The vocabulary will be taken mainly from home activities in the various environments - grasslands, forest, creek and town. From 500 - 600 words will be added to those already learnt making a total of 1,000 - 1,200 by the end of the year.

Listening

The child will listen to stories of 15 - 25 simple and compound sentences which he should be able to talk about. He should also follow directives and obey instructions of four or five sentences and listen intelligently to short talks or 'news'.

Speaking

The pronunciation of minimal pairs of English sounds will be systematically practised. Further speech practice will be given through the recitation of rhymes, acting of dialogues and repeating of stories.

By the end of the year, the child should himself be able to tell the story of a set of pictures shown him for the first time. For this he should be able to use correct words and phrases and a pronunciation sufficiently acceptable to make his story intelligible.

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Reading

By the end of the second year the child will have learnt to read 500 words in 20 or so syntactic structures with any correct substitution. He should be able to understand short written stories of up to 20 simple sentences read silently and answer questions on them; read simple sentences and find the matching pictures; obey written instructions etc. - all within the vocabulary and structures learnt. In the course of the year the child will be initiated to the link between letter and sound where this link is at its most regular.

Writing

The child will improve his handwriting and learn to form capital letters. By the end of the year he should be able to write words and short phrases from immediate recall memory; put together parts of sentences, fill in gaps with words provided and re-arrange sentences in chronological order. He should also take part in class composition of short 'news'.

YEAR THREE

Language

A vocabulary of 600 - 700 words will be added totalling 1,800 words. The perfect tense as well as the use of the passive will be added to the structures known and for these the past participle of all known irregular verbs will be taught. The relative will be systematically taught - with its total paradigm who, whose, to whom, with whom etc. as well as adverbial phrases of time, place and manner.

Listening

The pupil will now hear stories unaccompanied by pictures. He will also hear diallgues, with emphasis laid on variety of intonation, and will be initiated to simple poetry.

Speaking

By the end of the year the pupil should be able to make rapid two-place substitutions in pattern practices. He should be able to describe a picture, give a short talk, retell a story heard once and take part in the spontaneous acting of a short scene using intelligible English. The emphasis in speech exercises this year will be placed on intonation.

Reading

The pupil will acquire a further reading vocabulary of 500 words, to 1,000 words by the end of the year. He will also have learnt to read all syntactic structures previously mastered orally. As in year two, the emphasis will be on reading for meaning. The pupil will also learn to read rapidly across substitution tables.

Moreover a systematic course will be given in phono-orthography and morpho-orthography to enable the pupil to give the most common sounds to letters and sequences of letters of the alphabet. Where the sequences are morphological the link with the meaning will also be underlined.

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Writing

The pupil will learn to form a joined handwriting. He will write sentences from substitution tables and short passages from multiple choices. He will complete gap filling exercises, answer questions in writing and compose short paragraphs according to models shown him. All this will be carried out within the limits of the pupil's reading vocabulary.

YEAR FOUR

Language

A vocabulary of 600 words will be added to form a total spoken vocabulary of 2,500 words. The learning of basic structures will be completed with the addition of the past perfect tense - and the conditional using that tense - of the 'ing' complement and the 'that' clause. Waysof expressing obligation e.g., 'must', 'have to', and possibility e.g., 'would, could' will also be taught. From then on structures will be added as the need arises for a particular register situation.

Listening

Intensive comprehension work will be based on stories, short talks and oral instructions given by the teacher as well as radio programmes and if possible, talks and plays recorded on cassettes.

Speaking

By the end of the year the pupil should be able to rapidly make three place substitutions in pattern practice and complete the beginning of sentences. He should be able to give simple information directives, instructions and reports as well as translate the gist of what has been told him in his mother tongue.

Reading

A reading vocabulary of 1,000 words will be added to form a total reading vocabulary of 2,000 words globally learnt. Evidently all such words must have been thoroughly learnt orally before being presented for reading. 100 of these words however, will be purposely chosen from among words that the pupil will have neither heard nor seen. These will be inserted into the reading text, at rare intervals, to train the pupil to refer to a lexicon that he will find at the back of his reader.

The course started in Year Three in phono-morpho-orthography will continue throughout Year Four to explain the less common links between sound and symbol.

Two new elements will be introduced this year. The pupil will possess a reader of his own for intensive reading comprehension work and there should be, in the class, a small library of a hundred or so supplementary booklets chosen for the level of the class from the point of view of vocabulary and structures as well as content.

Titles should be suggested by the writers of the present course after a careful study of available books. Thus the pupil will, on the one hand, be able to answer detailed questions concerning tests studied at depth and, on the other, develop a taste for leisurely reading.

Writing

Systematic written exercises and spelling games will prepare the pupil for written work that is no longer strictly controlled. Composition will be guided and stimulated to the point where the pupil will be able to produce his own composition.

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YEAR FIVE AND SIX

In the last two years of primary school the pupil will increase his vocabulary with more specialised words specific to other subjects such as agriculture, village technology, social studies etc. Likewise new structures will be such as are needed for these subjects and other registers to be covered.

Approximately 1,000 more words will be added to the spoken vocabulary during these two years and the pupil will meet many more in his dictionary of 5,500 words as well as in other subject lessons. It is hoped that this little dictionary of 5,500 words (explained in a vocabulary of 1,500 words already well mastered by the pupil) will become progressively part of the pupil's active vocabulary. In all the pupil will have acquired a vocabulary of 3,500 words with the possibility of acquiring more to infinity.

In the practice of the major skills emphasis will be placed on the functional use of language, though literature will not be wholly neglected. Talks, descriptions commentaries, interviews, discussions, recipes, directives, instructions and reports will all be exploited when practising the listening, speaking, reading and writing skills in the Upper Primary, in order to develop the use of the appropriate register in all such situations.

Listening & Speaking

Moreover the pupil will listen to and learn to make telephone calls and radio programmes, to take part in meetings and prepare debates with the exercises in reasoning and in the collection of data (reference reading) that this presupposes. Where output is concerned, the situations will in many cases need to be simulated, as in mock telephone calls.

Reading

The pupil will be introduced to poetry and drama as well as to the functional registers in reading. He will therefore begin to learn to read aloud - a skill that requires rapid silent reading - and will progressively acquire the necessary skills to perform this difficult task. At the same time he will follow a systematic course in Speed Reading in Year 5 to encourage him to shed bad habits that slow down reading. In Year 6 he will develop the skills of scanning, skimming and reference work.

By the end of Year 6, the pupil should read narrative, containing no new words, at a speed of 120 - 150 words a minute with 70% comprehension.

Writing

The pupil will learn to write in the register listed above e.g., description reports, minutes of meetings etc. He will also learn to draw up notices and advertisements, to fill forms, to write invitations and business letters. He will learn to take notes from his reading in Year 5 and from the spoken word in Year 6. He will also write fictitious stories and be introduced to the art of setting out ideas with psychological appeal.

Altogether the pupil should achieve the General Objectives set out on page 2 above

N.B.: The programme here described together with its objectives is based on the time table set out below. A reduction in the time allocated to the programme will result in a lowering of the objectives set out above.

14h 50 per week for language in Years 1 & 2
11h 40 per week for language in Year 3
8h 50 per week for language in Year 4
8h 50 per week for language in Years 5 & 6

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MATHEMATICS SYLLABUS

CLASS ONE

TOPIC	OBJECTIVES
SETS AND LOGIC	1. Identify objects by properties they possess (Same and different: shape, colour, size, weight, etc.) 2. Identify an object by the properties it does not possess. 3. Notion of patterns. 4. Matching: One-to-one correspondence. 5. Identify a set 6. Identify an empty set.
NUMBER AND NUMERATION	1. Study numbers from 0 to 20 (reading, writing, formation, composition and decomposition by using simple concrete objects) 2. Study of numbers 20 to 100 (Numeration) 3. Say the number of objects in a given set. 4. Say which set has more objects than other given sets. 5. Use the sign (=) to compare two numbers or sets - identify 1/2 and 1/4 (Write 1/2 and 1/4) - identify odd and even numbers - count by 2, 5 and 10
THE FOUR OPERATIONS	1. Addition of two numbers whose sum is equal to or less than 10. 2. Addition of three numbers whose sum is equal to or less than 10. 3. Addition of two numbers whose sum falls between 10 and 20. 4. Identify the property of zero for addition. 5. Subtract any two numbers less than 10. 6. Subtract any two numbers which fall between 10 and 20. 7. Find the missing number in any addition or subtraction sentence. 8. Addition of two numbers whose sum is between 20 and 100. 9. Subtraction of any two numbers which fall between 20 and 100. 10. Find the missing number in an addition or subtraction sentence such numbers which are between 20 to 100. 11. Multiplication by 2 and by 5. 12. Division by 2 and by 5.
PROBLEM SOLVING AND APPLICATION	Throughout all the topics, the problem solving approach is to be utilized using real life situations. Market stall situations, Home situation
GEOMETRY	1. Identifying objects by properties of shape and size. 2. Classifying objects according to shape. 3. Informal identification of shapes in the classroom, home and environment specially shapes of houses, farms, furniture, rooms etc.
MEASUREMENT	1. Comparison of lengths. 2. Measure the length of objects in the classroom using units from the child's experience and environment (hands, arms, pace, etc. 3. Recognize and use currency to 100frs. CFA. 4. Recognize and use the number of days in a week (Give the names)

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MATHEMATICS SYLLABUS

CLASS TWO

TOPIC	OBJECTIVES
SETS AND LOGIC	1. Revision exercises on chapter I of the first year syllabus. 2. Classify objects with 2 or 3 attributes: shape, colour, size, etc. 3. Match several objects to one. 4. Use and understand the term "AND".
NUMBER AND NUMERATION	1. Revision exercises on chapter two of the first year syllabus. 2. Study the numbers 20 to 100 (reading, writing, formation, composition and decomposition using simple concrete objects) 3. Place value (units, tens, hundreds) 4. Represent the symbols. Compare two numbers greater than or less than. 5. Take half of even numbers, 1/4 of numbers which are multiples of 4 and 1/3 of numbers which are multiples of 3. 6. Count in 2's and 4's. 7. Count in 5's and 10's. 8. Count in 100's and 1000's.
THE FOUR OPERATIONS	1. Revision exercises on the 3rd chapter of the first year syllabus. 2. Construct and use addition tables. 3. Addition without carrying two numbers greater than 100 but less than 1000. 4. Property of commutativity for addition. 5. Addition without carrying two numbers less than 100. 6. Subtraction without carrying two numbers greater than 100 but less than 1000. 7. Subtraction without carrying two numbers less than 100. 8. Construct and use multiplication tables 2, 5, and 10. 9. Multiplication without carrying two numbers whose product is less than 100. 10. Multiply a number with two or three digits by one digit number whose product is less than 1000. 11. Properties of commutativity for multiplication. 12. Division without remainders of numbers less than 100 by 2, 5 and 10.
PROBLEM SOLVING AND APPLICATION	Throughout all the topics, the problem solving approach is to be utilized using real life situations. Play Market stalls
GEOMETRY	1. Recognize and construct a circle. 2. Recognize and construct a triangle. 3. Recognize and construct a triangle and square.
MEASUREMENT	1. Measuring length (metre) 2. Measuring capacity (litre) 3. Measuring mass (gram) 4. Measuring money (franc)

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CLASS THREE

TOPIC	OBJECTIVES
SETS AND LOGIC	1. Revision exercises on chapter one of class two syllabus. 2. Introduce appropriate terms: set-element - belongs to representation of a set. 3. Equal sets. 4. Definition, extension and understanding of a finite set. 5. Relation within a set. 6. Identify a sub-set.
NUMBER AND NUMERATION	1. Revision exercises on chapter two of class two syllabus. 2. Study of numbers 0 to 5000. 3. Place value-units, tens, hundreds, thousands. 4. Writing numerals in words. 5. Study of fractions using concrete examples.
THE FOUR OPERATIONS	1. Revision exercises on the chapter three of class two syllabus illustrating the properties of commutativity for addition and multiplication using the set theory. 2. Construct and use the table of addition. 3. Addition without carrying two numbers whose sum is less than or equal to 5000 (Set theory) 4. Addition with carrying of two numbers whose sum is less than or equal to 1000 and 5000 using set theory. 5. Addition without carrying three numbers whose sum is less or equal to 5000. 6. Addition with carrying three numbers whose sum is equal to or less than 100, 1000, 5000. 7. Subtraction without carrying of two or three numbers. 8. Construct and use multiplication tables of 3, 4, and 6. 9. Multiply without carrying a number of 2-digits by a number of one-digit. 10. Multiplication with carrying a number of 2 digits by a number of one digit. 11. Multiplication with carrying a number of 2 digits by another of two-digits using the set theory. 12. Division without carrying a number less than or equal to 1000 by a number less than 10. 13. Division without carrying a number less than or equal to 5000 by a number less than 100. 14. Compare the fractions studied in Class Two. 15. Introduce the sign for greater than (>) to compare numbers.
PROBLEM SOLVING	Throughout all the topics, the problem solving approach is to be utilized using real life situations. Post Office Transactions.
GEOMETRY	1. Revision exercises on chapter four of the class two syllabus re-emphasizing the circle, the triangle and quadrilaterals (square and rectangle) 2. Construct a straight line, broken line, curved open line and curved closed line. 3. Construct and identify simple polygons (square, rectangle and triangle on squared paper)
MEASUREMENT	1. Revision exercises on chapter five of class two syllabus. 2. Study the units of length metre and its multiples (decametre, hectometre, kilometre) Application: Measure and calculate the perimeters of various polygons - (rectangular and square objects in the environment) 3. Introduce the calculation of area. 4. Measure the area of a square in square metres 5. Measure of mass: gram and its multiples (Dg, Hg, Kg) 6. Measure of capacity: litre and its multiples (Dl, Hl, K.)
GRAPH AND STATISTICS	1. Number line.

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MATHEMATICS SYLLABUS

CLASS FOUR

TOPIC	OBJECTIVES
SETS AND LOGIC	1. Revision exercises on chapter one of class three syllabus insist on: 2. Sets, elements, belongs to, (definition, extension and understanding of what a set is, relation and subsets. 3. The use of: all; there exists at least one; and; or 4. Intersection of two sets. 5. Union of two sets.
NUMBER AND NUMERATION	1. Revision exercises on chapter two of class three syllabus insist on: writing numerals in words; write fractions already studied; construct and use multiplication tables of 3, 4 and 6. 2. Study numbers 0 to 10,000. 3. Place value to tens of thousands. 4. Multiples. 5. Explore numbers to other bases.
THE FOUR OPERATIONS	1. Revision exercises on chapter three of class three syllabus. 2. Add and subtract fractions with common denominators: 1/4,1/2, 1/3. 3. Construct and use multiplication table of 7, 8 and 9. 4. Addition with or without carrying four numbers less than 1000 but whose sum is greater than 1000. 5. Subtraction with or without carrying numbers with 2, 3 or 4 digits. 6. Multiplication with or without two numbers of two digits. 7. Division with or without remainders of numbers less than 10,000 by numbers less than 1000. 8. Fractional numbers less than a unit; greater than one unit. Mixed fractions. 9. Take a fraction of a number. 10. Reduce fractions to the same denominators. 11. Addition of fractions. 12. Subtraction of fractions. 13. Multiplication of fractions
PROBLEM SOLVING AND APPLICATION	Throughout all the topics, the problem solving approach is to be utilized using real life situations. Budgeting in the home. Finding and comparing prices.
GEOMETRY	1. Revision exercises on chapter four of class three (re-emphasize: straight line, broken line, curved line: open and closed) 2. Relative positions of straight lines, parallel lines. 3. Notion of sector and angular sector. 4. Line segment and perpendicular lines. 5. Obtus angle. 6. Acute angle. 7. Compare angular lines. 8. Construct perpendicular lines. 9. Use of compass. 10. Study the triangle: Determine the height, base and top. 11. Kinds of triangles. 12. Construct and define square and rectangle. 13. Perimeter of square and rectangle.
MEASUREMENT	1. Revision exercises on chapter five of class three syllabus re-emphasizing units of length, area, mass and capacity. 2. Operations with complex numbers; application of units of time (hour, minute and second)
GRAPH AND STATISTICS	1. Revision exercises on chapter five of class three syllabus. 2. Construct concrete graphs. 3. Read the graphs.

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MATHEMATICS SYLLABUS

CLASS FIVE

TOPIC	OBJECTIVES
SETS AND LOGIC	1. Revision exercises on chapter one of class four illustrating union of sets, intersection of two sets with the aid of examples from arithmetic, problems, metric system and geometry. 2. Construct subsets from a universal set. 3. Intersection of three sets. 4. Complementary sets. 5. Disjoint sets (geometic examples) 6. Venn Diagrams.
NUMBER AND NUMERATION	1. Revision exercises on chapter two of class four emphasizing mixed fractions. 2. Study of numbers 0 to 1,000,000. 3. Place value to 1,000,000 (million). 4. Decimal fractions $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{1000}$. 5. Study of decimal numerals from decimal fractions. 6. Percentages. 7. Using percentages to calculate interest. 8. Base 4, 5, 8, Simple computation, changing to Base 10. 9. Modular Arithmetic.
THE FOUR OPERATIONS	1. Revision exercises in chapter three of class four syllabus. 2. Addition of 4 numbers whose sum is equal to or less than one mi million. 3. Construct and use the multiplication tables of 11 and 12. 4. Multiplication without carrying 2 numbers with more than 2 digits whose product is less than one million. 5. Multiplication with carrying 2 numbers with more than 2 digits whose product is less than one million. 6. Division with or without remainders, numbers up to one million by 3 or 4 numbers. 7. Property of distributivity e.g. $a(b+c) = ab + ac$. 8. Simplification of fractions. 9. Addition of fractions. 10. Multiplication of fractions by whole numbers. 11. Division of fractions. 12. Convert fractions into decimals and percentages and vice versa. 13. Factor and Prime Numbers, HCF. 14. Use the following symbols =; $<$; $>$ 15. Compare fractions with different denominators; Multiples, LCM. 16. Convert mixed fractions into improper fractions. 17. Zero as additive identity and multiplicative identity.
PROBLEM SOLVING AND APPLICATION	Throughout all the topics, the problem solving approach is to be utilized using real life situations. Estimating and planning budgets.
GEOMETRY	1. Revision exercises on chapter four of class four syllabus (angular sectors, construction of perpendicular and parallel lines). 2. Half line - segment of a line. 3. Parallelogram: Construct and know the different properties. 4. Rhombus: Construct and know its properties. 5. Trapezium: Construct and know its properties. 6. Construct figures to a given scale: prism, sphere and cone. 7. Study of the circle: circumference, centre radius, chords and diameter, sectors, Determine Pi. 8. Regular polygons.
MEASUREMENT	1. Revision exercises on chapter five of class four syllabus (unit of length, area and time) 2. Area of a square 3. Area of a rectangle. 4. Area of a parallelogram 5. Area of a triangle. 6. Area of a Rhombus. 7. Area of a Trapezium. 8. Calculate area and other dimensions. 9. Area of regular polygons.
GRAPH AND STATISTICS	1. Revision exercises on chapter six of class four syllabus. 2. Construct graphs from given information. 3. Interpret concrete graphs.

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CLASS SIX

TOPIC	OBJECTIVES
SETS AND LOGIC	1. Revision exercises on chapter one of class five syllabus emphasizing sets, disjoint sets, intersection of three sets, universal set, venn diagrams and complementary sets. 2. Negative propositions, conjuction of two propositions, disjunction of two propositions and properties of certain relations. 3. Truth tables for given propositions. 4. Relation of equivalence.
NUMBER AND NUMERATION	1. Revision exercises on chapter two of class five syllabus. 2. Square Root of numbers; definition and notation (indices). 3. Cube root of numbers; definition and notation. 4. Index of numbers; definition and notation. 5. Construct and use the table of square roots of the first twelve numbers. 6. Construct and use the table of cube roots of the first six numbers. 7. Expanded notation. 8. Bases other than 10; four operations in these bases. 9. Modular Arithmetic.
THE FOUR OPERATIONS	1. Revisions exercises on chapter three of class five syllabus. 2. Rules of the divisibility by 2, 3, 4, 5, 9, 10, and 25. 3. Proof of nine for multiplication. 4. Operation on decimal numbers to one millionth. 5. Practical life problems.
PROBLEM SOLVING AND APPLICATION	1. Uniform motion; define speed, distance, time taken. 2. Moving objects: shown on a graph, over-taking and crossing. Calculating profit and loss.
GEOMETRY	1. Revision exercises on chapter four of class five syllabus. 2. Study the cube; construct, represent, define. 3. Study the cylinder: construct, represent, define. 4. Study the sphere: construct, represent define. 5. Study the Parallelogram: construct, represent, define. 6. Study the Prism; Construct, represent, define. 7. Study the Cone: construct, represent, define.
MEASUREMENT	1. Revision exercises on chapter five of class five syllabus. 2. Calculate the speed of moving objects. 3. Calculate the capacity and volume of cubes, parallelograms, cylinders and prisms.
GRAPHS AND STATISTICS	1. Revision exercises on chapter six of class five syllabus. 2. Identify in a graph the X and the Y axis. 3. Calculate the mean of given data.

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AGRICULTURE

The emphasis on environmental education manifests itself also in the education of pupils in the most important single industry to the nation namely agriculture. In promoting the President's promulgation of "The Green Revolution", and the "President's Grand Prize for Manual Work" agricultural education brings pupils to greater appreciation of the environment and of the attendant applied biological sciences.

This is only to say that introducing pupils to agriculture and the occupational opportunities pupils would become more appreciative of the work of the producer and the consumer. The programme in no way attempts to turn pupils into farmers yet it enhances the pupil's occupational possibilities if he/she opts to be a farmer or inherits a farm.

Pupils who have been exposed to the course would have familiarized themselves with practical and theoretical activities which culminate into effective farming employing approved scientific methods.

For pupils who engage in individual farming activities, they would be provided guidance to make each activity an interesting and gainful occupation. Any such activity should be selected on the basis of the pupil's interest, abilities and the supporting parental agreement and home farm possibilities.

The course being general in nature leaves it open to the resourceful teacher to conduct a situational analysis before launching an agricultural programme. Such a programme must be one that fits in with local interests since a good school farm activity may serve as an extensive facility to the community.

Every attempt should be made to give the pupils first hand information through getting them involved in practical agricultural activities, observe community farming activities and agricultural demonstration and experimental farms, supplemented with discussions after visitation to include related and desirable environmental education. The teacher's initiative is envisaged and encouraged in course formulation and importation.

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AGRICULTURE

YEAR ONE

IMPORTANCE OF SPECIFIC AGRICULTURAL ACTIVITIES

Flower Cultivation

How flowers are used:
- For beautification of compound and houses.
- For gifts.
- For marriages and funerals.
- For sale.

LAND PREPARATION AND LAYOUT

1. Identification of common farm tools e.g. [illegible]
2. Exploring soil - feeling soil, soil colour.
3. Soil colour and where crops grow better.
4. Making of flower beds or potting for plants.
5. Watching soil carried away by rain.

PLANTING AND OTHER MODES OF PROPAGATION

1. Identification of food crop plants in the locality of the parts eaten e.g. maize, beans, pumpkin etc.
2. Identification of common types of flowers growing in the compound.
3. Determining where and when to plant.
4. Preparing the flower bed and pot manuring and planting.
5. Applying the correct method(s) in planting e.g. small seeds, tubers, while the teacher plants the cuttings - planting distances.
6. Applying the simple method(s) of transplanting from seedlings.

WEEDING, PEST AND DISEASE CONTROL

1. Identification of common weeds, e.g. Goat weed, Emilia sonchifolia, Mimosa etc.
2. Weeding in flower beds.
3. Identification of dead flowering plants and removal of dead leaves.
4. Keeping away animals from destroying flower beds.
5. Removing caterpillars and insects that destroy flowering plants.
6. Identifying insects and the damage they cause.

HARVESTING, PROCESSING AND MARKETING

1. Observation of harvesting activities e.g. flowers, vegetables, farm crops.
2. Observing food processing activities e.g. garri, akara beans and banana etc.
3. Visit local food market and some stores to see different food crops sold e.g. plantains, pawpaw, banana, yams, groundnuts etc.

ANIMAL BREEDING

1. Name of domestic animals and in particular those reared. e.g. dog, cat, hen, cock, sheep, goat, guinea fowls turkey etc.

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YEAR ONE (cont'd)

2. Identification of main feeds of the animals.
3. Observing the mode of feeding.
4. Explaining common uses of domestic animals e.g food, pets, transportation etc.
5. Where the animals live.
6. Handling and kindly treating animals.
7. Watching the sale of animals and meat in a nearby market.

ADDITIONAL CONCEPTS

Flower trees.
How to harvest flowers.
How to preserve flower seeds.
How to display flowers in vases.

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YEAR TWO

IMPORTANCE OF SPECIFIC AGRICULTURAL ACTIVITIES

Flower Cultivation

How flowers are used:
- For beautification of compound and houses.
- For gifts.
- For marriages and funerals.
- For sale.

LAND PREPARATION AND LAYOUT

1. Simple farm tools and their uses e.g. hoe, cutlass, spade etc.
2. Soil exploration continued - colour, texture, animals, humus, and crops grown.
3. Preparing soil for improved fertility using humus.
4. Making flower beds and setting for plants.
5. Simple causes of carried away soil and simple control methods.

PLANTING AND OTHER MODES OF PROPAGATION

1. Identification of the parts of food crop plants eaten e.g. stem, leaves etc.
2. Identifying seasonal and perenial flowers in the compound e.g. cosmos, bachelors button etc.
3. Planting of flowers - annuals and perennials interspersed.
4. Methods of manuring perennial flowers. e.g. compost, talinum triangulare, sweet bitterleaf.
5. Continued planting of small seeds, large seeds, bulbs, tubers, while the teacher plants the cuttings.
   - planting distances
6. Continued transplanting

WEEDING, PEST AND DISEASE CONTROL

1. Continued identification of weeds in the flower bed e.g. goat weed, Emilia sonchifolia, cosmos, hibiscus, dahlia etc.
2. Weeding in the flower beds.
3. Continued removal of dead flowers and examination for possible causes.
4. Continued keeping away of animals that damage flowers.
5. Removing and examining insects that destroy flowers.
6. Continued identification of insects and the damage they cause.

HARVESTING, PROCESSING AND MARKETING

1. Observation of harvesting and storage methods of flowers, vegetables and farm crops.
2. Continued observation of food processing activities. e.g. garri, akara, beans and banana etc.
3. Continued visit to local food market to see (a) unprocessed foods sold. (b) processed foods sold. e.g. (a) groundnuts, plantains, cocoyam, cassava. (b) garri, porridge, akara, beans and banana etc.

6.9.51

ANIMAL HANDLING

1. Names of domestic and wild animals e.g. leopard, tiger, hyena, civet cat etc.
2. Identification of other types of animal feeds.
3. Feeding of some animals - safety precautions.
4. Observing proper handling of common farm animals.
5. Observing the veterinarian at work treating animals.
6. Identify the sale of the animals and as to color butchering.
7. Identifying the uses of the animals for food, sale, for pets, for transportation.
8. Study unit prices of meat in the local market.

ADDITIONAL CONCERNS

Flower trees.
How to harvest flowers.
How to preserve flower seeds.
How to display flowers in vases.

G.9.52

YEAR THREE

IMPORTANCE OF SPECIFIC AGRICULTURAL ACTIVITIES

Vegetable Cultivation

Importance of growing vegetables:

- For food
- For sale

LAND PREPARATION AND LAYOUT

1. Garden tools their uses care and cost e.g. garden fork, rake etc.
2. Selecting a good garden area - essential factors (list them).
3. Seed bed consideration - soil fertility, soil tilthe, depth moisture etc.
4. Preparing nurser/garden beds - size, paths and general layout.
5. Compost making and application on vegetable beds, continue erosion control methods.

PLANTING AND CARE AFTER METHODS OF PROPAGATION

1. Identification of common vegetables cultivated e.g. spinach, bitter leaf, fluted pumpkin.
2. Identification of common vegetable seeds and possibly cost.
3. Determining when and where to plant vegetables.
4. Understanding the garden rotation e.g. leaf, root, fruits.
5. Raising seedlings in a nursery.
6. Planting by sowing in a drill, by the rule of thumb, broadcasting, clibbling etc. Planting from cuttings, vine bulbs, slips etc.

WEEDING, PEST AND DISEASE CONTROL

1. Identification of weeds plot and vegetable diseases e.g. as for class 2 leaf spot, mosaic etc.
2. Control of weeds, pests and diseases in the garden.
3. Warding off marauding animals from the garden.
4. Introduction to simple chemical control of insects and diseases - equipment.
5. Application of common chemical control and equipment used - safety precautions.

HARVESTING, PROCESSING AND MARKETING

1. Participation in harvesting and handling of vegetables.
2. Observing the local methods of processing vegetables e.g. grinding, pounding and mechanical assistance.
3. Observing local methods of processing vegetables e.g. grinding, pounding and mechanical assistance.
4. Visit local market to see how vegetables are sold.
5. Collect weekly prices of vegetables.

6-9-53

YEAR THREE (cont'd)

ANIMAL BREEDING

1. Identifying common breeds in life stock.
2. Classifying the animals as (a) per sex (b) per mode of feeding.
3. Observe types of livestock and feed.
4. Observing the housing of common domestic animals.
5. Observing and understanding good breed and characteristics of common domestic animals.
6. Observing and understanding types of breeds kept on-common farm livestock.
7. Identifying the by-products of farm animals and their utilization.
8. Identifying the parts of farm animals sold.
9. Keeping weekly market prices of animals and of unit prices of meat.

AGRICULTURAL SCIENCE

Varieties of vegetables.
Seasonal and predominant production areas.
Watering vegetables.
Irrigation for vegetables.
Presidents Grand Prize.

YEAR FOUR

6.9.54

EXPERIMENTS ON SPECIFIC AGRICULTURAL ACTIVITIES

Vegetable Cultivation

Importance of growing vegetables:

- For food
- For sale

LAND PREPARATION AND LAYOUT

1. Garden equipments other than tools, their uses and care.
2. Garden tools e.g. wheel barrow, hand pens, pickaxe etc.
3. Preparing seed beds for various crops, root, leaf, and stem crops.
4. Preparing beds and flats for cultivation.
5. Continued soil test making, erosion control and application of chemical fertilizers.

PLANTING AND OTHER TOOLS OF PROPAGATION

1. Identification of the parts of vegetable plants eaten.
2. Identifying grain and matured vegetables.
3. Planning & planting scheme for vegetables on the basis of seasonality and maturity e.g. spinach, bitter leaf, pumpkin etc.
4. Understanding vegetable plant compatibility and staggered cultivation within each plot.
5. Tending a nursery - thinning and transplanting.
6. Growing by layering e.g. tomatoes

WEEDING, PEST AND DISEASE CONTROL

1. Control of insect pest and diseases - using physical, biological and chemical methods.
2. Continued identification of weeds and weeding.
3. Continued identification of vegetable diseases and nature of attack.
4. Controlling animals from the garden - fencing.

HARVESTING, PROCESSING AND MARKETING

1. Continued participation in harvesting and handling of vegetables.
2. Understanding how flowers and vegetables are harvested, stored or preserved e.g drying, boiling.
3. Observing mechanical methods of processing vegetables e.g. grinders, choppers etc - also safety precautions.
4. Collect and sell vegetables in the garden.
5. Continued weekly documentation of local market prices of vegetables.
6. Observe different methods by which vegetables are sold.
7. Keep vegetable sales record.

ANIMAL HUSBANDRY

1. Naming different types of meat - beef, pork, mutton etc.
2. Listing different breeds of livestock in terms of a given criteria - beef, milk, lean pork, egg, output - number of litres etc.

6-9-55

YEAR FOUR (cont'd)

3. Understanding the breeding of common livestock, mother and its young.
4. Introduction to mushroom, snails and other edible insects.
5. Observing and identifying different types of processed livestock feed.
6. Continued keeping of market prices of local and imported meats.

ADDITIONAL CONCERNS

Varieties of vegetables.
Seasonal and predominant production areas.
Watering vegetables.
Irrigation for vegetables.
Incidental's Grand Prize.

6-9-56

YEAR FIVE

IMPORTANCE OF SPECIFIC AGRICULTURAL ACTIVITIES

Farm Crop Production

Importance of growing farm crops:

- For food
- For sale

LAND PREPARATION AND LAYOUT

1. Farm tools, their care and cost e.g. cutlass, pickaxe, axe etc.
2. Soil types and farm land selection, layout (list for crop types) and animal breeding.
3. Preparing the land - clearing, felling of trees etc. for cropping.
4. Ridging, mounding and cultivation of the flats for various crops.
5. Continued compost making or FYM collection and application of manures (fertilizers) on the farm erosion control

PLANTING AND OTHER FORMS OF PROPAGATION

1. Identification of farm crops in the locality.
2. Classification of agricultural crops for domestic food, consumption and mainly for cash e.g. cassava, cocoyams, maize, beans etc.
3. Understanding the planting calendar of the locality.
4. Planning a school farm rotation and establishing a farm. e.g. maize, beans and yams.
5. Planting various farm crops with knowledge of (a) name (b) variety (c) manuring and fertilization (d) method of growing - time, seed - rate, germinat, planting distance and mode, equipment used and other cultural practices.
6. Planting food crops from cuttings, suckers, vines, stems, and roots e.g. cassava, plantains, potatoe (sweet), cocoyams, potatoe(irish).
7. Planting common fruit trees. e.g. guava, pawpaw, mangoes, pear etc.

WEEDING, PEST AND DISEASE CONTROL

1. Understanding insects - life cycle, how and what damage they cause.
2. Understanding plant diseases - nature and form.
3. Control of insect pest in the farm and orchard.
4. Control of plant diseases in the farm and orchard.
5. Understanding the use of farm chemicals and equipment.
6. Continued safety precautions.

HARVESTING, PROCESSING AND MARKETING

1. Knowing and participating in the improved methods of harvesting, handling and storage of farm and orchard crops.
2. Understand the harvesting or felling of forest products e.g. timber.
3. Harvesting and determining crop yield e.g. school farm crops.
4. Understanding the processing possibilities of various food crops and applying this where facilities exist.
5. Collect weekly market prices of various crops.
6. Study the different methods of selling the crops.
7. Weigh and sell farm crops.
8. Keep sales record.

6.9.87

YEAR FIVE (cont'd)

ANIMAL BUILDING

1. Listing the qualities of good meats.
2. Identifying different breeds in terms of a given criteria.
3. Understanding the care for the mother and its young.
4. Understanding what foods go into combinations of livestock feeds.
5. Understanding livestock records.
6. Understanding livestock distribution pattern in the country.
7. Understanding animal conservation in the country.
8. Understanding livestock feed - local deficiency.
9. Continued keeping of market prices.

ADDITIONAL CONCEPTS

Farm management
- Soil
- Labour
The Young Farmers Club
World Food Problem
Establishing a Farm - Land, Capital, Labour.

6.9.58

YEAR SIX

IMPORTANCE OF SPECIFIC AGRICULTURAL ACTIVITIES

Farm Crop Production

- For Food
- For Sale

LAND PREPARATION AND LAYOUT

1. Farm equipments other than tools, their uses and [illegible] e.g. tractor, plough etc.
2. Farm layout in relation to soils types.
3. Continued preparation of the farm for cropping and land types utilisation.
4. Expanded fertilizer application for various soils and crops.
5. Elaborate erosion control method.

PLANTING AND OTHER FORMS OF PROPAGATION

1. Identification of the utilization of the farm crops.
2. Seasonal distribution of domestic food crops and those mainly for cash, e.g. cassava, maize, guinea corn etc.
3. Utilising the planting calendar with respect to research and extension information.
4. Understanding mono-cropping, mixed cropping compatibility of farm crops and effective application of each period.
5. Understanding cultural practices of crops mainly for cash by direct application or visitation to a viable farm. Continued work on fruit trees (budding, grafting).
6. Improving and raising pasture by improved practices.
7. Establishing farm fences, shade trees and wind breaks

WEEDING, PEST AND DISEASE CONTROL

1. Continued understanding and control of insect farm diseases and weeds.
2. Understanding and control of orchard pests and diseases.
3. Continued understanding and use of chemical controls for pests and diseases including precautions.
4. Introduction to common chemical weed killers, utensils and safety precautions.
5. Continued erection of farm fences.
6. Knowing local distributorships for chemical control of weeds, plants, pests and diseases.
7. Knowing unit prices of chemicals for control of pests and diseases.
8. Understanding and utilizing the services of the phytosanitary department.

HARVESTING, PROCESSING AND MARKETING

1. Continued application of improved techniques of harvesting and handling of farm and orchard crops.
2. Determining crop yields after harvest.
3. Understanding timber exploitation requirements; also tree felling techniques.
4. Understanding agricultural foods - processing requirements establishments.
5. Continued collection of market prices.

6-9-59

YEAR SIX (cont'd)

6. Market school farm produce and keep sales record.
7. Understand the marketing procedure in a cooperative.
8. Contrast processed and unprocessed food prices.
9. Understand other [illegible] agricultural marketing organs.

[illegible]:

1. [illegible] vaccinations.
2. [illegible] initial stock.
3. [illegible] livestock care and housing.
4. [illegible] a simple rotation for livestock feeds.
5. [illegible] livestock records as applicable.
6. [illegible] livestock experimental and breeding stations [illegible] country.
7. [illegible] the various systems for [illegible] livestock.

[illegible]:

- [illegible]
- [illegible]
- [illegible]

[illegible] Agric., Lusaka.

OBSERVATIONAL SCIENCE AND NATURE STUDY

G.9.60

I N T R O D U C T I O N

Knowledge of natural phenomena as pertaining to the physical and cultural development of children must form a part of any Observational Science curriculum. It is impossible to separate this facet of learning from other areas of the involved subject matter.

Nature Study, in a completely unstructured sense, begins at birth, with the inherent urge for survival. The natural curiosity of the child is enhanced as he is exposed to his daily surroundings, both in and out of the home. Later, nursery schools provide enriching experiences and, as the child enters primary school, he should rightfully be given stimulation which will enhance his interest in exploring the world in which he lives. This must, of course, be presented according to his own level of receptivity and intellectual development.

The Observational Science curriculum must, therefore, include Nature Study as a backdrop for the more scientific and productive pursuit of agriculture itself. Nature Study must be presented in appealing and intriguing modalities. Instructional media should include written materials, graphic aids, hands-on projects, experimentation, etc. Field trips provide excellent, yet inexpensive, means for the teacher to use in arousing interest in the environment and how it can better serve the needs of mankind. Children must learn utilization with conservation.

Nature Study must be presented in a manner which, at all times, respects differing home and family backgrounds, i.e., religious, philosophical, and ideological. Care should be taken to maintain a classroom atmosphere which allows freedom of interpretation of the functions of nature. Some ideas which are incorporated into the curriculum for Observational Science and Nature Study are designed for developing the art of MAKING NATURE WORK FOR YOU, and include the study of: days and seasons, weather, climate and vegetation, terrain, soils and their adaptability to various crops, plant growth, animal life, birds and fowls, aquatic life, utilization of natural elements as well as science and technology--in the home, in industrial development, in economics, and in world trade. With such background information, pupils are equipped to lead more enjoyable and productive lives, with a greater appreciation for nature's gifts to mankind.

G·9·61

NATURE STUDY AND OBSERVATIONAL SCIENCE

YEAR ONE

TOPIC	
OBSERVATION OF ENVIRONMENT	- Nature study walks about area and school compound with teacher. Teacher serves as motivator for questions and poses questions to pupils designed to pique their awareness of natural phenomena, e.g., plants, animals, weather, etc. Children are encouraged to observe and discuss things of interest, e.g., flowers, insects, birds, soil, etc. Set up a nature corner to be continued throughout the school year. Specimens which have been collected by the children shall be identified, classified, and displayed in one corner of the classroom. These should be changed or added to from time to time. Collections may include flowers, fruits, seeds, rocks, feathers, shells, bones, and many other items. Group discussions of field activities should follow all nature walks or revisions in the nature corner. Children should make simple drawings of things observed. All explanations and discussions shall be confined to simple levels.
WEATHER, SEASONS, AND THE SOLAR SYSTEM	- Children should be encouraged to make simple observations of natural phenomena (wind, clouds, sunshine, shadows, dry and wet seasons, sunrise and sunset, planting and harvest seasons). Children should talk about the weather each day and should make simple weather charts, graphically describing the weather. Changes which occur should be noted. Children should observe plants which are peculiar to each season, viz., those which thrive during dry and wet seasons. Introduce a simple nature calendar. The effects of climatic conditions on plants should be discussed, viz., leaves fall during the dry season, the effects of drought on plants, flowering and fruiting seasons.

69.62

YEAR ONE(cont.)

ANIMALS, BIRDS, INSECTS, AND AQUATIC LIFE

- Teach the names of domestic animals — cats, dogs, sheep, goats, pigs, etc.

Teach the names of common birds — chickens, ducks, (cocks, hens, chicks), turkeys, guinea fowls, also clock bird, sun bird, palm bird, etc.

Teach the names of common wild animals.

Discuss what animals and fowls eat, where they live, etc.

Show drawings of animals and birds and ask the children to identify.

Discuss simple types of marine life, insects, and reptiles.

Talk about the uses for domestic animals (meat, milk, eggs, draught), the uses of marine life (food) animals and birds (skins and feathers).

PLANTS

- Names of common plants, weeds, flowers, and shrubs in the school compound, and how to identify them.

What are seeds?

Names of parts of plants—roots, stem, leaves, flowers, fruit.

Use of plants—shade, food, shelter, clothes, furniture, medicine, boats, vessels, etc.

Activities: Pupils plant beans or maize in tins, pots, or spare corner of school garden. Watch them grow. Seeds might be dug up from time to time to observe development.

SOIL

- What is soil? How is it formed (disintegration of rocks, decomposition, etc.)

AIR

- Discuss some evidences of air—wind, lung expansion, etc.

Discuss and demonstrate some qualities of air (moisture, pollutants, etc.)

Why do living things need air?

Properties of suspension. Activities—children may feel the presence of air by waving their hands in front of their faces or by fanning themselves. Children may throw pieces of paper in the air and observe that they are suspended and move about. Discuss properties of air in motion (wind). What happens if flies are put in airtight tins?

YEAR ONE (cont.)

WATER – Name water sources (rivers, springs, wells, rain, ocean, man-made water systems).

Discuss properties of water (clean, dirty, tasteless, containing salt).

Discuss uses for water (human/animal/plants).

Water as a habitat for marine life.

HEAT – Body responses to heat/cold.

What happens when we become (a) too warm (perspire); (b) too cold (shivering, teeth chatter)?

How to keep warm (clothing, drink warm fluids, stand or sit near fire).

How do domestic animals/fowls keep warm?

Common signs of heat, e.g., glowing coals, flame, smoke.

LIGHT – What makes light (natural means, i.e., sun, moon, stars; artificial means, i.e., candles, lamps, fire)?

Concept of day and night.

Cloud cover/shadows.

Observations and practical activities.

SOUND – Identification and imitation of various noises, e.g. sounds in the market, machine sounds, nature sounds.

FORCE, WORK, ENERGY, and POWER – The movement of animals by legs, scales, wings, and fins.

How we move objects—simple push, pull, and lifting of objects.

MACHINES – We use tools to make work easier.

Show very simple tools that make life easier, e.g. farm implements and kitchen tools.

What tools can pupils name.

G.9.64

YEAR ONE (cont.)

MATTER - Pupils feel materials, e.g. a sponge, wood, cloth, paper, etc. Which is hardest? softest? heaviest?

TIME - Concepts of the progression of time:

(a) Today, tomorrow, yesterday.
(b) Morning, afternoon, evening, night.
(c) Daytime/nighttime.

YEAR TWO

G:9.65

OBSERVATION OF ENVIRONMENT – Continuation of nature study walks to be extended to include neighborhood (streams, forests, lakes, springs, farms, etc. as applicable in area).

Encourage children to observe types of plant growth, animals, insects, birds, and fish; to identify them and discuss their means of adaptation, habitats, etc.

The nature corner should be continued and expanded. Children should be encouraged to bring new specimens from time to time. Nature corner must be maintained in a fashion that is appealing to the curiosity and creativity of pupils. Teacher should direct the activities but at all times remember "It is the CHILDREN'S CORNER."

Objects should be classified as animal, vegetable, and mineral. Teacher should encourage class discussion to discover the differences in (a) ability to grow, (b) ability to move, (c) ability to reproduce, and (d) ability to respire.

Restrict treatment of subject to common plants, animals, and other products of nature.

WEATHER, SEASONS, AND THE SOLAR SYSTEM – Review of the seasons—Dry season, rainy season, Harmattans, etc.; their general onset and duration.

– Plant growth peculiar to each season: The effects of the seasons on various plants and animals should be noted and discussed. Children should talk about what is rain, fog, mist, etc.

Daily weather charts, prepared by the children, should be maintained. Children can draw in symbols representative of the day's weather.

ANIMALS, BIRDS, INSECTS, AND AQUATIC LIFE – Review and contine work done in Level 1.

Continue study of domestic animals and birds.

Names of dangerous animals and some of their characteristics.

Classify animals as to (a) flesh eaters, (b) grass-eaters, and (c) both flesh and grass-eaters. Talk about the teeth structure of each.

Continue study of wild birds, their parts, and habits. What other flying creatures are there (bats)? Name birds that fly at night.

6.9.82

YEAR TWO (cont.)

- Names of common fish: Which are available here and which in other localities? How do fish see and swim?
What is the largest aquatic animal?

Identify and discuss insects around the compound. Classify as to harmful and beneficial.

PLANTS

- Review of class one.

Names of seasonal plants and their common uses.
Names of fruits, and their uses.
Names of grasses. (Human/animal consumption?).

Name the external parts of a seed.

What plants grow in water alone?

Activities: Plant beans or maize and observe. Check root development. Teacher should draw pupils' attention to stages and duration of each for germination and plant growth. Pupils make drawings of their observations.

SOIL

- Review level one - what is soil? How is soil produced? Relationship of water and soil, heat and soil, plant nutrients and soil.

How is soil cultivated? The importance of soil.

Discuss various types of soil (clay, loam, humus, sand, etc.

What are some of the dwellers of the soil?

AIR

- Review class 1. Discuss the necessity of air to life. Continue experiments with entrapped insects, toads, rats, etc. in airtight containers.

Discuss compressed air. Demonstrate with a bicycle pump (inflate balls, balloons, etc.)
What is air pressure?

WATER

- Review class one. Discuss domestic uses of water. What are the sources of domestic water supply? Why does water take the shape of the container? Demonstrate.
Children should observe simple phenomena of evaporation and condensation.

Discuss the solvent properties of water.

6.9.62

YEAR TWO(cont.)

HEAT - Pupils name all sources of heat they know of. These can be organized into man-made and natural sources.

How is heat used in their environment?

Discuss safety around heat.

LIGHT - Items in the pupil's everyday life that give off light (candles, lanterns, fires, torches, etc.). Organize as to natural and man-made sources.

Concept that all life depends upon the sun.

SOUND - Discuss and make simple sounds.

Uses of sound—What do certain sounds mean, i.e., music, sirens, horns (warn pedestrians), etc.?

FORCE, WORK, ENERGY, and POWER - Simple methods of moving objects.

Simple experiments with objects to show relationships between force, speed, and distance, e.g., throwing stones, spears, hitting a ball, etc.

MACHINES - Basic machine principles—the idea of an item being used to do work.

Simple tools and machines and their uses, and examples of each (a) the ramp, i.e., a ramp for moving large, heavy barrels of liquid to a higher point; (b) the wedge, e.g. axe, chisel, common wedge.

Safety with common tools.

MATTER - Pupils lift objects of similar size to note that some are heavier than others despite being the same size.

TIME - Names of the months.
Number of days in each month.
Names of the days in the week.
Number of hours in a day.
Construct a simple 24-hour clock face to teach the telling of time.

6-9-66

YEAR THREE

- Nature walks should be expanded to include visits to places at a greater distance. Include a "day at the market." Identify food products offered for sale. Differentiate between those produced locally and those brought in from other areas.

  Nature corner to be continued and expanded. Discussions can be conducted at a more sophisticated level. Seed germination, plant growth, etc. can be taught from a more scientific point of view. Specimens may include objects not available locally. All items should be classified.

SONS, - Review of work done in class 2.

SYSTEM — Make a simple weather vane and teach pupils how to determine direction of wind: E, W, N, S, SE, SW, NE, and NW.

Discuss other instruments used in predicting or determining weather: wind vane, thermometer, rain gauge, barometer, etc.

Children should discuss the relationship between the earth and sun, the movement which produces the seasons.

Continue to maintain daily weather charts which can be made more elaborate than at Levels 1 and 2.

S, - Review work done at Level 2.

Expand on species of animals, birds, fish, and insects—where they can be found, what they eat, what they produce (benefits or harm)?

Classify animals (with and without backbones). Classify other animal life in the same manner.

Study the stages of development of insects. On walks about the compound, look for butterfly eggs (underside of leaves of fruit trees). Keep these in jars with perforated lids. Note changes and make drawings.

Discuss activities of bees. How is honey produced?

— Review of class 2.

Learn parts of a plant—root, stem, branches, leaves, flowers at more advanced level than one.

Learn types of roots—root hair, tap root, fibrous roots, etc.

Learn types of stems—erect, climbing, underground.

C-9-69

YEAR THREE (cont.)

- Learn leaf types.

How are plants important in everyday life?

How are seeds carried from place to place?

How do plants aid in controlling erosion?

Activities: Visit a nursery or model farm. Identify various plants seen. Pupils may draw specimens.

SOIL - Examine and study a soil profile. Review origin of soil and soil types. Demonstrate through experiments. Collect different soil samples in locality, observe and discuss the differences.

AIR - Continue discussion of air pressure, and do additional experiments (syphon or instruments for measuring air pressure).

How does air occupy space? Does air have weight?

Do simple experiments with moving air (sailboats, windmills, weathervanes, etc.).

WATER - Differentiate between liquids and solids. Discuss the properties unique to each.

Can some solids be liquified? Name them? Can some liquids be converted to solids? How? Can these be restored to their original states?

What additives are effective in changing the composition of liquids and/or solids?

Why do oil, kerosene, acid, etc. have varying effects on certain solids. Compare with water.

Discuss evaporation.

HEAT - Simple experiments showing that heat rises and cold air flows downward.

Simple experiments showing storage of heat, using rocks, water, or other materials. Some materials store heat longer than others.

Discuss volcanic heat, its origin deep within the earth, and evidence of volcanic action, such as around Cameroon Mountain.

6.9.70

YEAR THREE (cont.)

LIGHT - Relationship of light/electricity.

Relationship of plant growth to light.

Simple relationship of light to health.

Relationship of light to vision.

SOUND - Qualities of sound (a) pleasing and unpleasing, (b) volume, (c) pitch—high and low, organization—i.e., music and disorganization, i.e., noise.

Use of musical instruments to demonstrate these qualities.

FORCE, WORK ENERGY, and POWER - Introduction to energy in the following forms: (a) electrical; (b) heat, (c) light, (d) chemical, and (e) mechanical.

Simple experiments producing each type of energy.

Everyday sources of energy around the pupil and classification into the above groups of energy.

MACHINE - Simple tools/machine and their uses and examples of each (a) the lever, e.g., see saw, scissors, crow bar, claw hammer; and (b) the wheel and axle, e.g., gears in an egg beater, wheels on a car and bicycle.

Demonstrate other examples of machines using ramp and wedge.

MATTER - Further experiments to demonstrate that weight is not dependent on size: which is heavier—a kilo of feathers or a kilo of oranges.

TIME - Use of the clock face to expand on telling time, i.e., the various ways to express time. Use of A.M. and P.M. to denote before noon and afternoon.

The seasons—What are the months of the rainy season, of the dry season locally.

G.9.71

YEAR FOUR

OBSERVATION OF ENVIRONMENT – Continuation of nature walks. These walks can be further expanded to include visits to local farmers doing common activities, e.g., raising poultry, cow milking, making of butter and cheese, fish harvesting. Observation of farming techniques in the raising of farm crops, fruits, and vegetables.

Nature corner to be continued. Children should be encouraged to bring to school objects and specimens.

WEATHER, SEASONS, AND THE SOLAR SYSTEM – Continue previous levels' activities of maintaining daily records of weather, to include amount of rainfall, high and low temperatures, wind, cloud cover, etc.

Observe the effects of weather on plants and animals:

a) animals as predictors of weather.
b) increased incidence of insects in certain weather.
c) animals tend to "bunch" or "huddle" when certain weather is imminent.
d) Birds' and poultry's response to weather.

Man's methods for dealing with weather—sun, rain, wind, floods, and other weather conditions.

The importance of the sun in our lives, i.e., how we depend on the sun. Discuss some discoveries men have made about the sun, its composition, etc.
Elaborate on the subject matter introduced at earlier levels as to the effects of the seasons on plant growth, fruit production, dormancy of plants, etc.

What produces rain, fog, snow, etc?

ANIMALS, BIRDS, INSECTS, AND AQUATIC LIFE – Continue a more indepth study of domestic animals: (a) external features, (b) types of food, (c) mastication of food and digestive systems.

Continue similar studies of birds and fowls, also of fish and aquatic life.

Study insects, e.g., butterfly, grasshopper, moths, houseflies, mosquitoes, etc. Observe and compare their external features and life cycles.

Study fish: Their external features and movement. Include frogs, toads, and other aquatic creatures. What is their life cycle?

6.9.72

YEAR FOUR (cont.)

PLANTS - Study propogation and germination of common plants or seeds, e.g., yams, beans, cowpeas, maize, okro, groundnuts, melons. Name parts of a seed and seedling. How are seeds formed?

Conditions important for germination. Differentiate between below surface and above surface germination in dicotyledons and monocotyledons.

Simple explanation of pollination and fertilization. The part insects, wind, and birds have in these processes. Dispersal of seeds.

Parts of and uses for common flowers, e.g. water leaf, hibiscus, etc.

Show how light, fertilizers, water, air, and temperature affect plant growth.

Explain various uses of plants, i.e. foodstuffs, manufacture of cloth, plastics, etc.

SOIL - What is soil texture?

What effect does topsoil depth have to plant growth? What is the importance of organic matter in the soil? What effect does ability of the soil to retain water have to plant growth? What is soil erosion? What are the effects of soil erosion? What is the effect of weeds and other vegetative cover on erosion? On water retention in the soil?

AIR - Discuss presence of air in empty containers. What is a vacuum? Perform simple experiments to prove presence of air. Demonstrate how a candle is extinguished when a lid is placed on the container.

Discuss and demonstrate how air pressure changes.

What are the ingredients of air?

WATER - What is the source of the water supply for (1) your home, (2) your school, (3) your town/village/community e.g., spring, well, stream, cistern, pond? Discuss gravity fed system, pumps, water mains, sewer systems, etc. How is water made safe for drinking (chlorination, filtration, boiling)?

Explain "hard/soft" water. What are the effects of using hard water on laundry? What additives can be used to "break" water? Activities might include using magnifying lenses (if available) to examine water.

C.9.73

YEAR FOUR (cont.)

HEAT - Introduction of thermometer.

Measurement of temperature using Fahrenheit and Celsius (Centigrade) scales.

Use of a clinical thermometer to measure normal body temperature.

LIGHT - Colour— Children list the different colours in the classroom and outdoors. Objects can be collected and later sorted as to colour and shades of colour.

Looking through things—transparent (glass, cellophane, clear plastic), translucent or opaque (lampshades, paper, cloth).

Lenses and curved glass (bottles) and how they distort what is seen.

Looking at—shiny objects, at reflected images, mirrors, spoons, car windows, etc.

SOUND - Echoes—the reflection of sound by distant objects.

The speed of sound as demonstrated by thunder and lightning.

Reverberations—children should attempt to explain why musical instruments emit sounds more clearly indoors than outdoors. Why are they less harmonious outdoors?

FORCE, WORK, ENERGY, and POWER - Introduction to stored energy (potential energy) and energy of motion (kinetic energy) using examples and simple experiments.

Introduction to gravity as a force and its relationship to stored energy and energy of motion.

MACHINES - Use of simple machines/tools

The concepts and use of simple tools/machines in the construction of more complex machines, e.g., coconut grater, trucks, coffee pulper.

Use and safety of simple machines.

6-9-74

YEAR FOUR (cont.)

MATTER - The three states of matter—solid, liquid, gas.

What items can the children list under each of these categories?

Water can be used to demonstrate the three states of matter (ice—solid, water—liquid, and steam—gas).

TIME - Time is based upon the turning of the earth—it takes 24 hours for one rotation, therefore, 24 hours in a day. Use of practical experiments to show that as the earth turns, the sun remains stationary, resulting in 12 hours of sunlight and 12 hours of darkness.

Use a stick and explain the shadow created and the end of the shadow to demonstrate the rotation of the earth and time.

G.9.75

YEAR FIVE

OBSERVATION OF ENVIRONMENT – Trips to commercial enterprises to observe utilization of natural resources for domestic and/or commercial purposes, e.g. tea, cocoa, rubber, and coffee plantations, leather tanning, blacksmithing, etc.

The nature corner can include examples from the commercial enterprises visited, in addition to objects and specimens found by pupils outside of school.

WEATHER, SEASONS, AND THE SOLAR SYSTEM – Continue to observe daily weather, the seasons, and their implications to daily living and activity.

Study the moon, what do we know about it? Why does the moon look different at different times of the month? How the moon serves us in our everyday lives, e.g., hunting, fishing, etc.

What is the role of the moon in relation to eclipses?

Is there animal or plant life on the moon?

ANIMALS, BIRDS, INSECTS, AND AQUATIC LIFE – Review of Level 4.

Classify animals, birds, reptiles, amphibians and fish (vertebrates or invertebrates).

Discuss modes of feeding and locomotion.

Discuss animal behaviour as to methods of defence, protection, and adaptation to environment.

Indepth study of insects, reptiles, and aquatic life, modes of feeding, usefulness and harmfulness.

Animal parasites: jiggers, bedbugs, ticks, fleas, round worms, tape worms, discuss their parasitic lives and the harm they do.

Discuss insects, etc. that live on decaying rubbish or those that are helpful in breaking down dead plants and animals. Include specimens in the class collection.

Discuss draught animals, (a) the care of, and (b) their contribution to improved production of farm plants. Also, their contribution to food sources. Include the contribution of poultry and rabbits to the food supply.

G-1-76

YEAR FIVE (cont.)

PLANTS - Study the effects of light, water, and temperature on germination. What other factors affect germination (e.g. quality of seeds)?

How do plants penetrate and break the soil?

What elements are needed for plant growth?

Enlarge on study of pollination and fertilization, and characteristics of insect and wind pollinated plants.

How do the male and female parts of plants or flowers fuse to form the ripened ovum?

Study various fruit producing plants—Berries (tomatoes, guava)—Drupes (mangoes, coconuts, Indian almond), Dry Fruits (cowpeas, rubber, castor, okra), composite fruits (pineapple).

Study ornamental plants and flowers and their characteristics—Hibiscus (okra, garden hibiscus), Bean Family (cowpeas, yam beans, Pride of Barbados), Composite Flowers (marigold, goat weed, sunflower, zinnia, bitterleaf), Palm Family (oil palm, coconut, Royal palm, date palm), Convulvulus family (morning glory, moon flower).

Children should be encouraged to bring specimens to class, and after class discussion, to draw them.

SOIL - Discuss differences in soil and the effect on plant growth. Special attention should be given to the properties of soil (clay, sand, loam) with simple experiments.

Discuss the effects of cultivation, manuring, and mulching.

How is plant food lost by erosion, leaching, cropping, burning, and oxidation? What practical measures can be taken to prevent these (ridges, cross bars, cover crops, etc.) Discuss the use of compost, animal manure, and other fertilizers.

AIR - Discuss properties of air more indepth than at previous level. Is air real, i.e., occupies space, has weight?

Demonstrate air pressure (fountain pen, syringe, syphon).

How do things burn?

Harnessing "air" for use by man, e.g., sailboats, turning windmills, air guns.

G-9-74

YEAR FIVE (cont.)

WATER - Discuss water as a source of energy (factories, electrical power, transportation).

How does water contribute to pleasure (beaches, pools, water sports).

What are some of man's efforts to control nature's water supply, e.g., dams, canals, cisterns, spring-fed reservoirs, etc.?

Coordinate use of water with other areas of the curriculum, e.g., irrigation, drainage, power, etc.

Discuss water pressure. Demonstrate by pushing a board against water surface. Does water pressure vary at different depths?

Specific gravity of water compared with other liquids. Why do some objects float and others sink? Activities: Small boats, water displacement, etc.

HEAT - Simple experiments to illustrate expansion of material with heat, e.g. steel rails, glass, etc.

Expansion of water on freezing.

How is heat carried from place to place, e.g., conduction, convection, and radiation; illustrated with reference to (a) heated metal—conduction, (b) boiling water—convection, and (c) kitchen fire and heat of sun—radiation.

Simple experiment showing that friction produces heat.

LIGHT - Light travels in a straight line as demonstrated by a shadow and the object making the shadow being in direct line with the light source.

Light rays can be bent—Observe a ruler placed in a glass of water appears to bend because the water bends the light rays.

Colour—make a rainbow using a glass of water and a mirror. Show that light is composed of colours.

SOUND - Sound is moving air.

Sound is vibration of waves. Practical activities—
(a) feel vibration in one's own throat as one speaks.
(b) show vibration of elastic bands and the resulting sounds, (c) making sounds with grass reeds, (d) making sounds with bottles, and (e) construction a tin and string telephone.

Construct and play musical instruments, e.g., xylophone, harp, local musical instruments. Notes obtained from various units. Children may deduce that pitch of a note depends on the length of the unit.

G-978

YEAR FIVE (cont.)

FORCE, WORK, ENERGY, and POWER – Introduction to magnetism as a force through utilization of simple experiments: (a) exper... making magnets from pins, (b) use of magnetiz... pins to show direction, (c) the polarity of m... attraction, and repulsion, and (d) what materi... are attracted by magnets.

Introduction to friction and the relationship between friction and power. Experiments demonstrating how friction can be overcome using (a) oil between sliding surfaces, and (b) rollers between sliding surfaces.

The relationships between (a) energy and power, (b) power and force, and (c) force and work.

MACHINES – Field trips to observe complex machines in general use in the area.

Parts of specific common machines, e.g., bicycle, automobile, motorcycle, etc.

MATTER – Other characteristics and textures of matter—the ability of metal to change shape. Demonstrate by pounding copper metal or other material with a hammer. Show other materials which break apart or crumble when struck.

Hardness of various materials: Using different materials, which leave scratches on others. Organ samples of materials from hardest to softest.

TIME – How long do certain activites take, i.e., how many minutes for eating, how many hours for sleeping,

Students make a "time pie" dividing a typical day into time spent at specific tasks.

YEAR SIX

G·9·79

OBSERVATION OF ENVIRONMENT – Examples of pollution, waste, and contamination and their relationship to sanitation and health in the community, e.g., human waste, animal waste, insect breeding areas, and industrial pollution.

Nature corner to be continued. The teacher can bring in items designed to challenge pupils' ability to identify such items.

WEATHER, SEASONS, AND THE SOLAR SYSTEM – Continue daily observations of the weather and seasons and their implications.

Introduce study of the stars. How does man study the stars? What is the Milky Way? What is a galaxy? What is the difference between stars and planets? Discuss what is known about certain planets. How was this knowledge gained? What other members of the solar system are there?

The correlation of the seasons universally, i.e. Spring, summer, fall, and winter in various parts of the world.

ANIMALS, BIRDS, INSECTS, AND AQUATIC LIFE – Begin a study of the human body:

a) anatomy of the body to be treated simply including the composition and uses of bones and muscles.
b) Food and the digestive process (kinds of food, organs of digestion, and uses of various foods to the body.
c) Discuss the relationship between inhalation and exhalation. Do breathing exercises, changes in pulse rate, breathing rate, perspiration, etc.

Discuss the habitats and distribution of animals. What is the economic importance of animals: food, pets, tourist attraction, game reserves, clothing, transportation, zoos, draught animals, etc.

Continue the study of insects: (a) good/bad, (b) insect control, (c) drainage of stagnant water, (d) health related (malaria, phalaria, etc.).

PLANTS – Review the parts of a plant. What is photosynthesis? Describe osmosis through leaves.

What are some of the regulators that affect plant growth? Discuss direction of stems and roots. What are some of the essential elements for growth? What is dormancy in seeds? Plants

Discuss fertilizers (natural and commercial).

Describe how plants take food through their roots. Passage of water/nutrients through plant stem. Build up of carbohydrates in green leaves. Children perform simple tests for presence of starch in leaves.

6.9.80

YEAR SIX(cont.)

- Transpiration: Giving up of water by plants thro... leaves. Children should examine stomatas using h... lenses (if not available, use diagrams in diction... or other reference materials).

Examination of lenticels in herbaceous stems and stomatas, with simple explanation of plant respiration. How do plants conserve moisture?

Vegetative reproduction in plants. Propagation with cuttings, suckers, tubers. Parasitic plants (dodder, mistletoe). Examine and discuss.

Discuss forest and grassland safety and conservation.

Activities: Germinate seeds on wet blotting paper to demonstrate root hairs.

SOIL - Continue, as in class 5, to introduce use of plant nutrients (major needs for the sources of nitrogen, phosphorous, and potassium).

Importance of drainage. Need for and desirability of crop rotation. Benefits of terracing? Contour farming?

What benefits do trees have as protection against erosion?

How are soil samples taken? What are the advantages to testing soil? Discuss how nutrients may be added to certain soils according to the various needs of different plants.

AIR - Continue to discuss and demonstrate air pressure. Discuss use of the barometer (demonstrate if possible). What is the use in predicting weather?

Elaborate on the composition of air (main components-oxygen, nitrogen, carbon dioxide, and water vapour.

Activities: Demonstrate need for oxygen in breathing. In burning. In rusting.

How is carbon dioxide produced?

WATER - Explain how aquatic animals breathe (dissolved oxygen passes through their gills).
What are the effects of heating water? Why does it expand? Discuss circulation/convection.

Boiling water (100° C.) Explain that steam results from the rapidity of the movement of molecules converting to vapour. What is visible/invisible steam? Explain how expansion of water to steam creates energy.

Freezing water—molecules contract, then spread. Ice is less dense than water, requiring more volume.

Water in the air—evaporation, saturation, condensation. What is the composition of water (H_2O)?

YEAR SIX (cont.)

- What is meant by the "surface skin" of water?

When certain solids dissolve, why is the volume of the water not appreciably increased (e.g. sugar)?

HEAT - Conduction of heat (include good and bad conductors). Illustrate poor conductors, e.g., clothing, asbestos, and wood.
Review work with thermometers to include 2 fixed points (boiling and freezing).
Principle of the thermos flask.
Activities on the expansion of heat with both liquids and solids.

LIGHT - Lenses—the basics of how lenses work. Image reversals, focusing of the sun with a lens to make paper burn.

Construct a pinhole camera (need not use film) to view an image.

Concept of how the eye works—parallels can be made between lenses and focus.

SOUND - How the ear works in relation to the principles taught at earlier levels—sound as waves or vibrations; waves or vibrations moving through air.

Parts of the ear and their functions: the ear drum, the basics of the inner ear, the function of the outer ear.

FORCE, WORK, ENERGY, and POWER - Experiments in electricity using simple circuits with torch batteries, wire, bulbs, and switches.

Experiments with materials showing conductance and non-conductance.

Safety with electricity.

Construction of a balance to measure push/pull force. Demonstration of the proper methods of weighing items.

Brief introduction to alternative sources of energy, i.e., solar energy, wind energy, water energy, nuclear energy.

MACHINES - Application of simple materials to make simple machines, e.g., see saw, balance, pulleys, dry ovens, etc.

Maintenance, upkeep, and cleaning of machines common in everyday use.

6-9-8

YEAR SIX (cont.)

MATTER - Principles of measurement:

Volume—matter occupies volume or space. How to figure volumes of cubes by measuring height, width, and length. Determine the volume of irregular shapes by displacement of water in a graduated container.

Mass—Matter has mass, similar to weight. Methods to determine mass and weight: spring scale, equal arm balance.

Determine mass and volume of various items.

TIME - Measuring time, distance, and velocity, e.g., km per hour, meters per second. Activity: A ball over a 10 meter course is rolled and the number of seconds which are consumed is measured. Have pupils figure the speed in meters per second.

G.9.83

HYGIENE AND SANITATION

INTRODUCTION

This aspect of the curriculum recognized the importance of health in any society. Health may be defined as having complete body fitness, soundness of the mind and emotional stability. Without good health for its citizens, a nation cannot move forward to self-reliance. It is the foundation upon which the happiness of the individual and the welfare of the nation rest.

Although the basic responsibility for good health rests with the parents, it is also the duty of the schools to work with the family in order for the child to achieve and maintain a state of healthful living for a happy and productive life.

In the early years of the primary classes, the main goal is the formation of healthy habits through daily practice. As the children get older, they will learn about causes, prevention and treatment of common diseases. They will also learn to develop a healthy attitude toward their maturing bodies and, finally, their proper role in society.

C.9. 84

HYGIENE AND SANITATION

YEAR ONE

PERSONAL HYGIENE

1. Practical lessons should include daily inspection of pupils for:

   - body cleanliness and daily bath
   - clean clothing and use of school uniforms
   - neat dressing
   - clean hands and well trimmed nails
   - clean feet, well trimmed toe nails and removal of jiggers
   - clean teeth and removal of tooth cakes by teacher. Proper methods of brushing the teeth.
   - clean and well trimmed hair and examination for lice. Cleanliness of ear, nose.
   - attendance to scabies and cuts by teacher
   - clean and comfortable shoes

2. Daily cleanliness of the classroom should include:

   - sweeping of the classroom
   - dusting of furniture
   - orderly arrangement of books and furniture
   - opening and shutting windows
   - putting dirt and scrap paper into waster paper basket
   - providing water for washing of hands before eating or from toilet or as necessary
   - using the correct light in the classroom when writing or reading from books or from the blackboard.
   - providing clean drinking water and cups where applicable use of individual cups

3. Prize competition for all-the-year clean pupil.

4. Weekly inter-class cleanliness competition.

SOCIAL HEALTH HABITS

1. Demonstration and application of acceptable social health habits in the following:

   - spitting, coughing, sneezing, yawning, gnashing of teeth, snoring, chewing of pencils, biting of fingers, picking the nose, urinating and defecating in the street, shaking hands at odd times and when hands are wet, scratching in public, gasing in public, blowing mucus from the nose unto the floor, eating in the street or chewing gum, several people drinking from the same cup, throwing toilet rows on floors, talking across the table, making disturbing noises, sleeping at the right time, having same sexes and age groups sleep in the same room and beds, eating with lips closed, eating at the right time and place.

2. Taking exercise in the right location and identification of play-grounds.

G.9.1985

HUMAN BODY PARTS AND FUNCTIONS

1. Identifying the external parts of the human body - the head, feet, anus, hands, eyes, ears, nose.

2. Explaining the main functions of each of the parts identified.

3. Discussing and demonstrating practically how to keep these parts functioning properly.

4. Practical measurements or height and weight.

SAFETY

1. Avoiding accidents in the classroom e.g. proper placements of furniture and utensils.

2. Practical demonstration on how to use a knife or razor blade in sharpening pencils.

3. Avoiding accidents by not playing with razor blades broken bottles or sharp edge objects, putting pins in the mouth, putting objects in the ear or eye.

4. Road safety and practical demonstrations-which side of the road to walk, crossing a road, using a zebra crossing, using traffic lights, and when authorized by a policeman or gendarme.

5. Avoiding accidents in the compound - jumping from a great height or throwing stones at each other, engaging in rough play - playing on slippery ground
   - arm twisting
   - hitting with hard objects
   - lifting heavy objects

6. Demonstrating simple first aid to:
   - removal of grit in the eye
   - nose bleeding
   - attending to minor cuts
   - reporting accidents inflicted on self or others to the teacher, the parents or any elderly person, insect bite, animal bite, bleeding, sprains, fractures etc.

7. Simple first aid to burns and scalds e.g. not bursting blisters

8. Avoiding playing with hot water and electrical appliances.

9. Avoiding taking drugs not prescribed by a doctor or supervised by an elderly person.

DISEASES, SPREAD, PREVENTION AND CURE

1. Signs of illness - pain, feeling of hotness and oldness, coughing, sneezing, vomiting, dreeping nose, eye-colour change, eye discharge, ear discharge, running stomach, blotted stomach, pain in the throat, headache, etc.

2. Knowing about scabbies, rashes, ringworm and simple prevention and treatment.

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YEAR ONE (cont'd)

3. Knowing simple skin diseases spread by contact e.g. yaws and scabbies.

4. Practical prevention of such diseases.

5. Identifying the mosquitoe and the danger it causes.

6. Simple prevention of mosquitoes e.g. throwing away and emptying vessels which collect water.

7. Identifying the fly and the danger it causes.

8. Reporting signs of sickness and the news of local disease. Visiting the hospital or clinic for medical attention.

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Identification and proper use of sanitation facilities in the school compound e.g. good water, urinaries and toilet.

2. Knowledge of medical facilities in the community e.g. the hospital, clinic, the dispensary, vetinary clinic, maternity homes, local drug stores (pharmacy).

3. School meals and sanitation.

G.9. 87

YEAR TWO

PERSONAL HYGIENE

1. Practical lessons should include daily inspection of pupils for:
   - body cleanliness and daily bath.
   - clean clothing and use of school uniforms
   - neat dressing
   - clean hands and well trimmed nails
   - clean feet, well trimmed toe nails and removal of jiggers
   - clean teeth and removal of tooth cases by teacher - proper methods of brushing the teeth.
   - clean and well trimmed hair and examination for lice. Cleanliness of ear, nose.
   - attendance to scabies and cuts by teacher.
   - clean and comfortable shoes.

2. Class head boy or girl to arrange groups of pupils to keep classrooms cleaned daily.
   - sweeping of the classroom
   - dusting of furniture.
   - orderly arrangement of books and furniture
   - opening and shutting windows
   - putting dirt and scrap paper into waste paper basket
   - providing water for washing of hands before eating or from toilet or as necessary
   - using the correct light in the classroom when writing or reading from books or from the blackboard
   - serving water in a glass or cup without putting in the finger.

3. Prize competition for all-the-year clean pupil.

4. Weekly inter-class cleanliness competition.

5. Making a bed.

SOCIAL HEALTH HABITS

1. Demonstration and application of acceptable social health habits in the following - spitting, coughing, sneezing, yawning, gnashing of teeth, snoring, chewing of pencils, biting of fingers, picking the nose, urinating and defecating in the street, shaking hands at odd times and when hands are wet, scratching in public, gasing in public, blowing mucus from the nose unto the floor, eating in the street or chewing gum, several people drinking from the same cup, throwing toilet rows on floors, talking across the table, making disturbing noises, sleeping at the right time, having same sexes and age groups sleep in the same room and beds, eating at the right time and place.

2. Taking exercise in the right location and identification of play-grounds.
3. Dangers of using other people's towels.
4. Recreational activities and the days of the weeks when they are staged.
5. Location of different play-grounds.
6. Effects of chewing gum - social dislike and dental deterioration.
7. Common recreational facilities in the locality.

6-9-88

YEAR TWO (cont'd)

HUMAN BODY PARTS AND FUNCTIONS

1. Identification of simple internal body parts and their main functions - heart, lungs, stomach, intestines - visit to a butcher.
2. What to do when we sweat and effects of sweating.
3. Practical sings of growth type and number of teeth, hair length, toe nail growth, shoe size.
4. Practical measurements of height, weight and size.
5. Things that help us to grow - food, sleep and excercise.

SAFETY

1. Avoiding accidents in the classroom e.g. proper placements of furniture and utensils.
2. Practical demonstration on how to use a knife or razor blade in sharpening pencils.
3. Avoiding accident by not playing with razor blades, broken bottles or sharp edge objects, putting pins in the mouth, putting objects in the ear or eye.
4. Road safety and practical demonstrations - which side of the road to walk, crossing a road, using a zebra crossing, using traffic lights, and when authorized by a policeman or gendarme.
5. Avoiding accidents in the compound - jumping from a great height or throwing stones at each other, engaging in rough play
   - playing on slippery ground
   - arm twisting
   - hitting with hard objects
6. Demonstrating simple first aid to:
   - removal of grit in the eye
   - nose bleeding
   - attending to minor cuts
   - reporting accidents inflicted on self or other to
   - the teacher, the parents or any elderly person, insect bite, animal bite, bleeding, sprains, fractures etc.
7. Simple first aid to burns and scalds e.g. not bursting blisters.
8. Demonstrating to pupils how to handle simple electrical appliances e.g. switches.
9. Safety in eating fish.

DISEASES SPREAD, PREVENTION AND CURE

1. Simple prevention of the following diseases e.g. colds, conjuctivities.
2. Identification of and simple preventive measures e.g. avoiding body contact, exchange of clothes, using same towel, reporting to the doctor.
3. How germs enter the body - through cuts, through contact, exchange of clothes, through breathing, simple prevention and treatment e.g. colds, coughing, wounds etc.
4. Knowing simple diseases not spread by contact (non-communicable diseases e.g. fever, headache).
5. Knowing about jiggers and dangers they cause. Prevention of jiggers and treatment of jigger wounds.
6. Knowing about wasps and bees and their stings - prevention and treatment of the stings.
7. Knowing about snakes and avoiding snakes e.g. wearing shoes, not moving in bushy areas etc.

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YEAR TWO (cont'd)

8. Knowing about the African tarantula and prevention of its bite e.g. not putting hands in holes.
9. Knowing about the scorpion and prevention of its bite e.g. not putting hands in holes.

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Identification and proper use of sanitation facilities within the community e.g. public toilet, public toilets, public urinaries, public water supply.
2. Assisting in sanitation activities in the community e.g. draining of water points, tidying up street
3. Knowing the main functions of medical facilities in the community.
4. School meals and sanitations.

G.9.#90

YEAR THREE

PERSONAL HYGIENE

1. Continued check on personal cleanliness.
2. Continued check on classroom cleanliness and orderliness.
3. Discussions on home sweeping, cleanliness - polishing cleaning glass windows, washing of plates, pots, pans and other utensils. Washing and ironing of clothes and bedding.
   - plastering, painting and dusting of walls and floors as applicable.
4. Orderly arrangement of things at home to include pots, pans books etc.
5. Care of drinking water - boiling, filtration.
6. Importance of using rubber hoses for sucking water from the same tank.

SOCIAL HEALTH HABITS

1. Demonstration and application of acceptable social health habits in the following:
   - spitting, coughing, sneezing, yawning, smashing of teeth, snoring, chewing of pencils, biting of fi.. picking the nose, urinating and defecating in the street, shaking hands at odd-times and when hands wet, scratching in public, gasing in public, blo.. mucus from the nose unto the floor, eating in the street or chewing gum, several people drinking fro the same cup, throwing toilet rows on floors, taki across the table, making disturbing noises, sleepi.. at the right time, having same sexes and age grou.. sleep in the same room and beds, eating with lips closed, eating at the right time and place;
2. Improper use of handkershiefs and headties for car.. ready made foods.
3. Importance of rest, sleep and relaxation.
4. Proper use and effect of music
5. Importance of taking drugs prescribed by a doctor.
6. Other forms of recreational facilities in the locality.

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YEAR THREE (CONT.)

HUMAN BODY PARTS AND FUNCTIONS

1. Continued identification of external body parts and their functions - eyes, ears, nose, teeth.
2. Breathing with difficulties and what to do.
3. Why blood comes out of the body and why blood in the body.
4. How to promote good eye-sights e.g. avoiding glare, looking at car head-lamps, looking at welding lights, etc.
5. How to promote good hearing e.g. avoid blows on the ear, avoid putting foreign objects into the ear.
6. Continued growth records - height, weight and size.
7. Identifying and reporting body abnormalities to parents, teacher and the doctor.

SAFETY

1. Understanding and applying simple first aid to a bruise.
2. Understanding and applying simple first aid to a cut.
3. Understanding and applying simple first aid to insect bites.

DISEASES SPREAD, PREVENTION AND CURE

1. Common contagious diseases their signs and symptoms, prevention and treatment.

   mumps, measles, common cold, whooping cough, sore throat.

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Understanding current health problems in the community
2. Assisting in community activities e.g. clean-up campaign of the local market.
3. Understanding why meat is inspected.
4. Knowing and or identifying community health personnel.
5. School meals and sanitations.

6.9.92

YEAR FOUR

PERSONAL HYGIENE

1. Continued check on personal cleanliness.
2. Continued check on classroom cleanliness and orderliness.
3. Practical demonstration on how to clean kitchen utensils.
4. Orderly arrangement of things at home to include pots, pans, books, etc.
5. Care of drinking water - boiling, filtration.
6. Importance of using rubber hoses for sucking water from the same tank.

SOCIAL HEALTH HABITS

1. Demonstration and application of acceptable social health habits in the following:

   spitting, coughing, sneezing, yawning, smashing of teeth, snoring, chewing of pencils, biting of fingers, picking the nose, urinating and defecating in the street, shaking hands at odd times and when hands are wet, scratching in public, gasing in public, blowing mucus from the nose unto the floor, eating in the street or chewing gum, several people drinking from the same cup, throwing toilet rows on floors, talking across the table, making disturbing noises, sleeping at the right time, having same sexes and age groups sleep in the same room and beds, eating with lips closed, eating at the right time and place.

2. Proper use of leisure.
3. Agencies that promote recreational activities.
4. Duration for sleep, rest and relaxation

HUMAN BODY PARTS AND FUNCTIONS

1. Identifying the deaf, the dumb and the blind.
2. Causes of deafness, dumbness and blindness.
3. The human skeleton and functions of the bones and joints.
4. The vocal organ and care.
5. Practical examination of major internal organs e.g. heart, lungs, intestines, stomach and the main functions of these organs.
6. Keeping records of heights and weights.
7. Understanding the meanings of overweight, underweight and average (medium) weight.

G.9.93

YEAR FOUR (cont'd)

SAFETY

1. Understanding and applying simple first aid to a sprain.
2. Understanding and applying simple first aid to a burn.
3. Understanding and applying simple first aid to a scald.
4. Understanding and applying simple first aid to choking.
5. Understanding and applying simple first aid to skin bleeding.

DISEASES SPREAD, PREVENTION AND CURE

1. Simple classification of diseases as contagious, non-contagious, infectious, non-infectious.
   a) contagious - ringworm, scabbies, yaws, leprosy, conjuctivitis, infectious hepatitis.
   b) non-contagious - tetanus, rabies, filaria, serum hepatitis, gastritis
2. Simple study of local insect-borne diseases. Their sign, symptom, prevention and treatment e.g. malaria, sleeping sickness, filariasis, yellow fever, river blindness.

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Assisting in school compound drainage.
2. Cleaning culverts, burying broken tins and bottles.
3. Knowing the functions of the various health personnel e.g. doctor, health inspector, vetinary doctor.
4. Knowing the functions of the various health personnel e.g. doctor, health inspector, vetinary doctor.
5. School meals and sanitation.

6.9.84

YEAR FIVE

PERSONAL HYGIENE

1. Continued check on personal cleanliness.
2. Continued check on classroom cleanliness and orderliness.
3. Practical demonstration on how to clean and vanish house furniture and polish floors.
4. Practical demonstration on how to clean window panes.
5. Practical demonstrations on how to paint walls.
6. Importance of neatness at home to include orderly arrangement of foodstuffs.

SOCIAL HEALTH HABITS

1. Demonstration and application of acceptable social health habits in the following:-

   spitting, coughing, sneezing, yawning, gnashing of teeth, snoring, chewing of pencils, biting of fingers, picking the nose, urinating and defecating in the street, shaking hands at odd times and when hands are wet, scratching in public, gasing in public, blowing mucus from the nose unto the floor, eating in the street or chewing fum, several people drinking from the same cup, throwing toilet rows on floors, talking across the table, making disturbing noises, sleeping at the right time, having same sexes and age groups sleep in the same room and beds, eating with lips closed, eating at the right time and place.

2. Effects of using the teeth for opening beer bottles.
3. The social hazard of snuffing and smoking.
4. Dangers of alcoholism.
5. Drug abuse and the effects.
6. Kissing and physical safety.
7. Necessity of seperate toilet facilities for grown-up sexes.

HUMAN BODY PARTS AND FUNCTIONS

1. Identification and examination of body muscles - visit a butcher's shop or disect some common animal like a frog or rabbit, the main functions of the muscles.
2. Identification and examination of internal organs, liver, spleen, duodenum, the throat, kidneys, galt bladder, pancreas, the bladder.
3. Relationship and keeping records of age, weight and size.
4. Relationship between growth and teeth - types and number of teeth and the age at which each type grows or falls off.

6.9.85

YEAR FIVE (cont'd)

5. Proper methods of lifting heavy objects and the dangers of disc slips.

6. Identification of the institutions that cater for the deaf, dumb and blind.

7. Stuttering or stammering and how to get over the problem.

SAFETY

1. Understanding and applying simple first aid to a dislocation.

2. Identifying a first aid kit.

3. Understanding and applying simple first aid to a muscle cramp.

4. Understanding and applying simple first aid to a drowned person.

5. Understanding and applying simple first aid to vein bleeding.

DISEASES SPREAD, PREVENTION AND CURE

1. Simple study of local water-borne diseases. Their sign, symptom, prevention and treatment e.g. cholera-worms - guinea worm, hookworm and bilharzia, typhoid dysentery, tapeworm, roundworms.

2. Vaccination and Innoculation

3. Important people:

-Louis Pasteur Sabin

-Florence Nightingale - 1st Nurse

-Henri Oumant - Founder of Red Cross

-Alexander Fleming - discoverer of penicillin

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Setting up refuse dumps in the community.

2. Conducting anti-mosquitoe drive campaign in the community.

3. Understanding why uninspected meat is bad.

4. Water pollution causes and prevention.

5. School meals and sanitation.

G.9.96

YEAR SIX

PERSONAL HYGIENE

1. Continued check on persoanl cleanliness.
2. Continued check on classroom cleanliness and orderliness.
3. Practical demonstration on how to clean window panes continued.
4. Practical demonstration on how to paint walls.
5. Importance of neatness at home to include orderly arrangement of foodstuffs.
6. Importance of aerating clothing.
7. The importance of mineral waters.
8. Using chemical sprays on clothing e.g. to remove stains and to kill bugs.

SOCIAL HEALTH HABITS

1. Demonstration and application of acceptable social health habits in the following:-

   spitting, coughing, sneezing, yawning, smashing of teeth, snoring, chewing of pencils, biting of fingers, picking the nose, urinating and defecating in the street, shaking hands at odd times and when hands are wet, scratching in public, gasing in public, blowing mucus from the nose unto the floor, eating in the street or chewing gum, several people drinking from the same cup, throwing toilet rows on floors, talking across the table, making disturbing noises, sleeping at the rifht time, having same sexes and age groups sleep in the same room and beds, eating with lips closed, eating at the right time and place.

2. Drug abuse and the effects.
3. Kissing and physical safety.
4. Identification and use of public toilet facilities for the sexes as applicable.
5. Securing sanitary pads particularly for girls.
6. National recreational facilities.

HUMAN BODY PARTS AND FUNCTIONS

1. Body growth and excercises which develop the different parts. Implications for taking the right excercises and the regularity of excercises.
2. Control of weights and the ill-effects of being too fat, over-weighted and under-weighted.
3. Understanding the differences in human sizes, heriditary mutations, poor health, types of nourishments.
4. Study of circulatory system
   - respiratory system
   - growth, puberty, womanhood.
   - excretory system

YEAR SIX (cont'd) 6.9.87

SAFETY

1. Understanding and applying simple first aid to a fracture.
2. Understanding and applying simple first aid to a shock.
3. Simple demonstrations on how to lift the injured.
4. Understanding safety in keeping drugs.
5. The importance of a first aid box and its suggested conte
6. Understanding and applying simple first aid to arterial bleeding.
7. The Red Cross Society and its functions.

DISEASES SPREAD, PREVENTION AND CURE

1. Simple study of local air-borne diseases. Their sign, symptom, prevention and treatment e.g. flu, pneumonia, tuberculosis, chicken pox.
2. Metabolic diseases
   - sickle cell
   - anemia
   - hemophilia
   - diabetes
3. Venereal diseases
   - gonorrhoea
   - syphlis
4. Alcoholism and drug abus. Alcohol, Marijuana, Tobacc
5. Identification and use of simple non-prescribable dru
6. Nutritional diseases
   - rickets
   - anemia
   - pellagra
   - kwashiorkor - protein
     - calorie
     - deficiency
   - marasmus
     - protein - calorie deficiency under one year.

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Fencing around water points to control pollution by ani
2. Understanding meal sanitation through practical demonstration by meat inspector.
3. Air pollution causes and prevention.
4. Drinking or eating in bars and sanitation.
5. School meals and sanitation.

G-9-98

MORAL EDUCATION

INTRODUCTION

In considering the subject of teaching moral values to children in the primary school, educators will bear in mind the broad quality of this topic. It is impossible to deal with any child, or with instruction in any subject area, without considering the development of sound moral practices since all involve individual performance—both by the instructor and by the pupils.

It is expected that, at all times when in the company of children, whether on the school campus or elsewhere, teachers will maintain exemplar conduct, thus serving as models of behaviour which may be emulated by the pupils. As responsibility for demeanor is taught to the children, the teacher, in accepting the role as an instructor, pledges himself to observe high moral standards in his daily lifestyle.

Morals must never be taught in a punitive or restrictive manner. While disciplinary measures are at times unavoidable, the pupils should be made to realize that punishment generally results from the individual's own lack of regard for, or violation of, the basic rules of conduct—hence is usually self-inflicted although administered by another. Thus children will recognize that greater self-fulfillment and happiness are the natural outgrowth of developing and maintaining acceptable behaviour standards.

Recognition must be given to the varying moral values taught and observed in the home. Care must be taken to avoid infringing upon the rights and responsibilities of parents in this regard, or imposing views which may be contrary to those of the home. This is particularly true in matters which deal with religious values or traditional customs.

Teaching "morals" necessarily involves the areas of personal hygiene since a child who does not treat his own body well, cannot be expected to show respect and kindness to others. And care of one's own body includes cleanliness, nutrition, exercise, and all the factors which lead to good health.

The key, then, to successful teaching of sound moral practices to a child is initially, the development of his own personality, the growth of a child who is basically self-confident and self-assured, with respect for his own being. Such a person will inherently have respect for others, will practice kindliness, exhibit helpfulness, and will perform acts reflecting good citizenship in his interpersonal relationships—at home, in school, in his community, and in his country.

6.9.99

MORAL EDUCATION

YEAR ONE

Initially, all instruction in the area of morals will, of necessity, be conducted orally in class discussions in very simple, understandable terms and language. At this level, only basic principles will be presented, which the teacher may enlarge upon or elaborate according to the receptivity and ability of the pupils.

Neatness and tidiness:

School work. (Ex. keeping materials together, neat work area),
Personal habits. (Ex. keeping body and clothing clean, carrying handkerchief and wiping nose).
With personal belongings. (Ex. caring for balls or toys),
With school property and collections. (Ex. not damaging or defacing tables or benches).

Manners and demeanor:

Truthfulness, to parents, teachers, and others. Mention some consequences of lying. (Ex. saying one did not do something he had done, or vice versa).
Politeness. (Ex. proper greeting to strangers, elders, village authorities, and others).
Willingness to try new things. (Ex. new foods, new games).
Service. (Readiness to help others, ex. carrying water, helping in field, carrying wood, helping teacher clean classroom, helping schoolmates with tasks).
Pride. In accomplishments, in initiating simple functions. (Ex. planting a seed, caring for the plant, caring for an animal).
Respect. (Ex. not talking back, knowing how to talk to the village heads).
Respect for things (Ex. the school uniform).
Patience. (Ability to delay gratification, Ex. can wait if reward has been promised is not immediately had).
Punctuality. (Ex. being on time for school, for meals, for sports).
Observing rules. (Ex. lining up at school, obeying the teacher, class head, elderly persons, obeying traffic rules, obeying rules at home, such as not getting into food without permission).

G.9.100

MORAL EDUCATION

YEAR TWO

Review and reemphasize instruction at year one, as applicable.

Social Interaction and Personal Development:

Pleasantness and cheefulness. (Ex. wear a smile, maintain a a genial manner).
Responsibility.
a. For property. (Ex. careful with clothing and books).
b. For carrying out instructions. (Ex. doing as parents and teachers direct).
Perseverance. (Ex. continuing with tasks even when difficult).
Endurance. (Ex. completing chores or school work even when tired or feeling malaise).
Acceptance. Making the best of things, (Ex. wearing worn clothing when necessary).
Sincerity. (Ex. avoiding sham or mockery, telling deliberate untruths hoping to win favour).
Prudence. Good and bad choices. (Ex. swimming in dangerous areas).
Generosity. With self and with belongings. (Ex. sharing food and toys).
Willingness. To try new things. (Ex. to attempt a task not done previously).
Helpfulness. Particularly to needy or older persons. (Ex. helping carry a burden or do an errand).
Honesty. (Ex. stealing, telling lies, or otherwise concealing the truth). (Ex. knowing the whereabouts of a stolen article and not telling).
Cooperation. With teachers, parents, peers, and others. (Ex. helping sister with her chores so she has time to play with you).
Kindness.
a. To other persons. (Ex. caring for baby, or getting a drink of water for grandfather when he asks).
b. To animals. (Ex. care of a wounded animal or bird, or returning a lost dog to his owner).
Sympathy. Ability to say "I'm sorry" by word or by deed. (Ex. taking a gift, such as a gift of food, to a neighbour who has had a death in the family or a serious illness).
Appreciation.
a. To other people. (Ex. telling your mother "thank you" for food and clothing, and other love she shows you).
b. For gifts of nature. (Ex. not destroying or defacing nature.
Interaction with peers and maturation. (Ex. treating others as you, yourself, would like to be treated. Maintaining behaviour so as to be well liked.

G.9.101

MORAL EDUCATION

YEAR THREE

Review and reemphasize instruction at previous years, as applicable.

Conduct class discussions and read stories, fables, and poetry relating incidents involving moral values.

Discuss newspaper or radio items related to incidents involving moral values. (Ex. an accident which was caused by carelessness or drunkenness, or by child's inattention to traffic rules).

Pride in community:

- Help with environmental cleanup. (Ex. day proclaimed by President).
- Anti-litter campaigns. (Ex. do not throw candy or gum wrappers on ground).
- Appreciation of environment. Preserving and caring for nature. (Ex. flowers and plants in school compound).

Attention to Duties:

- Responsibility for carrying out assignments. (Ex. doing chores at home without need for reminder).
- Preparation of school lessons. (Ex. doing routine work without constant supervision).
- Not bothering others. (Ex. talking aloud in class or interfering with instruction by inattention or play).
- Obedience to teacher and other authority figures. (Ex. doing what is asked without argument or sullenness).
- Punctuality. (Ex. turning in assignments when due. Being on time for school or for meetings).

Good Citizenship (in social and sports activities):

- Good sportsmanship. (Ex. not complaining when not chosen for a game or team. Not making excuses for losing).
- Fair play. (Ex. keeping score correctly. Not cheating in play).
- Willingness to share. (Ex. letting others use your things).
- Empathy. (Ex. for peers who may be less capable or adept, or who are experiencing problems.
- Participation and involvement. (Ex. joining games, songs, dances. Helping to form clubs or suggest other activities).

Service:

- Helping school mates. (Ex. to carry books or materials).
- Helping others. Family, friends, older people, etc. (Ex. helping grandmother with work. Child learns joy of service without need for material reward).

Family Interaction:

- Relationships and responsibilities. To members of the nuclear family and the extended family (blood relations). (Ex. helping with tasks involved in providing food and shelter. Listening to stories by elders of tribal customs, traditions, history. Doing acts of kindness. Learning music and dances, and otherwise absorbing culture of ancestors).

G.9.102

MORAL EDUCATION

YEAR THREE (continued)

Family Interaction:

The greater family. The community or tribe. (Ex. interchange with and helping others in village or compound).
The nation. As a family. (Ex. becoming interested in and supporting projects for national welfare).
The world. The universal brotherhood of man. (Ex. sharing and helping other nations in times of calamity).

Respect for Authority:

Obeying parents, school, church, and civil authorities.

Personal Habits:

Avoidance of foul language. (Ex. do not use vulgar or profane words).
Gratitude. (Ex. thanking parents for home. Thanking teacher and friends for services and favours).
Satisfaction. In work done to the best of ability.
Avoidance of gossip, hurtful, or inappropriate remarks. (Ex. avoid making untrue, unkind, or disparaging remarks about another).
Self-control. (Ex. avoid shouting, fighting, crying, over-emotionalism, or display of anger).
Willingness. (Ex. to try new methods, read new books).
Courage. (Ex. not being afraid in the dark).
Prudence and safety. (Care with fire, around lakes and streams, or in traffic).
Self-reliance. (Ex. devising ideas and means which foster independence, preparing own meal, mending a tear in a dress).

G.9.103

MORAL EDUCATION

(Prefacing remarks to years 4, 5, and 6: It may be expected that at these age years, the moral principles and practices which were presented in the early primary years shall have become natural and spontaneous. It is recognized, however, that as children reach the ages of 9 through 13, they are most impressionable, and certain aspects of their growth and development continue to require much emphasis and grooming. While guidance through the trauma of "growing up" is inherently the duty of parents and the home, nonetheless the teacher often acts as a surrogate parent in this regard. This is not unusual inasmuch as a great share of the child's waking hours are spent in school, in the company of the teacher. He, therefore must assume a large part of the responsibility for the inculcation of sound moral values in the children he serves. In preparing this syllabus, the basic rules of behaviour and conduct presented at the early primary years may not be repeated although they should by no means be considered to have been accomplished or to be irrelevant. They should be continually reviewed by the teacher and reemphasized to the pupils, along with whatever new ideas are presented in the forthcoming chapters more specifically designed for years 4, 5, and 6).

G.9.104

MORAL EDUCATION

YEAR FOUR

Review and reemphasize instruction at previous years as applicable.

Read stories, fables, and poetry and discuss their moral implications.

Discuss current events, both local and national, which deal with moral issues. Outline the responsibilities of pupils in dealing with such ever (Ex. In the event a home is destroyed by fire, pupils can assist in brin contributions of food and clothing to the school to be delivered to the family.

Pride in community:

Appreciation of and preservation of the environment. (Ex. children are encouraged to participate in community efforts t maintain and beautify the surroundings by the planting of trees, s and flowers).

Diligence in school:

Preparation of lessons. (Ex. child does homework assignments and t in acceptable work without reminders).
Punctuality with assignments. (Ex. child observes assigned due d and assumes the responsibility for turning in work on time).

Good Citizenship:

Fairness in sports and other activities. (Ex. Child does not deliberat hurt another player in a game in order to score a point or make a goal
Empathy for others. (Ex. child will aid a less capable or younger child in sports or social functions. Empathy extends to other areas of socio- interaction, to include kindness to the ill, crippled, or elderly).
Participation and involvement. (Ex. interest in youth groups promoting national unity).

Service to others:

Assisting family (Ex. assuming increasingly responsible role in home, such as care of younger children while mother goes to market).
Assisting in community (Ex. aiding a neighbour with household chores or field work).

Personal Growth:

Awareness of problems related to drugs and alcoholism. (Ex. Cite cases of violations and consequences).
Self-reliance. Ability to make decisions. (Ex. child is given choice of two projects in school compound and decides which is more expedient for him).
Avoidance of gossip, hurtful remarks, and untruths. This needs continual reinforcement. (Ex. child avoids hurting another child's feelings because of circumstances over which he has no control).
Modesty and vanity. (Ex. as body matures, child should be aware of changes and need for greater cleanliness, decorum and appropriate dress).

6.9.105

MORAL EDUCATION

YEAR FOUR (continued)

Greed. Inordinate desire for possessions. (Ex. child commits dishonest act to acquire an object, e.g., trades his brother's ball for another toy he very much wants).

Self control. (Ex. shouting, fighting, over-indulgence, arguing with teacher, disrespect to parents and others).

Bravery. (Ex. saves a child from being hit by a car, though risking his own life in doing so).

G.9.106

MORAL EDUCATION

YEAR FIVE

Review and reemphasize instructions at previous years as applicable.

Discuss current events, both local and national, which involve moral issues.

School citizenship

Class and school elections (exercise good sportsmanship).
Observing school rules.
Fair play. In and out of classroom. (Ex. honesty in games).
Cooperation. (Ex. assisting parents with home tasks so entire family can enjoy some special treat or occasion).
Acceptance. Of negative as well as positive decisions by authority figures. (Ex. child does not question mandate of parent in matters pertaining to his activities).

Personal Development

Self-respect. The need for self-esteem as a basis for liking other people.
Respect for others. (Ex. maintaining supportive attitudes, not hypercritical).
Honesty. In all things, to self and others.
Entertainment. Good and bad choices. (Ex. outcome of bad choices can affect future welfare, such as choice of bad companions creates bad reputation and might influence future job opportunities.
Self-control. (A continuing need to develop restraint and ability to control anger, hate, overemotionalism in sorrow and joy).
Loyalty and devotion to others. Family, peers, adults, and others. (Ex. loyalty to a friend when unkind, possibly untrue remarks are being made by others).

Knowledge of:

Drugs. The hazards involved. (Ex. addiction often results in crime).
Alcoholism. Abuse to body. (Ex. illness for victim of continual over-indulgence).
Social diseases. Syphilis, gonorrhea, etc. (Ex. of the devastation to human body.)

Service-related professions. Their contribution to mankind.
Teachers. (Ex. their devotion to the welfare of children).
Doctors and nurses. (Ex. long hours to relieve suffering).
Scientists. (Ex. personal risks to explore—astronauts).
Religious leaders. (Ex. clergy serve often for no personal gain).

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v
9.

MORAL EDUCATION

YEAR SIX

Review and reemphasize instructions at previous years as applicable

Discuss current events, local, national, and in the world, which involve moral issues.

Citizenship:
In the school—
Observing school rules, (Ex. as established by the headmaster, the school council, and the teacher).
School and class elections, (Ex. helping to organize and participate in school elections. Maintaining honest and impartial procedures).
Petitions for change: (Ex. when in opposition to, or when suggesting change, to learn the mechanics of the right of petition, thus realizing the benefits of a democratic society).
Knowledge of local, provincial, and national elections. (Ex. class discussions pertaining to candidates and issues, as a basis for future involvement).

Moral Issues in the world at large:
Universal likes and differences: (Ex. moral values in varying structures of nations and their governments and philosophies).
Responsiblities to others. (Ex. our responsibilities involving world hunger, social injustices, and racism).
Discuss the Pan-concept inherent in all religions, i.e., "Do unto others . . ."

Personal Growth:
Developing sound judgment. (Ex. when faced with a decision concerning social matters, to make good choice).
Honesty and integrity. (Ex. if a merchant inadvertently gives you too much change, to be honest and return the overage).
Moderation. (Ex. to avoid over-indulgence in all things, eating, drinking, play, work, etc.).
Devotion and loyalty. (Ex. Being true to friends, in good fortune and in adversities).
Being non-judgmental. (Ex. in situations, or with others whose ideas and behaviour differ, to avoid being over-critical).
Self-esteem: (Ex. developing a healthy regard for one's own person and performance).
Respect for others. (Ex. Maintaining attitudes which build up, not damage, other people and their reputations).
Use of leisure time. (Ex. for self-improvement, service to others, and for pleasure).
Self-control. (Ex. in difficult and trying situations, sorrow or tragedy, such as calamities in the home, illnesses or deaths).

Traditions (Verifying Facts):
Examining moral values and superstitions of ancestors. (Ex. food or health taboos, determine those based on sound principles).
Importance of fables. (Ex. in explaining moral values).
Social customs. Respect for culture. Keeping alive ceremonies, dances, feasts, and other customs. (Ex. Elephant dance and its meaning).

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9

HISTORY AND GEOGRAPHY

INTRODUCTION

The presentation of History and Geography within the curriculum in the reform of primary education in Cameroon poses specific questions and requires attention to certain directives.

The child should be made aware of the circumstances which have led to the confrontation or unions of peoples and societies in their efforts to dominate and organize their natural and social environments. Through studies of man in society, he will acquire precise and concrete information related to the past, the present, and possibly of the future—first of his immediate world; of Cameroon, his nation; of Africa, his country; and of the universe, which is becoming ever smaller and nearer.

OBJECTIVES

History

The teaching of history should not only implant specific facts and data in the minds of young learners but should arouse in them an ability to assess their individual roles in today's world. Many children are close to traditional societies, hence recognize a sense of the continuity of human progress and of the solidarity of the successive generations of which they are a part. As a reflection of this heritage, their ambitions for their own futures will be oriented in a natural sense toward the service of common good.

The teaching of history embraces the study of man in society in the light of past events. Reasoning and deduction from examples cited will center on the political, economic, or social aspects of human relations, Such teaching should contribute toward the acquisition of certain dates and facts which are indispensable for analysis and clear thinking, as well as in obtaining a suitable basic vocabulary. However the overall goal should always relate to the development of an individual who is oriented toward the ultimate success and happiness of man in society. The child should be enabled to develop the critical faculties he needs to comprehend present day problems of human relations since problems of the past cannot be separated from the hope of finding viable solutions in the future. Thus, the deeds of man, the evolution of peoples, and the formation of nations (more particular the development of Cameroon) will be envisioned as the potential fruit of arduous labour and great patience rather than the results of the less scrupulous methods, of domination by power and force, aggression, and warfare.

6.9.109.

GEOGRAPHY - SUGGESTED SYLLABUS

TOPICS	CLASS ONE
S C H O O L	Location of important spots in the school compound e.g. classes, food sheds, urinals, toilets.
VILLAGE & VILLAGE LIFE	Location of our homes. How do you get to school? Name of our village. Village occupation.
T O W N	Name of our town, important places in the town e.g. market, motor park, football field.
DIVISION	Names of some big towns and villages.
PROVINCE	Names of important places.
THE UNITED REPUBLIC OF CAMEROON	Name of the country Names of all the provinces.

G.9.180

GEOGRAPHY - SYGGESTED SYLLABUS

TOPICS	CLASS TWO
S C H O O L	Getting to and from school, foot paths, bicycles, car etc. Simple modelling of the classroom showing important spots table and desks.
VILLAGE & VILLAGE LIFE	Main roads in the village. Travelling in the village Transportation.
T O W N	Major streets in the town. Means of transport Town centre.
DIVISION	Main roads. Travelling. Types of cars used. Communication. Our neighbouring Divisions
PROVINCE	Repear Year One
THE UNITED REPUBLIC OF CAMEROON	Name of all the Provinces repeated.

G.9.181

GEOGRAPHY - SUGGESTED SYLLABUS

TOPICS	CLASS THREE
S C H O O L	Simple signs of direction using the sun. The concept of East and West, North and South. Modelling of the school compound.
VILLAGE AND VILLAGE LIFE	People in the village. Major village occupation - carpenters, bricklayers, smithing.
T O W N	Types of building - shops, churches, schools
DIVISION	Products. Communication. Major occupations. Outline map showing important towns.
PROVINCE	Other Provinces in the country. Map of the province and its important features.
THE UNITED REPUBLIC OF CAMEROON	The shape of the country (stencil). Our neighbours Important products of our country. Import and Export Major towns, mountains, lakes and seas.

6-9-12

GEOGRAPHY - SUGGESTED SYLLABUS

TOPICS	CLASS FOUR
S C H O O L	Scale drawing explained. Plan of the classroom using a suitable scale.
VILLAGE & VILLAGE LIFE	Plan of the village. Communication to and from the village - road, rail, water, air. The market in the area.
T O W N	Map of the town - major streets, shops, hospital. Major industries. Main occupations. Export and Import.
DIVISION	A map showing vegetation - physical features.
PROVINCE	Map of the country showing the particular province in which the school is located. Vegetation, communication, Industries, Relief/Climate Touristic sight, Export & Inport. Population. Major occupations in the province.
THE UNITED REPUBLIC OF CAMEROON	Relief and climate, Natural regions, Industries Forest exploitation Economic Activities - Agriculture, Plantations, Livestock sources of energ Cameroon and Africa.

G.9.113

GEOGRAPHY - SUGGESTED SYLLABUS

TOPICS	CLASS FIVE
S C H O O L	Plan of the school compound using a suitable scale. More exercises on scale drawing.
VILLAGE & VILLAGE LIFE	Plan of the village scale drawing - school compound The position of the village in the Division. Its main occupation. A sketch map of the village showing important places e.g. the chief's compound, the church/ church/mosque, village hall, the cemetry. Shrine. Important products of the village.
T O W N	Major occupations and services. Road & other signs Advertisement.
DIVISION	Drawing the map of the Division and locating the important towns.
PROVINCE	Maps depicting the following Divisions/Sub-Division Communcations and major industries.
THE UNITED REPUBLIC OF CAMEROON	Map of Cameroon - Relief, Valleys, Plains, Plateau Mountains, vegetation forest, Savannah. Idfe in the Forest Zone. Idfe in the Savannah. Other physical features - Rivers, Lakes, etc. Economic geography Main Industries. Trade with other parts of the world. Export and Import. The oil Refinery

G-9.114

GEOGRAPHY - SUGGESTED SYLLABUS

TOPICS	CLASS SIX
S C H O O L	Aerial representation of objects e.g. buildings Location of the school in relation to the village.
VILLAGE & VILLAGE LIFE	Building sites surrounding the school. Drawing school compound to scale. Area representating the school. Surveying instruments. Communication. Other occupations in the village - trading, crafts Graph - representating of the village. Census of the village. A map of the village - important aspects.
T O W N	The physical features of the town. Map and Models of the town. Plan of the town to scale. Communication Major foreigner groups.
DIVISION	The extent of our division. Outline map. Occupations of the foreigners in the Division. Where some of the people of the Division have migrated to
PROVINCE	Regional map of the province showing: (a) Relief (b) Climate (c) Communication. The province in relation to other provinces Export & Import of the province.
THE UNITED REPUBLIC OF CAMEROON	Map of the United Republic of Cameroon showing maj. of transport, principal airports, sea river ports within and outside Cameroon and other African cour. Ghana, Chad, Ivory Coast. Industries - where sit. the country. Cameroon and her neighbours. Relief U.R.C. Africa and the world. Outline map of the showing continents and Oceans - America, Asia, Eur. India and Africa.

SUGGESTED HISTORY SYLLABUS

G.9.185

CLASS I

TOPICS	
SCHOOL	Name of the child Age and date of birth Names of parents Names of other family members.
THE HOME AND FAMILY	Origin of the tribe with which the family is affiliated with.
VILLAGE AND VILLAGE LIFE	Name and origin of the village. How long your parents have lived in the village. The language of the home, village.
TOWN AND TOWN LIFE	Name and origin of the town. How your parents have lived in the town. The main language of the town.
THE DIVISION	Name of the Division and the derivation of the name.
THE PROVINCE	Name of the Province and the derivation of its name.
THE UNITED REPUBLIC OF CAMEROON	Other children in our class. Where do they come from.

SUGGESTED HISTORY SYLLABUS G.9.186

CLASS TWO

TOPICS

SCHOOL	Langunge of the home Name of the tribe in which the school is situated Names of the family members.
THE HOME AND FAMILY	The family Region The language of the home.
VILLAGE AND VILLAGE LIFE	Names and quartersin the village. How did they acquire the names.
TOWN AND TOWN LIFE	Names of quarter in the town. How they acquired their names.
THE DIVISION	The Division in the past - what was its name and extent.
THE PROVINCE	The Province in the past - What was it before? How big or small was it?
THE UNITED REPUBLIC OF CAMEROON	Other people in our village, Division. Where do they come from? How did they get here.

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SUGGESTED HISTORY SYLLABUS

CLASS THREE

TOPICS	
SCHOOL	The idea of a school. How children were educated in the traditional African way.
THE HOME AND FAMILY	The History of the home.
VILLAGE AND VILLAGE LIFE	Important personalities of the quarters past and present. What makes them important? Important historical places of the village. By whom was the village founded?
TOWN AND TOWN LIFE	Important personalities of the quarters past and present. What makes them important? Important Historical places of the town.
THE DIVISION	Historical places of importance in the Division.
THE PROVINCE	Historical places of importance in the province.
THE UNITED REPUBLIC OF CAMEROON	Other people in our country. Why are they here?

SUGGESTED HISTORY SYLLABUS

CLASS FOUR

TOPICS	
SCHOOL	History of the school. Some people in the area who attended the school - tracing their where - about using the Register
THE HOME AND FAMILY	History of the family. Family tree. How far can you trace your family. Notion of time
VILLAGE AND VILLAGE LIFE	The origin and growth of the village - How the village got its name. The first people to settle there. The name of their tribe - Where they came from - old sites.
TOWN AND TOWN LIFE	The town in the past. Important personalities of the town past and present.
THE DIVISION	History of the Division. Introduction of Islam Christianity in the Division. They early Missionaries - Alfred-Saker. Jackson Fuller, A. C. Good.
THE PROVINCE	History of the Province - Its creation. What was in the past - during the Germans, the English and post Independence.
THE UNITED REPUBLIC OF CAMEROON	The early inhabitants or our country - the pygmies. European exploration of Cameroon, the German explorers - Barth and Nightingal, The German occupation of Cameroon - the principal German towns - Buea, Douala, Yaounde. The 1914 War - German lost Cameroon, The rule of Cameroon as a mandated territory. The French and the English in Cameroon. Cameroon and the Second World War 1939-1945. Political Evalution 1954-1960 Independence Jan. 1, 1960. The birth of the United Republic of Cameroon 20th May 1972. The study of some tribes- (a) The Fulbes (b) the Dualas (c) The Bamilikes (d) The Bassas and Bakokos (e) The Bamums

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SUGGESTED HISTORY SYLLABUS

CLASS FIVE

TOPICS	
SCHOOL	History of the Agency running of the school. This History ... tion in Cameroon Missionaries as pioneers of education
THE HOME AND FAMILY	The cradles of civilisation
VILLAGE AND VILLAGE LIFE	How the village was founded. Early settlers. Important personalities of the village past and present. The population of the village - its rate of growth.
TOWN AND TOWN LIFE	Origin and growth of the town. How the town got its name
THE DIVISION	The Division in the past. Important people past and present in the Division
THE PROVINCE	The Province in the past Important people past and present the Province. The Province in History - the arrival the whi... The exploration of Cameroon The German colonisation.
THE UNITED REPUBLIC OF CAMEROON	Important people in the History of Cameroon - Martin Paul Sa... Douala Manga Bell, Charles Atangana, Ntsama Adamu Sultan, Njoya. German colonisation of Cameroon. Cameroon and the 1914 war. The German replaced by the French and the English. Independence Jan. 1960 Reunification, Ahidjo - the father of the Nation. The Unification 20th May, 1972.

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SUGGESTED HISTORY SYLLABUS

CLASS SIX

TOPICS	
SCHOOL	The Development of Education in Cameroon. The idea of school. Types of schools - Dame school Nursery school Monitorial school Postal Tuition Other types of schools - Islamic. Informal Education.
THE HOME AND FAMILY	The History of my home. Old and new structures. Stories told at home during leisure time. The family tree. Origins of family names of quarters.
VILLAGE AND VILLAGE LIFE	The history of our village National Historical spots in the village.
TOWN AND TOWN LIFE	History of the town i.e the town in the past.
THE DIVISION	History of Division. Great personalities of the Division Important Historical events in the Division,
THE PROVINCE	History of the Province-what is was before the creation of Provinces in 1972. Important historical events and places of interest in the Province. The history of the administrative headquarter of the Province
THE UNITED REPUBLIC OF CAMEROON	The Exploration of Africa and Cameroon in the 19th Century - David Living - stone, Stanley, Bath, Nachtigal, Europeans in Cameroon from 16th - 19th Century. The Portuguese, the Dutch, and English and the French Cameroon as a German Protectorate - the work of the Missionaries, the traders, treaties with Germany. German administration - resistance to their occupation of Cameroon. German achievements in Cameroon - Agriculture means of communication and health. Cameroon and the First World War 1914-1918. The era of mandated territory. The league of Nations. The Englsih and French in Cameroon at the end of 1914-18 War. The organisation of Great African Empires-Ghana, Mali Songai. The Slave trade and its abolition. Participation in the 2nd World War 1939-45. The UNO. Political Evolution from 1945-1961. Party politics regional assemblies. Reunification 1st October 1961. The architects of independence of Reunification - AHMADU AHIDJO and JOHN GHU FONCHA. Political Evolution from 1960-1972. Federal Republic. The 1972 Referendum. The birth of the United Republic - 20th May 1972.

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C I V I C S

Introduction

Our Civics Syllabus which is based on the Spiral Curriculum seeks to lead the child progressively from the study of his home environment to that of the world to give him expanding flashes of insights as he ascends the school and acquires more knowledge and experiences in the preparation for life.

With a Spiral Curriculum, the learner takes up again and again the same sort of problems at deeper and broader levels and in different circumstances--"any subject could be taught to any child in an honest form."[1]

In brief, our Civics Syllabus is designed to prepare and equip the child for life, not only in his local community but as a citizen of the world. In order to present life as a whole, educationists have departed from the traditional approach of fragmenting this body of knowledge into History, Geography, and Economics. Instead, knowledge is presented as an integrated discipline so that the child can see the inter-relatedness of all the factors in his environment and be able to take his place and assume his responsibilities in the community through the development of desirable knowledge, attitudes and skills.

The aims of the Civics Syllabus are:

1. To foster an understanding and appreciation of a given environment with a view to conserving and transforming its vital resources.
2. To enhance the integration of youths in their environments.
3. To inculcate a sense of civic responsibility as well as full and conscious participation in the life of this environment.
4. To promote a wholesome life through the acquisition and utilization of the available resources in the environment.

The objectives are:

1. The development of useful mental skills (cognitive) which include:
   a. the ability to observe.
   b. the ability to collect information or data.
   c. the ability to analyse data.
   d. the ability to make hypotheses.
   e. the ability to come to conclusions based on da

[1] J.S. Bruner: The Process of Education, p. 52

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2. Attitudes (affective):
   a. to develop in the individual an appreciation of the need for changing the environment or adapting to it.
   b. to maintain the child's sense of wonder, stimulate and broaden his interest in the world around him.
   c. to inculcate in the individual a moral responsibility for the preservation and improvement of our natural and cultural heritage.
   d. To develop in the child positive feelings toward the state.
   e. to help the child to value the cultural diversity of Cameroon.
   f. to help the child to appreciate the need to share with other sub-groups within the nation.
   g. to develop in the child an appreciation of the importance of cooperation and tolerance among nations.

Content

The Civics Syllabus comprises structures and Current Affairs and in classes one and two, myths, legends, and folk stories. Under structures, the following stories will greatly help us to achieve the aims and objectives of the Civics Syllabus: The School, Village and Village Life, Town and Town Life, The Division, The Province, and The United Republic of Cameroon.

The historical and geographical aspects of each lesson become more meaningful and interesting when they are related to the above topics. As children move from one class to another, each topic in the syllabus increases in content and complexity.

To keep the children abreast with the daily happenings in the school community, the village, the division, the province, the country, and the world, current affairs should be taken up as they occur, e.g. the visit of the President of France to Cameroon.

The objectives of the current affairs aspect of a Civics syllabus would be:

1. to stimulate pupils' interest in everyday events and activities that have significance for the community in which they live.
2. to develop their ability to observe everyday activity and current events.
3. to encourage pupils to seek information by asking questions.
4. to encourage and develop their skills in oral expression.

The formal current affairs lessons for class one should be deferred until the last term. Throughout classes one and two, current affairs need not appear on the time-table as a separate subject. Also, as the type of topics which children of this age and level can benefit may not

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METHODS OF TEACHING

Any academic subject has at least two main characteristics--a body of knowledge and a particular method of inquiry. The field of information into which the study of civics can take children are so extensive that the information cannot be defined. An important aspect of the teaching of civics throughout the primary school course is the stress on the skills of inquiry--the ability to observe and collect information independently, to see actual relationships, and to reach conclusions based on rationality. Thus, the development of precise methods of making direct observations and recording social experiments, and the communication of the results, are characteristics of the methods to be employed in the teaching of civics. This approach provides the learner with a life-long tool.

The acquisition of mere facts on the otherhand has limited value. Facts are important but what is more important is the manner in which the child acquires and applies the facts. In order to achieve this, the following changes in the methods of teaching are necessary:

1. Learning situations must be created by posing problems for the children to solve.
2. Opportunities must be provided for children to find out things for themselves--remember the Chinese proverb:

   "I hear and I forget
   I see and I remember
   I do and I understand."

3. The function of the teacher is no longer to lecture and dole out facts but to organise, stimulate and guide the children by skillful questioning and productive handling of groups.
4. Teacher should make full use of outdoor role-playing and group activities as means of developing the attitudes and qualities specified in the aim.
5. Pupils must be helped to seek information from the environment, not only from books.

N.B. Particular attention should therefore be paid to the methodology section of the Teacher's Guide which stresses the child-centered discovery method and activity-centered approach. This section of the book offers suggestions on possible ways of teaching each of the topics in the syllabus. The teacher is requested to use the suggestions, and to innovate. Equal attention is also drawn to the section on the utilization of resources. In this respect, the teaching of civics is particularly demanding but maximum utilization of resources in the environment makes for effective teaching.

The Handbook also attempts to offer guidance on evaluation, especially in the different areas of attitude and values. The vocabulary list is a guideline to the range of words to be used by the teacher and is also a checklist on new concepts to be introduced in each cour

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be frequently available, the teacher is advised to take up current affairs only when there is a suitable topic, e.g., the celebration of death in the village or an important marriage ceremony in the community. One current affairs lesson in a two-week period will be quite ample.

In classes one, two, and three, current affairs should as far as possible be confined to local and national topics. As the pupils can only comprehend straightforward events, the topics must be within their power of understanding.

In classes one and two, legends, myths, and folk stories form an important part of most African culture. They should, therefore, be included in the Civics Syllabus. Stories were created and told for different purposes. The myths were told to explain great mysteries of our world: how the world began, how men came, the origin of death, of day and night, rain, drought, the sun and the moon, thunder and lightning, of kingship, and of social classes.

Legends are stories which people tell about their past and the great men of their past, about movements of people, wars and disasters, founding of dynasties and cities. Legends are not true stories. The people in them are larger than life and so often the accounts of what they did. They have clearly been told for particular reasons, sometimes to establish the claim of people to remain on the lands they now occupy but more often, to glorify these legendary ancestors so that their descendants can gain some extra glory for themselves.

On the other hand, folk stories are sometimes about people, sometimes about giants, witches, or monsters. The most common are about animals and insects--the chameleon tortoise, leopard, elephant, lion, hare, or spider.

In the not distant past, stories were usually told to children in the evening by their parents and grandparents. They represented a very wise and pleasant part of the traditional education of children for they taught manners and customs and kept alive a very important part of the cultural heritage, the oral literature of Africa. If you observe a child listening to a well-told story, you will see that his mind, his whole self, is far from you. He is reliving the adventures of the hero you are describing. He becomes the tortoise tricking the antelope. He becomes the brave king leading his warriors to battle or the poor boy who is rewarded for goodness.

Children not only love stories, they also learn from them. They learn to develop imagination, to make new and more wonderful pictures in their minds. They also learn new words and expressions, thus enabling them to speak better and to describe things clearly. Myths, legends, and folk stories are part of Cameroon cultural history.

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CIVICS - SUGGESTED SYLLABUS

CLASS ONE

TOPICS	
SCHOOL	Members of the school family Headmaster, Headmistress, Teachers, Pupils.
THE HOME AND FAMILY LIFE	Members of the family and what each of them does - the father, mother e.g. children carrying water, splitting wood, sweeping the house and clearing the compound.
DIVISION	- Origin of the name of the Division - Name of the Divisional Officer - The division in which the school is situated - Some big towns & villages
TOWN	Things we see in our town - important people in town - the name of our town - important places in town - football field, district office, townhall, & Motor park.
PROVINCE	The head of the province - The Governor - The name of Province.
THE NATION	Names of Head of State Important events in Cameroon 11th February 20th May The name of the Country and the name of the Province.

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CIVICS - SUGGESTED SYLLABUS

CLASS TWO

TOPICS	
SCHOOL	The significance of the School Uniform. Important events in the School - Youth Day Celebration.
THE HOME AND FAMILY LIFE	Respect of the rights of the members of the family.
DIVISION	How the division is governed.
TOWN	The role of the important people in town - The District Officer - The Mayor - The Medical Officer
PROVINCE	How province is governed The name of the governor of the province.
THE NATION	How the provinces are governed Different provinces of the country Our neighbours.

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CIVICS - SUGGESTED SYLLABUS

CLASS THREE

TOPICS	
SCHOOL	Duties rights and responsibility of members of the school family. School rules and regulations - What staff and pupils do.
THE HOME AND FAMILY LIFE	Family security and persons responsible for it. Traditional rights in the family - the birth and naming of a baby in the family.
DIVISION	How the division is governed Important celebrations Youth Day - 11th Feb. Referandum - 20th May.
TOWN	How the town is governed How disputes are settled in town Those who maintain peace in town The town council.
PROVINCE	How the province is governed Associating, Credit Union Football clubs, traditional groups to promote culture. Visits to province by national & International visitors The names of other provinces. The names of governors.
THE NATION	Our national days celebrations How country is governed - Head of State - Assembly - The governors, etc. The origin of the name of Cameroon.

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CIVICS - SUGGESTED SYLLABUS

CLASS FOUR

TOPICS	
SCHOOL	People who help us to build the school - The P.T.A. The administration of the school.
THE HOME AND FAMILY LIFE	A simple family tree The extended family, uncles, aunts, cousins etc. Family budgeting Method of saving money.
DIVISION	How the division is governed The work of the Divisional Officer - Customary Courts - Magistrate Courts - Administrative division of the Country - Sub Districts
TOWN	Importance of the social services i.e. Hospitals, Post Office, Social Welfare, Maternity Homes, Gendarmarie The Government of the town The work of the Mayor The District Officer The Administrator The Police
PROVINCE	Development activities in the province. The Governor and his duties How the province is governed The activities of the C.N.U. in the province The National symbols (a) the flag (b) anthem (c) coat of arms
THE NATION	The CNU party The Head of State How the country is runned The O.A.U. The U.N.O. National events (a) Agricultural Shows (b) C.N.U. Congress (c) Elections into National Assembly etc.

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CIVICS - SUGGESTED SYLLABUS

CLASS FIVE

TOPICS	
SCHOOL	The importance of the school to the Community.
THE HOME AND FAMILY LIFE	Place of origin explained People who work in the village and their main functions What good members of the village ought to do - pay taxes, obey laws and participate in community work
DIVISION	Government & Native - The differences - Certificate of Occupancy - How to get a building loan - The President of the C.N.U. and Y.C.N.U. W.C.N.U.
TOWN	Village & Town life compared How town is governed Financial institutions and taxes The C.N.U. and her organs W.C.N.U. & Y.C.N.U.
PROVINCE	How the province is governed continued The work of the Governor Important events in the Province
THE NATION	How the Country is governed The C.N.U., its organs & functions Political evolution Molti party and the one party system

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CIVICS - SUGGESTED SYLLABUS

CLASS SIX

TOPICS	
SCHOOL	Traffic in and around the School. The problems of the school - Community work, Payment of fees, Buying of uniform Professional consciousness of teachers School as a Community Centre - Civics and Social functions
THE HOME AND FAMILY LIFE	Social services - red cross, Boy Scouts, Choir groups. How disputes are settled in the village. The village traditional council.
DIVISION	How the division is ruled The role of the Divisional Officer Council service C.N.U. Section President Sources of revenue in the Division.
TOWN	The towns needs i.e. water sewage disposal, crome protection e.g. buglary, pick pocketing. Accidents - Town Council - The Town Courts
PROVINCE	How the province is governed (cont.) The work of Governor, Parliamentarian. The problems of the province Roads, education, unemployment health facilities, and touristic sights etc.
THE NATION	How the country is governed The President of the Republic of The Constitution The important issues, - the Referandum 1972. The National Assembly Rule of the President in the National Assembly The elections of parliamentarians Administration of Justice in Cameroon, The Courts, The Citizen & Law , Regional Organization - UDEAC, O.A.U. International Organization - - U.N.O, UNESCO, UNICEF, FAO, ILO The Cameroon National Union structure & objectives, its history.

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ART AND CRAFTS/TECHNOLOGY SYLLABUS

INTRODUCTION

"Crafts is about making things"

"Technology is sciences applied in the making of things"

Aim: The aim of the syllabus is to teach children how to make useful things. In doing these the children will be able to:

(a) Develop the ability to identify and solve practical problems.
(b) Encourage resourcefulness and creativity in the use of materials.
(c) Develop methods, skills and techniques in good home making.
(d) Expose the children to those skills which may subsequently enable them to find employment.

Principles:

(a) The tools and materials used should be inexpensive and available locally.
(b) The syllabus is flexible to permit regional variation in:
    i. Materials available
    ii. Local crafts, traditions and skills.
(c) Teachers using this syllabus should use their discretion regarding.
    i. The objects selected for craft projects - these should be within the child's capacity and offer reasonable choice.
    ii. The number of things made, bearing in mind that it is better to complete one thing well rather than many badly.
(d) Teachers should explore the possibility of making an object from different materials in order to develop adaptability and resourcefulness.
(e) Finally teachers should not feel restricted to activities suggested in this syllabus. New techniques and ideas for art and craft activities should be explored and included in the syllabus.

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(f) Every school will require one member of staff who has attended a basic Art, Crafts/Technology Education Seminar and subsequent courses in techniques at the Divisional Crafts Workshop level.

Materials and Method

(a) The Crafts outlined in the syllabus have been classified according to materials used, techniques activities and things to be made.

Example I Wood (common everywhere)
Things which can be made from wood include e.g. combs, spoons, furniture, toys, sports equipment, musical instruments, boxes, simple farm buildings etc.

Example II Leather (Northern Areas)
Things which can be made from leather include e.g. bags, sandals, seats, book covers, belts, etc

(b) Preparation, organisation and supervision of the work is very essential i.e. (a) Materials, tools, use of local craftsmen and work area.

- Certain activities would require individual or group participation in which demonstration and practice are very essential.
- Care and maintenance of tools are essential in all work organisation.
- The class should have a box in which scrap and waste materials are collected from the homes, shops and surroundings e.g. empty tins, wire, newspapers, etc.
- Record of children's work should be kept by the teacher.

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Topics	Materials	Techniques	Class 1
Woodwork and Basketry	Wood Raffia Bamboo Cane Calabash Nuts/Seeds	Sawing Planing Cutting Joinery Carving Modelling Assemblage Weaving	Creative play activities with: - sticks - counters - building blocks - beads/seeds
Clay modelling Pottery & Sculpture	Clay Plaster Soap Stone	Coil & Slab Modelling Slip decoration and Glazing Casting Carving Moulding	Creative play activities with mud clay, sand, stones - modelling - sand hill
Metalwork	Sheet metal & tins Wire Machine parts	Cutting Bending Beating Soldering Forging Twisting	Creative play with: wire, tins, etc.
Textiles	Cotton, wool and Synthetic Fabrics (New and used - materials)	Dye making and dyeing Tie and Dye Discharge printing Batik Block printing (Silk screen) Spinning and weaving Sewing and embroidery Crochet Knitting	Creative play with materials: - dressing up games - colour matching
Fibrework	Cotton Raffia Sisal Sago Screwpine Coconut Banana Straw Grasses Reeds Oil palm	Weaving Plaiting Braiding Twining Spinning Crocheting Sewing "Macrame" Knotting	Creative play with fibre: - twisted fibre - twined fibre - plaited fibre
Leather and Plastic work	Leather Hides and Skins Plastics Rubber	Dyeing Stitching Embossing	Familiarise the children with animals in the environment e.g. goats, cats, rabbits, cows, etc.

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Class 2	Class 3	Class 4
- Toy models e.g. houses, implements furniture, etc. - Beadwork	Toys and models	- Drawing pens - Organic jewelry - Soya and chop sticks - Chewing and spill sticks - Sticks for counting - Twig sculpture
Modelling: - Animals/reptiles, birds, etc.	Modelling figures, etc.	- Impressed and relief plaques - Coil pots and figures - Spoons - Beads
Creative play with metal: - Construction sets - metal percussion instruments	Wire sculpture and abstract forms, etc.	- Decorated surfaces - Cut and folded shapes - Wire jewelry
- Dressing up games with dolls - Fabric pictures - Costumes	- Dusters - Pads - Rag-dolls - Puppets and costumes	- Kerchiefs - Bags - Bundles - Cravats - Patchwork quilts - Cards
Strings Bangles Necklaces	- Cardlooms - Woven book-covers - Banana fibre Sculpture	- Bamboolooms - Bags - Brooms - Mats
Identify animals that are skinned e.g. goats, cows etc.	Know the differences between: - Hides - Skins - Kip - Plastics - Rubber	Working with leather and Plastics: - Strips - Bookmarkers - Shoe laces

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Class 5	Class 6	End Profile
- Boxes - Rattles - Combs and spoons - Walking sticks - Decorated calabashes - Kites, Fans - woven types - Toys	- Baskets. Containers - Musical instruments - Utensils - Farm implements - Furniture - Games and Sports equipment - Building (farm and home) - Hunting and fishing equipment	General Personality traits Show some level of: Initiative, creativit resourcefulness, critical ability, readiness to innovate, self-reliance, etc.
- Group modelling - Painted pots - Dishes - Sculptured forms - Bells - Flutes	- Slab pots - Bricks and tiles - Simple kiln construction	General Attitude towards work:- Show some level of: - Willingness to work productively, - Team spirit, - Appreciation of a job well done, - Respect for others' jobs - Safety precautions
- Dishes and bowls - Fans - Pendants - Bracelets	- Biscuit moulds - Scoops - Funels and cans - Boxes - Charcoal braziers - Graters	Specific Attitude towards Arts, Crafts and Technology Show some level of: - Ability to identify and solve practical proble - Good design and craftsmanship - Appreciation of indigenous and th contemporary arts and crafts and the artistic and cultural value.
- Dyemaking - Covers - Belts - Cloths and wrappers - Mats/Rugs.	- Towels - Bed/table covers - Ties - T-shirts - Soft furnishings - Screens - Pictures and wall hangings - Lampshades - Hats - Costume fabrics	Attitude to Productio and Distribution
- Boardloom - Containers - Brushes - Hats - Belts - Scarves - Ties	- Tablelooms - Baskets - Thatching - Beds - Hairstyles - Screens - Nets and hammocks - Fencing	- Have a basic degre of competence in th use of tools and materials and do simple maintenance services in the environment - Make some useful articles for the home, the farm and to satisfy basic social needs. - Have some ideas of cooperative methods of making and selling of craft items.
- Thongs - Purses - Book covers - Drums	- Belts - Sandals - Seats - Buckets	

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Topics	Materials	Techniques	Class 1
Picture making and Lettering	Pencil Ink Chalk Crayon Paint Dye Charcoal Paper/Card	Drawing Painting	Art activities designed to develop sense of: - line - shape - colour - pattern - paper kites
Pattern work and Bookcrafts	- Printing Materials - Vegetables - Clay Polystyrene Wax Paper/card String Miscellaneous Found objects	Rubbings Mono and Polyprints Offsets Blocks Scrape prints Stencilling	Finger and hand patterns
Design and Construction	Domestic and Industrial Waste including Glass Cork Shells Horn/bones Barkcloth Leaves Feathers	3 - dimensional Assemblages and Constructions	Collection of natural objects e.g. feathers, corks, leaves etc.
Technology	Tins, Bolts and nuts Palm oil Paper Sawdust Grasses Custic Soda Wax Candle drips		

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Class 2	Class 3	Class 4
Art activities designed to develop sense of: - line - shape - colour - pattern - movement - Cards & picture making - Paper kites	- Coloured paper collages - Pattern making in other shapes - Crayon drawing - Kites	- Coloured paper mosaics - Linear patterns - Pen and pencil drawings Charcoal pictures
Finger and stamped block-pcitures and patterns	- Potato prints - Wax texture impressions	- Wax impressions - Stencils - Book covers
Creative activities with collected natural objects e.g. shells, bones, leaves, etc.	- Junk models and toys	- Paperstrip b... - Puppets, etc.
	- Bolts and nuts - Tie and untie bolts and nuts.	- Candle stands - Solder joints

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Class 5	Class 6
- Paintings - Lettering - Diagrammatic drawing - Scraper board pictures	- Group murals - Signwriting - Poster design - Book illustrations
- Wax impressions - Stencils - Greeting cards - Wrapping papers	- Wax impressions - Posters - Greeting cards - Illustration (Silk screen)
- Papiemache masks - Figures	- Collages - Mobiles - Chimes
- Candle stand - Oven design and model construction - Waterfilters - Biscuit tins and baking moulds - Re-pulped paper making	- Candles - Soap - Paper - Polish - Sugar extraction - Oil palm processing - Oven construction

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Topics	Materials	Techniques	Class 1
Nutrition and Cookery	Local food-stuffs Kitchen implements and utensils Cooking apparatus	Methods of Preparing food Methods of Cooking food Juice extraction. Preservation and Storage of food; e.g. drying, smoking salting, bottling etc... Budgeting Marketing	- Flower garden: practice with soil, growing - Growth graphs or charts - Naming and recognizing local foods - Play at kitchen; play or making meals. - Rules concerning meals. - Play tea party, play restaurant - Play market - Integration with language and maths.

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Class 2

- More work with flower garden or herbs
- Discussion of the importance of growing food for the family.
- Recognition and naming of local foods.
  - Simple uses in the body. (energy, construction, protection)
  - Simple rules for food preparation: e.g. Avoid flies
    Clean pots
    Wash hands
- Play at market
- Integration with language and maths
- Growth charts

Class 3

- Vegetable garden with simple vegetables.
- Growth charts
- Review of uses of foods in the body Practice at classification into three food groups Energy, Construction and protection Discuss connection between growth and good nutrition.
- Cooking techniques: Cleaning food, cutting and chopping. Boiling and frying
- Soups and beverages
- Three stone fire place
- Revision and expansion of food habits and rules concerning meals.
- Visiting the market to see different foods
- Integration with language and maths.

Class 4

- Expanded vegetable garden. Discuss its use as a means for improving meals.
- Planning meals using the three food groups
- Review uses of food in the body, including simple digestion. Eating foods to prevent sickness.
- Cooking techniques:
  a) Simple juice extraction e.g. oranges lemons.
  b) Roasting
  c) Charcoal stoves
- Kitchen sanitation e.g. keeping kitchen clean, proper serving temperatures
- Storage of grains and flours
- Budgeting for food money.

G-9-M1

Class 5	Class 6	End Profile
- Boxes - Rattles - Combs and spoons - Walking sticks - Decorated calabashes - Kites, Fans - woven types - Toys	- Baskets. Containers - Musical instruments - Utensils - Farm implements - Furniture - Games and Sports equipment - Building (farm and home) - Hunting and fishing equipment	General Personality traits Show some level of: Initiative, creativity resourcefulness, critical ability, readiness to innovate, self-reliance, etc.
- Group modelling - Painted pots - Dishes - Sculptured forms - Bells - Flutes	- Slab pots - Bricks and tiles - Simple kiln construction	General Attitude towards work:- Show some level of: - Willingness to work productively, - Team spirit, - Appreciation of a job well done, - Respect for others' jobs - Safety precautions
- Dishes and bowls - Fans - Pendants - Bracelets	- Biscuit moulds - Scoops - Funnels and cans - Boxes - Charcoal braziers - Graters	Specific Attitude towards Arts, Crafts and Technology Show some level of: - Ability to identify and solve practical problems, - Good design and craftsmanship - Appreciation of indigenous and the contemporary arts and crafts and their artistic and cultural value.
- Dyemaking - Covers - Belts - Cloths and wrappers - Mats/Rugs.	- Towels - Bed/table covers - Ties - T-shirts - Soft furnishings - Screens - Pictures and wall hangings - Lampshades - Hats - Costume fabrics	
- Boardloom - Containers - Brushes - Hats - Belts - Scarves - Ties	- Tablelooms - Baskets - Thatching - Beds - Hairstyles - Screens - Nets and hammocks - Fencing	Attitude to Production and Distribution - Have a basic degree of competence in the use of tools and materials and do simple maintenance services in the environment - Make some useful articles for the home, the farm and to satisfy basic social needs. - Have some ideas of cooperative methods of making and selling of craft items.
- Thongs - Purses - Book covers - Drums	- Belts - Sandals - Seats - Buckets	

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Topics	Materials	Techniques	Class 1
Picture making and Lettering	Pencil Ink Chalk Crayon Paint Dye Charcoal Paper/Card	Drawing Painting	Art activities designed to develop sense of: - line - shape - colour - pattern - paper kites
Pattern work and Bookcrafts	Printing Materials Vegetables Clay Polystyrene Wax Paper/card String Miscellaneous Found objects	Rubbings Mono and Polyprints Offsets Blocks Scrape prints Stencilling	Finger and hand patterns
Design and Construction	Domestic and Industrial Waste including Glass Cork Shells Horn/bones Barkcloth Leaves Feathers	3 - dimensional Assemblages and Constructions	Collection of natural objects e.g. feathers, corks, leaves, etc.
Technology	Tins, Bolts and nuts Palm oil Paper Sawdust Grasses Custic Soda Wax Candle drips		

Technical Exhibit G 10: Past Teacher Certifying Exams

Durée : 3h
Coef. : 2

PSYCHO - PÉDAGOGIE GÉNÉRALE

Les candidats traiteront au choix, l'un des deux sujets suivants :

1er SUJET :

Pour assurer la discipline dans une classe, le regard vaut mieux que la parole, et la voix basse mieux que la voix pleine.

Qu'en pensez-vous ?

Quels procédés utilisez-vous pour faire régner une saine discipline dans votre classe ?

2ème SUJET :

«Ce qui est important, ce ne sont pas les connaissances que les élèves acquièrent, mais celles qu'ils pourront acquérir.»

Expliquez clairement cette opinion et dites comment vous pourriez vous en inspirer dans la conduite de vos leçons à l'école primaire.

MINÉDUC - DEX

CAPIA - SESSION 1981

Durée : 3h
Coef. : 3

PSYCHO - PÉDAGOGIE PRATIQUE

OPTION PRIMAIRE :

Vous vous proposez de conduie une leçon de géométrie au Cours Moyen.

Titre de la leçon : La surface du losange.

Rédigez-en une fiche de préparation commentée.

OPTION MATERNELLE :

L'école maternelle est un lieu de première éducation.

Dites comment vous vous prenez pour faire acouérir aux enfants de 4 à 5 ans de bonnes habitudes. Ces jeux font parties de quel groupe d'activités de l'école maternelle ? Donnez le déroulement d'un jeu.

Durée : 1 h 30 mn
Coef. : 1

DESSIN & ÉCRITURE

Représentez un pousse-pousse plein à craquer.
Son propriétaire, un vigoureux gaillard, s'efforce de lui faire monter la côte.

Au bas de ce tableau, écrivez en cursive moyenne :
«Tu mangeras à la sueur de ton front».

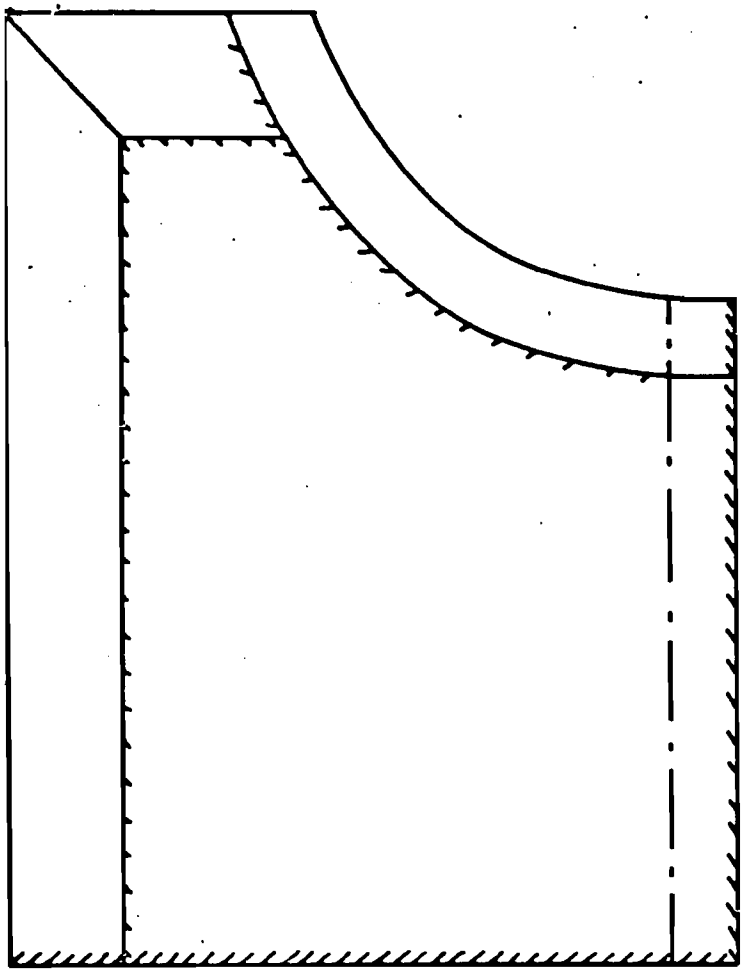
MINÉDUC - DEX
CAPIA - SESSION 1981

Durée : 1 h 30 mn
Coef. : 1

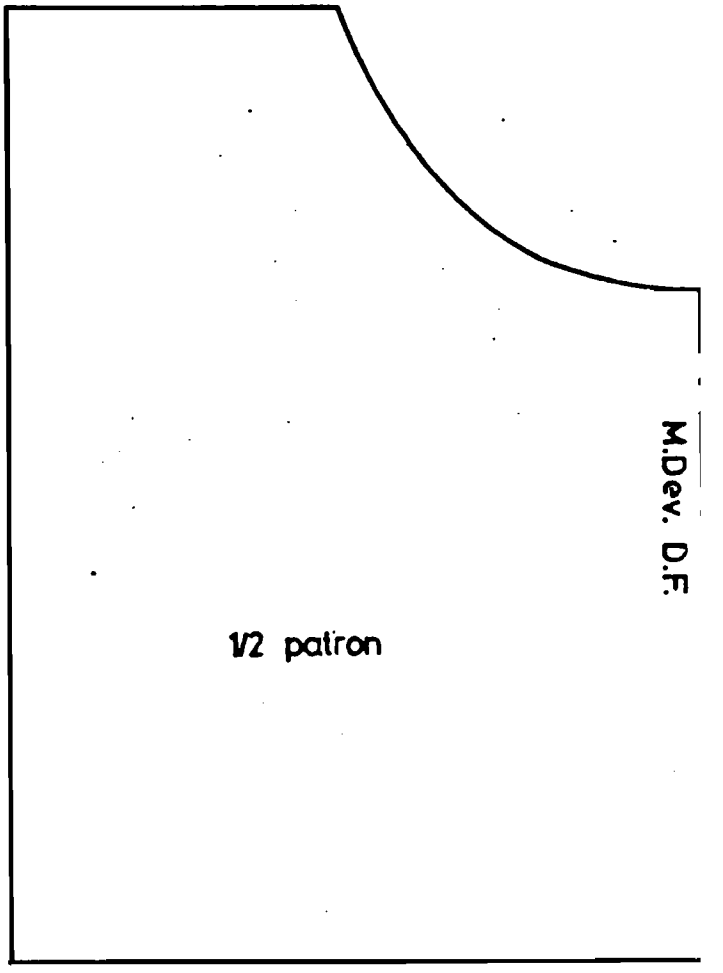
TRAVAIL MANUEL

Pliage, découpage et collage.

Réalisez un cylindre de 18 cm de hauteur et de 6 cm de diamètre.



② pièce terminée (l'envers)



① patron

Haut de serviette à bouillie

Travail demandé :

- couper une bande de tissu de :
  12 cm sens trame
  16 cm sens chaîne.
- Exécuter un coin onglet sur le côté gauche (ourlets terminés 1,5 cm).
- Passer un fil à 1 cm du bord droit
- Poser le patron au bord du fil passé.
- Couper à 0,5 cm au dessus du patron.
- Préparer et monter un biais à plat à l'encolure
- Surfiler la pièce.

Barème de correction : /20 pts

Coin et ourlets	16
Biais d'encolure	2
Aspect et finition	2
	20

ÉTUDE DE TEXTE

Une rude saison.

Le mois de janvier battait son plein avec des alternatives de froid intense et de grandes chaleurs. Au matin, un brouillard ténu s'attardait quelque temps aux abords des concessions et fumait doucement comme à regret. Alors, les cases étaient secouées de toux stridentes et les courettes des maisons voyaient surgir tardivement le peuple grelottant de leurs habitués. Le long des palissades en tiges de mil ou en lattes de bambou, des gamines vêtues de loques sortaient, se protégeant du vent glacial. Devant les concessions les plus accueillantes, où des gestes de charité étaient accomplis chaque jour un nombre incalculable de fois, ils s'arrêtaient pieds joints, le nez dans les deux mains et récitaient d'une voix chevrotante et cassée les éternelles litanies des mendiants. Et quand une aumône se faisait trop attendre, ils s'en allaient, chassés par le froid, en trottinant dans une autre direction.

Quand le soleil daignait sourire, il chassait le brouillard, glissait un rayon tiède sur les haillons et le cœur des malheureux — La journée s'écoulait très douce, jusqu'à l'heure où le vent d'Est s'en venait, bousculant tout. Il venait avec ses bouches de feu altérées. Alors les foules en vadrouille donnaient de la tête dans des vagues de chaleur desséchante, d'une chaleur qui brulait les yeux, grillait les narines. Les poulets lamentables cherchaient la fraîcheur. Accroupis à même le sable chaud, dans des espaces découverts, les dromadaires tournaient désespérément leur énorme cou vers l'Ouest et tendaient leurs naseaux ouverts dans un appel émouvant jamais entendu, l'appel de la soif.

Le soir ramenait le froid plus discret mais plus tenace, qui semblait sourdre de la terre et qui montait, montait à la limite des cheveux. La gaieté et la jovialité des Noirs désertaient les ruelles et ne fusaient que la nuit autour des bons feux de bois où l'on transportait le cercle des longs entretiens, des fables qu'on ne se lasse pas d'écouter et des contes merveilleux qui emplissent les sommeils des enfants.

ABDOULAYE SADJI (Presence Africaine).

QUESTIONS :

1 - VOCABULAIRE : /4 pts

Expliquez les mots et expressions suivants :
- ténu
- toux stridentes
- en vadrouille
- sourdre.

2 - GRAMMAIRE : /12 pts

a) - Conjuguez le verbe attendre au passé-composé, au passé simple de l'indicatif, puis au présent du conditionnel (à la 1ère personne du singulier et à la 1ère personne du pluriel uniquement). 4 pts.

b) - Analyse : /8 pts

— Analyse logique de la phrase : «Devant les concessions .... les éternelles litanies des mendiants. 5 pts.

— Donnez la nature et la fonction des mots suivants :
- doucement (et fumait doucement comme à regret) 1 pt
- accomplis (où des gestes de charité étaient accomplis) 1 pt
- joints (ils s'arrêtaient pieds joints). 1 pt

3 - INTELLIGENCE DU TEXTE : /4 pts

L'auteur parle d'une saison rude. Quels sont les détails qui le prouvent ? 2 pts

Cette rude saison ne permet pas une vie aisée à la population. Relevez le passage qui le montre. 2 pts

Durée : 1 h 30 mn
Coef. : 1

DESSIN & ÉCRITURE

Un paysan labourant son champ.
Au bas de ce tableau, écrivez en cursive fine : «Un trésor est caché dedans, je ne sais pas l'endroit».

MINÉDUC - DEX

CAPME - SESSION 1981

Durée : 1 h 30 mn
Coef. : 1

TRAVAIL MANUEL

Développer puis construire un plumier aux dimensions ci après :

L = 18 cm

ℓ = 4 cm

h = 3 cm

Durée : 1 h 30 mn
Coef. : 1

COUTURE

Détail de robe.

Travail demandé :

- Passer un fil de milieu
- Plier le tissu en deux
- Poser le patron sur le fil plié
- Couper au ras du patron
- Fendre sur le fil passé jusqu'à 7 cm.
- Border l'encolure et la fente d'un biais
- Exécuter une bride à bouton et coudre le bouton
- Surfiler la pièce.

Barème de correction : /20 pts

Aspect et présentation	2 pts.
Biais d'encolure et fente	16 pts
Bride et bouton	1 pt
Finition	1 pt

MINÉDUC - DEX

CAPME - SESSION 1981

Durée : 2 h
Coef. : 3

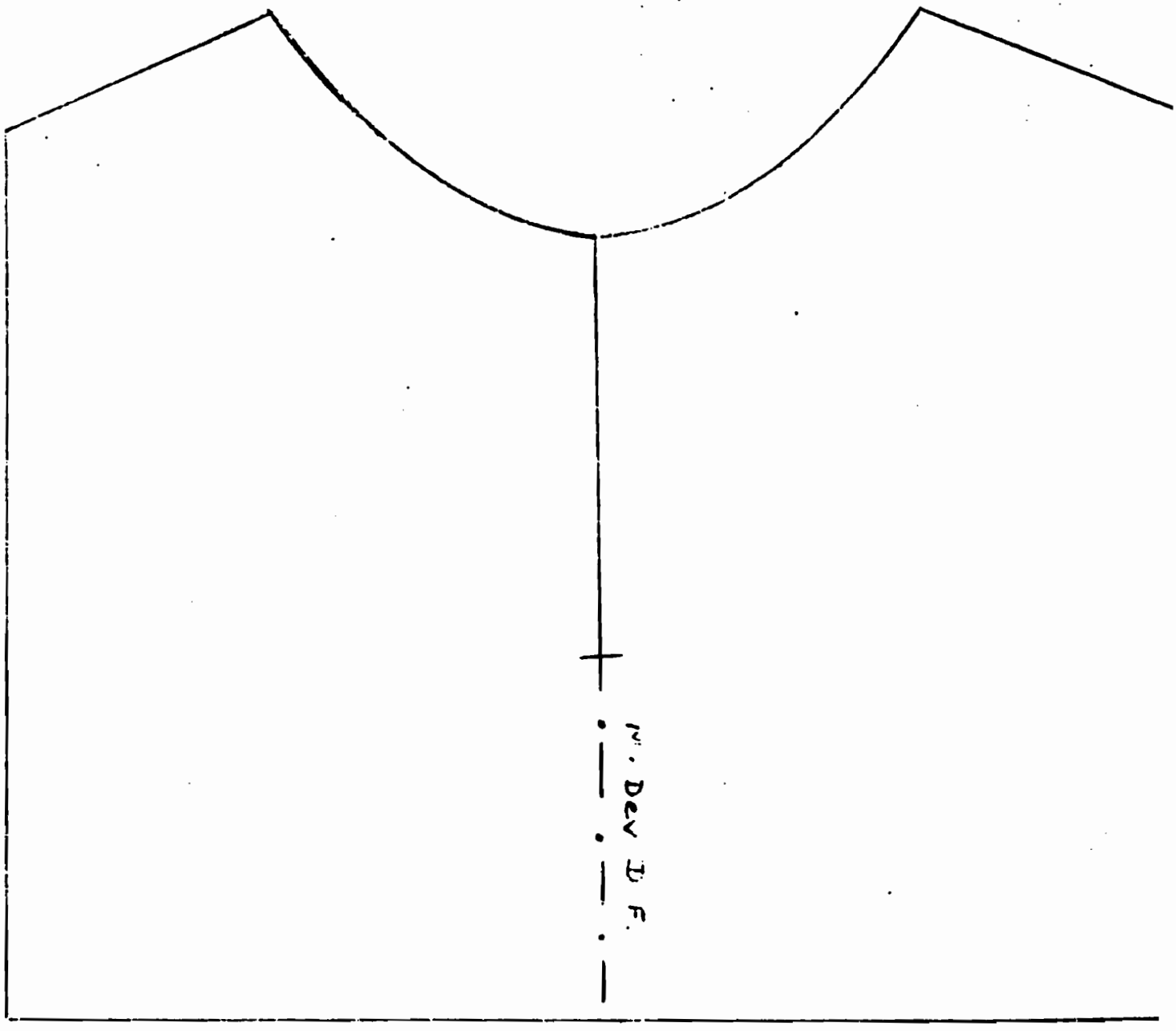
PRÉPARATION D'UNE LEÇON

OPTION PRIMAIRE :

Rédigez une fiche commentée d'une leçon de Géographie au C.E.
Titre de la leçon : Les points cardinaux ; s'orienter.

OPTION MATERNELLE :

L'enfant apprend par imitation.
Décrivez un jeu dramatique dans la section des moyens : (4 à 5 ans).



Durée : 4 h
Coef. : 2

CULTURE GÉNÉRALE

Les candidats traiteront au choix, l'un des deux sujets suivants :

1er SUJET : «L'homme heureux n'est pas celui qui fait dans sa vie deux parts : l'une pour son travail, l'autre pour son plaisir. L'homme heureux est celui qui trouve dans son travail son plaisir».

Appréciez cette pensée et tirez-en les principes pédagogiques qui s'imposent.

2ème SUJET : «Le grand risque de l'homme, c'est d'être déformé par son métier.»

Cette opinion vous paraît-elle justifiée ? Si oui, quels sont les moyens qu'on peut mettre en œuvre pour éviter ce risque ?

Durée : 1 h 30
Coef. : 1

DESSIN & ÉCRITURE

Illustrez une scène sportive de votre choix : (course à pied, à bicyclettes, course de pirogues, etc...).

Au bas du tableau, écrivez en 3 lignes de cursive fine, moyenne et grande :

«Que le meilleur gagne».

MINÉDUC - DEX

CAPI - SESSION 1981

Durée : 1 h 30 mn
Coef. : 1

TRAVAIL MANUEL

Pliage, découpage, collage.

Réalisez un parallélépipède - rectangle aux dimensions suivantes :

L = 12 cm

l = 8 cm

h = 6 cm

PSYCHO - PÉDAGOGIE GÉNÉRALE

er SUJET :

« La seule manière de préparer l'enfant à une tâche sociale est de l'engager à la vie sociale... Meubler l'enfant d'habitudes,de dévouement et de serviabilité envers un milieu social dont on l'isole, c'est, à la lettre, lui enseigner à nager hors de l'eau.»

Après avoir commenté et discuté au besoin cette opinion de DEWEY, Vous indiquerez les moyens qui vous paraissent les plus appropriés à éveiller, chez l'enfant de l'école primaire, le sentiment de la vie sociale.

ème SUJET :

« L'enfant doit être le conquérant de son savoir et l'artisan de son éducation».

Qu'en pensez-vous ?

Dégagez-en les conséquences pédagogiques.

PSYCHO - PÉDAGOGIE PRATIQUE

PTION PRIMAIRE :

Une leçon de Géographie au Cours Moyen.

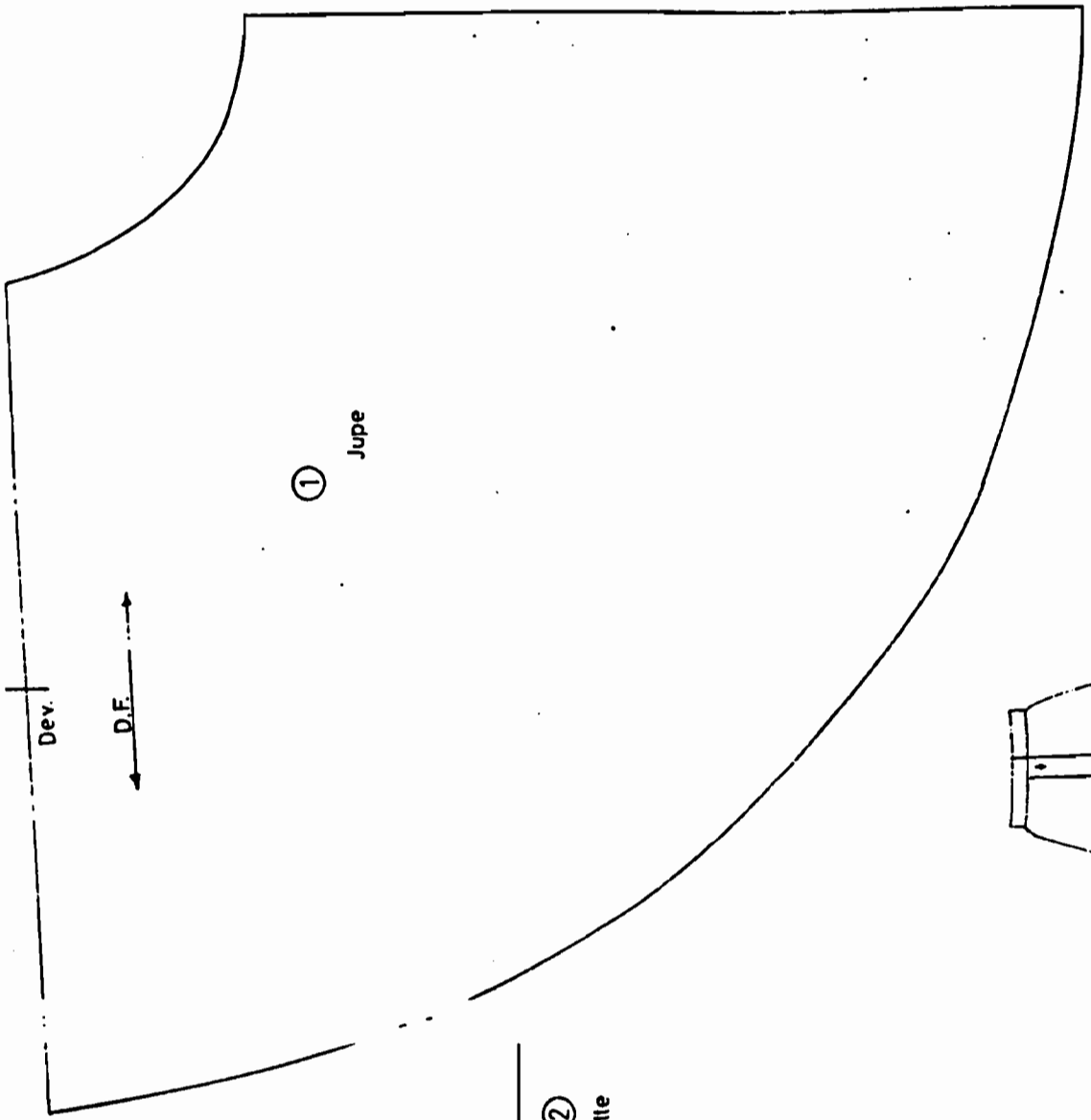
Titre de la leçon : Les Régions Naturelles du Cameroun.

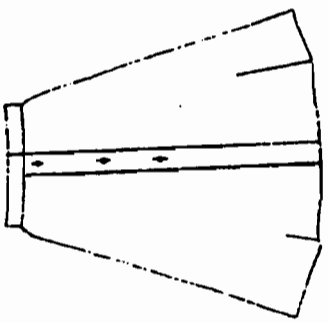
Rédigez-en une fiche de préparation commentée.

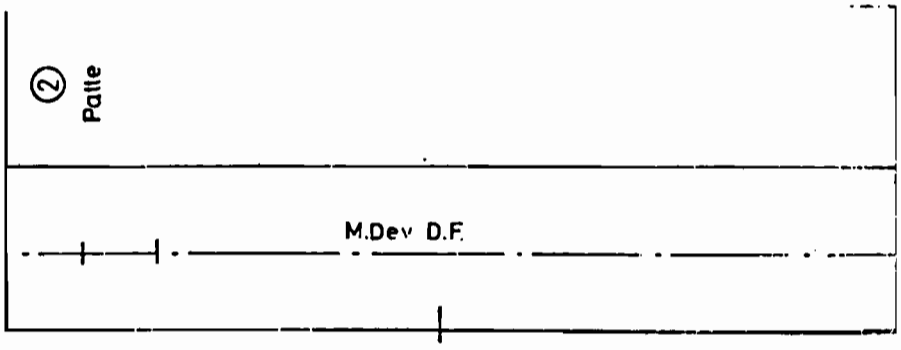
PTION MATERNELLE :

L'enfant ne sait pas se structurer dans le temps ni dans l'espace.

Organisez les jeux qui l'aideront à se situer dans le temps et à s'orienter dans l'espace.







MINEDUC DEV

CAP SESSION 1991

COUTURE

DEVANT DROIT D'UNE JUPE ANGLAISE

Travail demandé :

Couper les patrons au tissu
Disposer les patrons sur le tissu en respectant les sens
Couper, laisser 1 cm de couture + 3 cm d'ourlet
Passer les fils
Exécuter un ourlet terminé de 2,5 cm au point de côté
Exécuter la patte de boutonnage
Broder la boutonnière

Barème de correction : /20 pts

Respect des mesures	2 pts
Ourlet	14 pts
Patte et boutonnière	3 pts
Soin et finition	1 pt

ANNEX G 11

Administrative Analysis of GURC Project Components

1.0 Administrative Analysis of GURC Project Components

The project has a precise and clear-cut goal: the improvement of primary education, both in quantity and in quality. In this project, consequently, four administrative levels of the Government of the United Republic of Cameroon (G U R C) must be considered because they are basic to the project.

1.1 The Ministry of National Education*

The Ministry of National Education of the G U R C is, of course, the authority and the decision maker for education. The administrative structure of the Ministry has three major components, two of which are at the central government level: the decision making personnel on the one hand (political by nature) and, on the other hand, their supporting staff organization. Added to these, outside Yaounde, another staff structure also exists. This is seen as "decentralization" by Cameroonians, but might better be termed "deconcentration", since almost its sole power rests in implementing rather than making decisions.

1.1.1 The Line Structure

The Presidency of the Republic, in concert with the Education Minister's Cabinet, seems to be the only administrative unit able to make important decisions.

1.1.2. The Staff Structure

For projects like this one, the Ministry of Economic Affairs and Planning, on one side, and the Prime Minister's Office, on the other side, keep an eye on all project components so as to amend or even reject them prior to final agreement.

Given this caveat, within MINED the Director of Nursery and Primary Education is the official directly responsible for this project, since not only primary education but primary level TTCs fall under his office. The Director and his two immediate assistants have been counterparts of USAID personnel and of the specialists throughout project design. Furthermore, members of the general commission appointed to assist in project preparation are representatives of three other concerned divisions of the Ministry of Education: General Administration, Equipment, and the General Inspectorate of Primary Education. Also included were members from the IPARs, both anglophone and Francophone (agencies involved in the school reform); the ENS, a department of education at the University of Yaounde, and the Provincial Delegates to education in the provinces involved, whose functions will be scrutinized below.

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* See Attachment I for Chart of MINED Structure

This "staff line" is favorable to the project: it has made valuable contributions and collaborated fully already. If the project is successfully implemented, each Cameroonian member could gain professionally as a result.

1.2. Provincial Authorities

1.2.1. The North and Northwestern Province: Overview

The project applies to two of the seven provinces of Cameroon: the Northern province, Francophone and including three religious affiliations (Christians, Moslems, Animists); the Northwestern province, Anglophone, mostly Christian (Protestants and Catholics), and where a great proportion of children attend private schools. The choice of thse two provinces is final and fully accepted, and even though political and/or policy motives may have been involved on the American as well as on the Cameroonian side, a basic rationale for the decision is the low rate of primary schooling and the lack of qualified teachers in these two target provinces.

The two target provinces are not only the most lacking in qualified teachers, but they are, with the Eastern province, the most isolated. Distance from the commercial center (Douala) and the administrative center (Yaounde) will mean higher transportation and construction costs and since one province is Anglophone and the other Francophone, all materials used in training programs will have to be thoroughly prepared and reproduced in both languages. These considerations, plus the need to assure adequate supervision and project implementation in two diverse and separate provinces will add to project costs. However, these areas are where GURC has the greatest need for U.S. assistance in primary education and therefore such costs are inherent, and fully justifiable, in the project.

1.2.2. Central Government Representation:

In each province is a scaled down replication of the organization of the central government which is illustrative of the extensiveness of the bureaucratization in Cameroon. Decentralization is the motto: in fact, one finds only lagging deconcentration. Although real decision-making power is not to be found there, these provincial governmental structures must still be used and considered even though their main purpose is to serve as a conduit to the central power source. Thus, the provincial administration is in many cases only a letter box. It is in charge of rooting Yaounde's authority in the field and above all demonstrating its political control. It also gathers data for local files, which end up in Yaounde anyway. In short, the provincial administration is the "modern" state superimposed on local and traditional structures of society.

1.2.3. Structure of Provincial Administration

The Provincial administration consists of the appointed Governor, the local representative of the President, flanked, amongst others, by the Delegate of Education, in lieu of the Minister. Under the Delegate of Education are the inspectors and the sub-inspectors, incorporated into the structure according to the French model. The responsibilities of both the Delegate and the inspectors are double: pedagogical and administrative.

Primary inspectors, in particular, are the real principals of the schools they control. The number of schools each inspector has under his jurisdiction varies from around fifteen to over one hundred nursery and elementary schools. The number of schools to visit, the lack of means of transportation and the bad roads prevent inspectors from providing pedagogical help as is expected, and thus most inspectors do almost nothing to help compensate for the lack of preparation, the too short practice teaching experience, and the young age of teachers.

The administrative function of inspectors is also quite deficient; for the most part they just abide by the rules, which significantly reduces their margin of initiative. However, although legally only the Ministry has the power to open schools, in practice the inspectors exercise this function by deciding where to allocate the newly graduated teachers the MINED assigns to their geographic areas of responsibility.

Two other factors reduce inspector efficiency. First, since training for their professional duties has been limited (1) to pedagogy, (2) to acquiring information about the rules to be followed, and (3) to their previous experiences as teachers, they never study basic concepts and theories of administration and management.

Second, but not to be forgotten, the inspector has to handle political relations with the local prefect in the same way that the provincial delegate has to with the governor of the province. The degree of collaboration by the prefect profoundly influences the effectiveness of the inspector.

1.3. The Primary Schools and their Teachers:

1.3.1. Urban vs Rural Schools:

Geographic location necessitates two kinds of primary schools in these provinces, each kind with different administrative processes. On one side are the urban schools, well within the legal system; and on the other the rural schools, especially those in the bush (10 kilometers and more from cities), isolated, quite often with a single teacher and a single classroom, under-equipped and without much contact with the outside world except when the teacher leaves during school sessions. As a matter of fact, the teacher leaves often, and for many days in a row, in order to get pay and food,and to push for promotion or transfer.

Helping and upgrading this rural teacher is a critical necessity if primary education is to be quantitatively and qualitatively improved. France, a century ago, mitigated the isolation of rural teachers by giving them civic responsibilities in addition to their teaching tasks. This endeavor took root and developed into what has been called with admiration the "village school", or "la communale de Jules Ferry", named after the Minister of Education who promoted it, and which was the French equivalent of the American "little red school house". The government of Cameroon would be well advised to consider enacting such an inspired policy. Why not, for instance, and with little added pay, give to these teachers the following responsibilities:

- Registering births and deaths in their areas;
- Serving as "scribes" and "postmasters" for the surrounding population;
- Handling, via C.B. radio, emergency calls from and to the outside (floods, epidemics, emergencies, etc.). This would establish a primitive telephone system for which teachers would be responsible, which would also be useful for "Tele-enseignement", the system of teacher upgrading operated by the MINEDUC.

Such innovations would give rural teachers the social and civic images they badly need both for their self-esteem and for their public recognition.

The rural school buildings themselves are called either "temporary", or "semi-permanent", or "permanent", according to the building materials used. The first are often straw huts the local people erect without outside help in areas where the social demand for schooling already exists. Thus starts the literacy process. The second type, also locally built, is usally made with earthen bricks which are used for the walls and even the chairs. To this the GURC often adds a tin roof, thereby "officializing" the school. Thirdly are the permanent school buildings, found mainly in cities, as one might suspect. They constitute the final stage in the officialization of the school, since they are usually wholly paid for by the State.

This triple distinction in school facilities indicates quite well the three tiered attitude of the administration toward the network of schools, when time comes for the posting of competent teachers and for the distribution of supporting pedagogical resources. It must be added, however, that there appears to be a trend away from this pattern in the Northwest where the government increasingly leaves the improvement and expansion of urban schools to the Parent Pupil Association (PTA), which levies fees on parents. The government then shifts its funds to remote rural areas where the initiation of primary education must be heavily subsidized for anything to happen.

1.3.2. Private Schools:

To this scene must be added the network of private schools which enroll up to half the primary students in the Northwest and almost all of which are church related. More selective, less over-crowded, better managed, and more efficient, these schools, though subsidized by the GURC, save the state money.

At present, these private schools and the GURC have a collaborative relationship, in which religious schools continue to play an important role, especially at the primary level. The GURC controls private school curriculum to meet national standards. The level of government subsidies results in lower salaries for private school teachers.

1.3.3. Primary School Teachers:

Officially, in primary schools, one has to distinguish between:

1) The auxiliary masters, who are under contract and often locally paid, and usually have received just primary schooling. Sometimes, even without the primary school graduation certificate (CEPE or FSLC), they are hired at the last moment and either locally paid or partially subsidized by the inspectorate; they generally work with and under the supervision of a teacher. These auxiliary masters, recruited locally, hence perfectly adapted socially and geographically, would be ideal candidates to recruit for the TTC (ENIA) provided they possess the CEPE (see 2 below). The pre-selection thus possible as a result of their on-the-job work experience would cut teacher losses later on, either during training or while on the job in difficult areas. Recruits from this group would have absolute precedence in the ENIAs of the North, over candidates from the South, regardless of the latter's qualifications.

2) The associate teachers (instituteurs adjoints) are graduates from the ENIAs (a) after three years if they entered with a CEPE or (b) after one year if they entered with a BEPC. They are the outcasts of the system, even though, in these two provinces, they constitute its main "qualified teacher" girder. Abusively spoiled in the beginning with scholarships disguised as pre-salaries, they are afterwards twice abandoned. First, in the CEPE-based program where their third year of training is fictitious. This period is supposed to be spent in the field, closely supervised and controlled. Such is not the case, and for good reasons. Except in rare cases, they are sent to teach for the entire third year far away from the TTCs. And this is done because of the so-called assignment rules, e.g., seniority rights, spouses of officials being assigned close to administrative centers, etc. They, the beginners, are thus isolated in difficult places usually completely divorced from the known, the familiar, and most important from their TTC.

3) The teachers. The "Teacher" (instituteur) has had one full year of pedagogical training in an ENI following the Baccalaureat or "A" Level exams or generally 3 years of training following the BEPC. In Cameroon, the teacher is then classified Grade I, and is, according to established GURC policy, supposed to constitute the basic contingent of professional teachers in the primary school. Actually, in the two provinces, these types of teachers are in the minority and should be considered, where they are found, as role models.

In all probability, this quality of teacher will be in short supply for another full generation. The decisive factor in attempting to achieve Grade I qualified teachers is neither political nor cultural, but rather economic and social. As a matter of fact, the standard of living in rural areas is such that this type of teacher, if widely generalized immediately, would be wasted: the motor would be too strong for the body. That is not to say that they should be reduced proportionately in the network of schools, for preparation must be

made for the future. It is just to say that to push the system in that direction too fast might be counterproductive. First, the unitary price for the education of these teachers (10 to 13 years of schooling) is out of proportion to the expected additional benefits to be derived from them as compared with the services provided by the associate teachers (8 or 9 years of schooling). Second, as a whole, the graduates from the ENI are generally designated as candidates for urban schools, which exacerbates further rural-urban inequality to the detriment of the entire system. Also, for many Grade I teachers, their rank provides them with a stepping-stone to reach the capital city and to pass entry exams there to higher educational institutions, which will subsequently permit them to join the excessive numbers of those already in government administrative services.

Even when there is a desire to accelerate educational development as much as possible, one should, based on analyses of historical processes, recognize and consider those basic steps which, without exception, all nations which have achieved mass education in the past have followed, namely: the first period of primary education generalization has been accomplished by teachers who themselves had at the most eight or nine years of schooling; it is only when everybody had benefitted from a primary education that the level of teacher recruitment was raised to Grade 12 (secondary school graduate); and, lastly, the generalization of secondary education in a country allows for the primary grade teachers to be trained at the university level (Bachelors Degree). To skip one of these steps might provoke a brain drain of teachers from the level of the educational network where they are most desperately needed.

Added to the three preceding categories of teachers are two others which must be considered in dealing with the two provinces included in the project. These are not formal categories, but they do, nevertheless, form a clear-cut reality in the North and, to a lesser degree, in the Northwest.

4) The school directors (or Headmasters). The PID placed special emphasis on them and although they are assigned responsibilities as school directors (or headmasters), those so designated in fact continue to be classified as teachers and often return to teaching positions. In each school, a teacher is designated to serve as school director. According to the size of the school, he fulfills this task either in addition to his teaching duties, or full time. The latter group is the only one of major concern here. According to the French model, the teachers serving as directors in primary schools have a restricted area of responsibility, exercised under close supervision by the inspector. In the Cameroon of bush and villages, far away from the inspector who cannot travel, the school directors' range of responsibilities forcibly increases. They are managers of personnel and equipment provided by the State, often handling local funds (for school construction, furniture, textbooks), and are also pedagogical supervisors of their colleagues, all of which partially transforms them into inspector surrogates. On the other hand, their more limited education, their reduced average age, their less extensive experience, plus the traditionally limited recognition

afforded them for their role in the educational system, all tend to diminish their efficiency and their usefulness. However, as long as the inspectorate will not be in a situation to perform its duties fully, the primary school directors should be better trained for theirs. And if the Cameroonian school as a distinct public institution ever becomes "established" with its own legal personality, as has even happened in France since the recent educational reforms, the importance of the director will increase even more. This trend meets the ideals of those in this country eager to promote a school more integrated into the community. Here American assistance arrives with a long tradition of experience and know-how.

5) The female teachers. The number of women teachers in the North is low. To explain the situation only by cultural heritage and Islamic influence is inadequate. North America, which historically was taught by women at the primary level, and still is, is a unique case. On the other hand, the European tradition is quite different. There, it was only later that the teacher's wife, continuing her education along the lines of her husband's, increased the number of female teachers (excluding teaching nuns). And in that system, the female teacher, wife of a teacher, was entitled, according to the rules, to obtain a post near her husband's. This pattern would be much more analogous to that of Cameroon where, most of the time, the teaching husband is himself a government official, posted in a city. Thus, the circle is closed --given deficient attendance at schools by country girls. There are generally fewer women in TTCs (certainly in the North), and given the "pedagogical couples" working in towns, the results are that, compared to the countryside, cities have a more balanced proportion of male-female teachers and generally a much better student-teacher ratio. Maybe the solution to the problem rests in aggressive recruitment of auxilary teachers amongst the few village girls who attended school.

1.4 The TTCs

The Government of Cameroon has set and observes precise policies for teacher training and upgrading. The project must take place within these limits. There are three types of teacher training institutions in the country: the ENS, ENIs, and ENIAs, the latter two both being termed TTCs in English.

In the two concerned provinces, the North has one ENI and three ENIAs, while the Northwest has both an ENI and an ENIA program, both in the Bamenda TTC. The Northwest also has private ENIAs - a functioning Catholic TTC at Tatum and a Presbyterian one at Mbengwi.

1.4.1. The Ecole Normale Superieure.

The ENS, according to its name, is modeled according to the one in Paris. Located in Yaounde, with an Anglophone annex in Bambili, Northwest province, the ENS is included in the University table of organization. It does not depend directly on the Ministry, but on the rectorate. Thus, for all practical purposes, its status is that of a University department, in which the Director serves as a Dean. It is endowed with the main mission of training teachers for secondary schools, hence its programs mostly include liberal arts

courses already found in the other university departments (languages, science, etc.). A program in Educational Science is also offered to prospective TTC faculty and primary school inspectors. This two year program was recently adopted at ENS in place of the previous three year one which ended with a degree equivalent to the license. For those training for the inspectorate, the new curriculum provides no opportunities for the study of educational administration as such, i.e., theories of administration, ways and means of management, personnel leadership, supervision of teaching, curriculum development and teacher evaluation. This two-year program provides an intermediate degree (more the equivalent of the junior college A.A. than a B.A.).

Although the upgrading of educators already in the field is considered an ENS responsibility, it is unlikely that the ENS will ever assume this task for primary school teachers because ENS has no direct initial responsibility for their training, which is to be done at ENIs or ENIAs. Furthermore, ENS lacks the capacity to engage in such a program. What ENS might be encouraged to do in support of primary education would be to prepare in-service programs for TTC faculty and primary school inspectors, because the initial training of these two career categories was and remains the responsibility of the ENS. There appears to be a general willingness on the part of the director at ENS to consider implementation of such professional upgrading programs. Certainly this could be done at Bambili, N.W. province, if not at Yaounde.

1.4.2. ENIs

ENIs (Ecole Normales d'Instituteurs) offer a one year program to students who have passed their Baccalaureat, or A Level exams, or a three year program to pupils who have previously passed their BEPC (Grade 10) or "O" Level exams. Graduates are the highest level of teachers, e.g., Grade I.

A discussion follows of the ENIs this project will work with:

The ENI in Garoua offers a three year program to pupils who have previously passed their BEPC (Grade 10) or "O" Level exams. Just one pupil out of three at Garoua is from the North even though this is the provincial capital. Almost all the administrative and teaching staff is from the South. The physical plant is in good shape, except for a lack of dormitory space. Both the management and maintenance are deficient.

Given the annual output of over 600 BEPCs from secondary schools of the province, one may ask why so few pupils at Garoua are from the North. One has the impression that with a minimum of publicity and with a clear priority given to recruiting local candidates, rather than assigning southerners to the north, the situation could be changed. It appears that Cameroonian officials are most willing to accept a variety of training approaches in order to achieve their goal to increase the number of Northern teachers.

The Garoua student body is attended by 20 persons in all, including administrators, clerical personnel, full-fledged progessors, and even five part-time teachers, plus a full-time librarian (who is in charge of about ten

shelves containing some 400 books in a large room which is kept locked). This results in a staff/pupil ratio of 1/6, which allows for an increase in enrollment without an increase in staff.

A good half of the physical plant is underutilized: equipment and furniture, even though quite new, are either lost, misplaced or out of order because of lack of maintenance. And there are curious anomalies. For instance, there is the teacher observation toom, with a two way mirror in the middle to allow students to unseen watch faculty and peers at work with children. However, at present a curtain is drawn across this mirror, and the room serves as two separate classrooms. There is a workshop for manual work, equipped with appropriate machinery and equipment, which is unutilized, out of order or not even set up to operate. In these conditions the school purports to offer a program of training for technical teachers. It is said that there is no competent professor on the staff to teach the subject. However, the staff includes a batch of part-time teachers, hired for a variety of teaching assignments according to the Director's desires. In addition, the normal school is located right next to a fully functioning technical high school which has extensive faculty capabilities in this area! The level of commitment to teach technical skills propoerly in the ENI, as required by the curriculum, is obviously highly questionable.

The management of the school seems to be in conformity with Ministerial regulations. But here, as well as in the four other TTCs visited in the two provinces, a serious lack of administrative ability must be pointed out. The goals of this project cannot be achieved unless the management capabilities within the schools are improved. Like the inspectors with whom they have been trained, the TTC directors in the exercise of their functions show great concern for adhering to the norms and the rules--often to the detriment of efficiency and initiative. And, again, they seem to lack training in such matters as personnel management, office organization, file keeping, and maintenance of furniture,equipment, buildings, and grounds. For instance, in four of the five schools, the plumbing and sewer systems are almost worthless from lack of maintenance. It must be noted TTC directors inherit problems which make subsequent "maintenance" almost impossible, e.g., the case of Ngaoundere, where a brand new building is equipped with a septic tank which has been constructed to drain uphill! To put the existing school physical plants back in order will require a substantial investment. Training, in part provided on-the-job by project technical experts, and via special programs for TTC administrators, are essential for the project to succeed. Follow-up in the field to assure practical application of management and maintenance principles is also important.

This ENI, like the three ENIAs in the North, includes a primary "school annex" on the premises established to provide practical experience for the pupil-teachers. However, it in fact serves merely as an observation laboratory. (At Pitoa, this school annex even has boarding facilities that consume precious dormitory space).

These annex schools could be questioned from several points of view. What does the annex school add to the learning experience of the pupil-teachers vis-a-vis the classrooms within which they will ultimately work? The annex

school is often peopled with children of the local elite. It often is an added expense to build and maintain (if done). The annex school consumes a disproportionate amount of the pupil-teacher's time. It also diverts administrative energies from the normal school itself. However, the Ministry of National Education, as certainly is its right, has decided to pursue the policy of maintaining the annex schools.

Given the level of funding proposed for this project and the magnitude of other project demands, it is strongly recommended that no assistance should be allocated to the construction or operating costs of these annex schools either directly or indirectly. As an alternative, it is recommended the project support efforts to place pupil-teachers in regularly operating elementary schools within driving distance of TTCs. But it must be stressed emphatically that the buses recommended for this purpose are not to be used to transport pupils to the annex school. Buses should have nothing to do with annex schools.

What has been said for Garoua does not fully apply now to the TTC at Bamenda, since the latter is still being built and is thus far from being in full operation. But the organization and the plans are basically the same. It would not be surprising if in a few years the situation at the two schools were identical, unless changes proposed for Garoua are subsequently enforced at Bamenda. It must also be noted that Bamenda offers, in addition to the ENI program, an ENIA program. Hence, what is said below about the ENIAs also applies to Bamenda.

1.4.3. The ENIAs

The normal schools for assistant teachers recruit from two groups: (1) from among those who have passed their BEPC (Francophone) or "O" Level (Anglophone) exams, and (2) from among those who have obtained their primary school certificate (CEPE or FSLC), and who are between 18 and 25 years of age. Some are also admitted on an equivalency basis. The question of recruiting more women for the ENIAs, especially in the North, from the group of assistant masters (MEG), has already been raised. Also, a great deal of what has already been detailed, regarding the performance and the administration of the ENI in Garoua, applies equally to the ENIAs. Thus the enrollment of pupils could at least be doubled in each TTC without an increase in the professional staff and with little additional construction, except for dormitories perhaps expanded, dining facilities, and in three cases, libraries. The general classrooms, workshops and halls already built have an especially low occupation rate (hours/week/trimesters), compared with those attained in wealthier countries where, at the secondary level, they might reach 75% of full-time use during working hours. Thus, the increase of enrollment is highly commendable as soon as possible in order to generate economies of scale in terms of greater administrative, faculty and space utilization.

To the high cost paid by GURC for the training of associate teachers (and other teachers as well) must be added the unusual practice of regular teacher's salaries being paid to TTC students as soon as they enter school so that a rigorous and complete accounting of the per capita cost of training for these civil servants at the secondary education level probably amounts to one of the highest prices paid in any school system in the world. Indeed, as soon as students register at the ENIA, they are already considered civil service employees (Grade 7 in the Civil Service). Thus, they earn about 128,810 CFA. ($4,684) a year, not counting free education. Part of that money (± 40%) is retained by the Ministry in order to pay for lodging and meals. The school is forbidden to charge additional fees and ENIA officials complain that the student subsistance budget is inadequate and often very late in arriving. A second portion of the students' payments is supposed to come as a monthly allowance; in fact, this pocket money often arrives after a delay of up to nine months and the procedures followed in order to obtain it even then consume a great deal of time and energy by both the pupils and ENIA administrators: hence a high level of dissatisfaction. A third part of the salary is given to students when their studies are over, and it is called the "pécule" (lump sum), in order to "settle in" at their first teaching post.

Authorities are talking of reforming the system. Salaries would be transformed into scholarships and reduced in terms of the amount of money allocated. This would also make the reimbursement process simpler to handle administratively because it would not require the processing of civil service appointments until after the training had been completed, which would help to improve the school environment since funds would, in theory, be available to the students as soon as they enrolled. They could then pay for textbooks, notebooks, and materials and supplies, so as to provide themselves at the beginning of their studies with means to promote their intellectual development both as students and later as professional educators.

1.4.4. The Annex Schools:

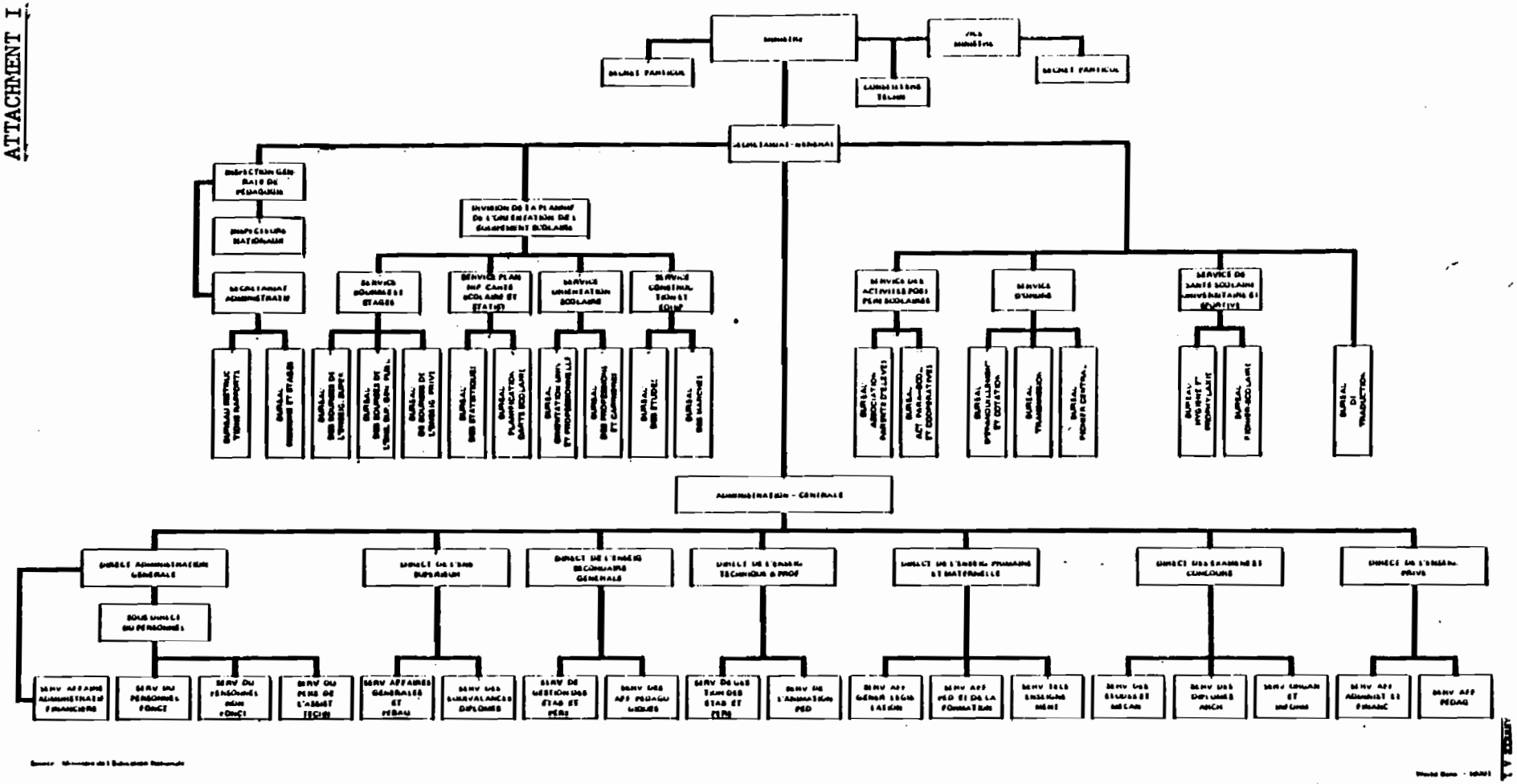
The component established for practice teaching at the ENIs and ENIAs is the annex school. This facility is viewed as essential by the MINED and an annex school exists at four of the five TTCs (Garoua, Maroua, Ngaoundere and Pitoa). The school at Bamenda has no annex school and the annex school at Ngaoundere is now some two miles from the new TTC campus which is located on the outskirts of town. Thus, its value to the TTC is little different from other primary schools in the town. Since pupil-teachers for the most part only observe in these schools (and are limited even in this function by overcrowded classrooms), their effectiveness as practice-teaching facilities is seriously questioned. Students desperately need experience in the kinds of schools to which they will eventually be assigned with substantially greater pupil-teacher ratios, often with more

than one grade per classroom, with shortages of teaching materials and in environments which reflect the rural in addition to the urban life. To correct deficiencies in practice teaching which now exist in the program, it is recommended that the project provide each TTC with a bus (15-20 places) as a means of taking pupil-teachers to schools within easy commuting distance of the TTCs where they could actually participate in classrooms which experience the problems they must face following their TTC training.

Practice teacher supervisors would accompany the students to these schools to assist and evaluate them. This practice would also enrich the primary school facilities where the practice-teaching is done. This activity would not diminish or detract from the TTC annex schools which the GURC wishes to maintain, but it would enhance very significantly the practice-teaching component of the teacher-training colleges. The technical expert at each TTC would assist with the development and implementation of this activity.

ATTACHMENT I

CAMEROON
STRUCTURE OF THE MINISTRY OF NATIONAL EDUCATION
STRUCTURE DU MINISTERE DE L'EDUCATION NATIONALE
1978



Technical Exhibit G 12

Technical Feasibility

A. Rationale for Technology Chosen:

1. Technical Assistance

Two basic strategies were chosen to achieve the project goal of an increased number of children receiving a higher quality of education in the North and Northwest provinces; to increase the quantity and quality of primary school teachers and to improve the administrative and pedagogical skills of inspectors, primary school directors, and TTC staff and faculty.

a. Increased quantity and quality of primary school teachers

i. Increased quality

The goal of raising the quality of education is usually accomplished in two ways: material support to school and improving teacher performance. The first method generally consists of school buildings, furniture, books, radio, or television. While these can be important to increasing the quality of education, they are neither the most important factor nor are they best provided by external donors. Outside financing of such supports is usually a one time deal which leaves the country without an institutionalized way of providing these supports and often saddles the country with repair/ maintenance bills which it cannot afford. Additionally, external donors often provide material supports that are inappropriate for the country's culture, climate, and level of education.

On the other hand, empirical evidence has shown that raising the quality of teacher performance increases the quality of education. In Cameroon, only 55% of the primary school teachers are rated qualified, that is possessing a Grade I, II or III Certificate. Moreover, there is doubt as to whether those with Grade III certification should be deemed qualified. (This project considers only Grade I and II teachers as qualified.)

In circumstances such as the above, raising the quality of teacher performance is usally the most effective way of increasing the quality of education.

To do this, the project will focus primarily on improving pre and in-service training for primary school teachers.

In Cameroon, TTCs are the major training institutions for primary school teachers. The TTC system is an established functioning one. A change in the system itself would be disruptive and illogical. An improved system for in-service and pre-service training would be beneficial.

Thus, the project will work with TTCs on training programs for primary school teachers. This choice of project emphasis is logical; it builds on existing host country capability. Indeed, TTCs have the basic facilities, personnel and support services to absorb the collaboration this project proposes for improving the quality of primary school teachers in the North and Northwest provinces.

ii. Increased quantity

To address the goal of increasing the quantity of students attending primary school, one must be aware of the reasons students are not attending school. Major reasons include a limited capacity of schools to accept students, overcrowded classes, distance from schools, parental doubts as to the value of education, cultural resistance to education, and lack of financial means to send children to school. The project addresses all these reasons, though the latter two only obliquely.

To increase the number of children who are able to attend school, one can increase the number of students per class or increase the number of teachers. In Cameroon, the national student-teacher ratio is 52:1; in the North and Northwest it is 53:1 and 63:1 respectively. Some semi-rural schools have as many as 200 students in a class. While at least one study has indicated that class size does not affect the quality of education, this study was done on classes of 50 or fewer students. General concensus admits that larger classes become unmanageable. This project, therefore, will seek to expand the number of primary school students by adding more teachers, and not by increasing class size.

The number of primary school teachers could be increased by hiring more untrained teachers, by raising teachers' salaries to attract more people to take the professional qualifying exams, or by lowering the standards of the professional exams so that more people pass. These solutions are not attractive ones, since they all skirt the importance of teacher training.

Thus, the strategy chosen to increase the quantity of teachers is to train more teachers by expanding the capacity of the five existing TTCs to accomodate more student-teachers. Although building a new, larger TTC would also achieve the same result, supporting existing facilities is a more practical, more politically sound solution which supports the government's efforts at decentralization.

No difficulty in finding more teachers to train is anticipated. Many more individuals take the competitive exam used to select TTC student-teachers than are accepted. Increasing the number of those accepted should not lower current standards, since the highest scores of those not selected differ little from the lowest scores of those accepted.

The increase in the number of teachers will also permit placing them in areas where education is not currently available, thus providing the opportunity for more children to go to school and decreasing the distance they must travel to attend. This will decrease the cost of

ANNEX H.1

RECURRENT COST ANALYSIS FOR THE SUPPORT TO PRIMARY EDUCATION PROJECT

Together the North and Northwest Provinces contain nearly half of Cameroon's school age population. They also have the lowest ratios of enrollment per member of the school age population in the entire nation. Moreover, both have experienced rapid increases in enrollment in primary schools in recent years. The increases have been well in excess of the capacity of the teacher training schools in the two provinces to provide qualified teachers. The result has been declining academic standards coupled with high rates of repetition and dropout.

The USAID, in cooperation and coordination with the GURC, has designed a project whose purpose is to address these serious problems. The project will expand and strengthen all of the existing teacher training institutions in the two provinces. As a consequence, they will be able to increase both the quantity and the quality of the new teachers which they will graduate.

The object of this paper is to identify for officials of the GURC the budgetary implications of the proposed project. For purposes of simplification, the cost implications have been divided into two distinct categories. The first is the cost to the GURC of the project per se during its five year life. It is scheduled to commence in fiscal year 1984/85 and to terminate in 1988/89. The other kind of cost is that which will recur after the project is completed. Both kinds of costs must be taken into account by GURC officials in preparing MINED's budget in future years. The USAID has analyzed in-depth both the project and the recurrent costs. The results of the analysis are summarized below.

A. Conclusions:

1. The project will increase the combined annual enrollment in the five ENI-ENIAs from 1,020 to 1,310 or by 28 percent.

2. The number of teachers graduating from the five schools each year will increase from 450 to 710, or by 58 percent. (This is due to an increase in enrollment at a TTC which has a one year program. CF Table IV.)

3. The total budgetary cost of the project to the GURC during the entire five years of implementation will be $6,492,000. This figure represents a modest percent of MINED's current annual operating budget.

4. The annual recurrent cost to the GURC for running the program at capacity for the first two years after the project's conclusion will be approximately CFAF .9 and 1.1 billion respectively. These expenditures are almost entirely the result of the increase in student stipends due to expanded enrollment at the five schools plus the significant increase in the total wages paid to the higher number of new teachers graduating each year.

Each of the above conclusions is based upon assumptions which are explicit in the analysis which follows.

B. Methodology:

The analysis begins with the construction of a budget reflecting the total cost of operating each of the five ENI-ENIAs as they are now without the project. This step is necessary because the budget for each of the institutions as presently made up by GURC officials excludes the most important costs of running them. Expenditures for faculty and staff salaries and student stipends are paid directly to those individuals by MINED in Yaounde. As a consequence, they do not appear in the budgets of the individual schools. When these items are included, there are three different kinds of cost for each campus. They are for student stipends, faculty and staff salaries and operating expenses. Each shall be discussed in more detail shortly.

As a first step, the costs in each category at each campus for the current fiscal year 1982/83 were determined. The figures appear in Table I. They disclose that the five institutions are spending a combined total of CFAF 927,860,662 for the 915 students presently enrolled. The average cost per student ranges from a low of CFA 816,041 at Ngaoundéré to a high of CFAF 1,297,520 at Pitoa. The overall average for all five institutions taken together is CFAF 1,014,055.

Next, the analysis establishes what the magnitude of the costs in each category at each campus would be if enrollment at each were to be the maximum without the project permitted with the existing facilities. According to USAID estimates, enrollment at every one of the ENI-ENIAs is presently approaching such an upper limit. Altogether, if their facilities were to be taxed to the utmost, the combined enrollment of all five institutions could only be increased from the present figure of 915 to a ceiling of 1,020. Based upon the recent expansion in enrollment at the five ENI-ENIAs undertaken by the GURC in response to increases in student enrollment at the primary school level - from 720 to 915 between 1980 and 1982 - the 1,020 figure will be reached by the 1984/85 academic/fiscal year. Once this upper limit is reached further increases in enrollment and, correspondingly, in new teachers entering the system, will only be possible once the renovation and construction activities proposed in the present project are completed in 1987/1988.

This is the situation that all of the available evidence indicates will soon prevail. Without the proposed project, it can be expected to continue indefinitely into the future. The analysis therefore assumes that beginning in 1984/85, and continuing thereafter, the GURC will have to pay for student stipends, faculty and staff salaries and operating expenses an amount that is based upon a total enrollment of 1,020 students. Expenditures for each of these items for each campus are estimated in Table II. Here the range in average cost per student is wider. The overall figure falls somewhat below that for the present fiscal year that was calculated earlier from CFAF 1,014,055 to CFAF 987,744. It is assumed that the GURC would spend this amount as a bare minimum in future years in order to continue to produce qualified teachers to meet the growing enrollment of students in primary schools. This is, in other words, the situation that will exist without the project. It is referred to hereafter as the without project case, or situation, against which the estimated costs resulting from the project will be compared.

The next step in the analysis is the estimation of what costs would be with the project. This involves more than the estimation of the budgetary implications for the five institutions of an expansion in enrollment from 1,020 to 1,310. For, in addition to the previous expenditure categories of student stipends, faculty and staff salaries and operating expenses, there are now some new ones. Among them are the costs for the in service training program. This program is intended to upgrade the quality of the many unqualified or underqualified primary school teachers that presently teach in both provinces. It will do so by offering the most highly motivated among them the opportunity to study in rigorous summer training sessions. These sessions will be specially designed to improve the relevance and practicality of the subjects which they teach, and the effectiveness of their classroom presentations. The summer sessions will also enable them to obtain the appropriate licence as Grade I or Grade II teachers. Additional costs that will be included are the maintenance of the new and renovated buildings, the operation and maintenance of a fleet of vehicles, and the debt service payments on the loan portion of the proposed project.

For ease of comprehension, the analysis has retained the same format as appeared previously in Tables I and II for the estimation of student stipends, faculty and staff salaries and operating expenses with the project. These figures, together with the assumptions upon which they are based, appear later in the discussion of each line item and in Table III. Note that the average cost per student at the five schools has now declined further to CFAF 915,257. This Table presents the with project figures for these expenditures. These costs plus the outlays for building and vehicle maintenance and debt service for the loan appear together in Table VI.

A very important budgetary implication of the project for MINED are the salaries of the new teachers that will result from the project over and above those which would continue to graduate in its absence, 710 as opposed to 450. This is a difference of 260 additional teachers graduating each year. The salary costs for new teachers with and without the project can be found in Table IV.

Finally, Tables V, VI and VII summarize the complete financial costs for the five ENI-ENIAs with and without the project. For the purpose of determining recurrent costs, these figures are carried forward for two years after the project's completion in 1989.

C. Discussion of the Line Items presented in the Tables:

1. Student Stipends

New students arriving at the ENI-ENIA's are considered to be government employees as soon as they are enrolled. Their starting salary depends upon their previous level of education. It varies from CFAF 40,424 per month for holders of the CEPE to CFAF 89,341 per month for those with the BAC. With their Christmas bonus included, GURC employees receive 13 months pay per year. Those who attend classes for more than one year are eligible for substantial step increases. For example, the U.S. equivalent of an elementary school graduate admitted to an ENIA would receive CFAF 40,324 per month for the first year of studies, CFAF 48,048 per month during the second year and CFAF 71,073 during the third year. If the student successfully completed his or her concours to become a licenced Class II teacher, or instituteur adjoint, he or she would earn a minimum of CFAF 78,748 per month. On an annual basis, this salary amounts to CFAF 1,023,724 per year. Graduating students who enter at a higher level and who successfully qualify to become Class I teachers, or instituteur, would receive a minimum of CFAF 1,273,298 per year.

The pattern of enrollment at the five TTCs is exceedingly complex. Among them there are one, two and three year programs and a total of five different levels of entry for beginning students. Each level has a different pay scale. These complexities make it virtually impossible to ascertain the existing level of stipends for the five schools. Their magnitude at any point in the future can only be estimated by making best guess assumptions. These have been made in deriving estimated stipends at each campus. They appear in Tables I, a-f, II, a-f and III, a-f.

The stipends constitute by far the largest single expenditure for the ENI-ENIA's. Based upon the most recent data available, approximately 80 percent of the total GURC expenditures for the schools are directly attributable to the student stipends.

2. Faculty and Staff Salaries

These salaries are calculated from present numbers and an average salary figure for faculty and staff at each institution. The increases in costs after 1984/85 are not reflective of inflation but do include the effect of increases in salary index steps which occur every two years. Inasmuch as the student/faculty ratios are relatively low, it has been assumed that no additional positions will be required as a result of the project.

3. Operating Expenses

This catch-all category used by the GURC presumably includes expenditures for building maintenance, material and equipment, utilities and so forth. Figures for the present are taken directly from the school's budgets for 1982/83. The figures for expenditures in this category with the project assume that the outlays per student at each institution will remain the same with the project as they are at present.

4. Graduate Salaries

These salaries are calculated based upon expected annual graduation rates under the project expansion. They do not reflect inflation. They do include step increases over time, however. The figures assume that graduates are successful in their concours within one year after graduation. They do not include the effects of resignation or mortality. The levels shown are thus biased upward in terms of recurrent cost obligations. The increases in recurrent costs for teachers salaries for the two years following the project are attributable to the fact that the number of graduates each year has increased by 58 percent - from 450 to 710.

5. Inservice Training Program

Table IV presents the cost effects of the inservice program for unqualified and underqualified teachers. The inservice programs for inspectors, faculty and headmasters do not affect their salary levels and thus have no significant recurrent cost effects. As in earlier calculations, the increases over time represent the effects of step increases but not of inflation.. No salary effects are calculated for the inservice program until 1987/88. This is because the program will first be offered in the Summer of 1986 and teachers will not be able to pass their exams before Spring, 1987. Thus, they cannot receive salary increases before fiscal year 1987/88 begins. The calculations are based upon assumed success rates of 50 percent on the teacher credential examinations for inservice participants at each level.

6. Maintenance and Replacement Costs

a. Buildings

It is assumed that maintenance for the five campuses combined will usually amount to one percent of the total costs of construction, or CFAF 28,000,000 per year. Once every six years, however, there will be a more extensive preventive maintenance program that will require the expenditure of CFAF 115,200,000.

b. Vehicles

It is assumed that during the life of the project the GURC will operate and maintain the 21 vehicles purchased for the project. The yearly cost will be CFAF 23,760,000. The first year after the project's completion - 1989/90 - it is assumed that the GURC will replace 11 of the vehicles at a cost of CFAF 69,000,000. The cost of operating and maintaining these vehicles is estimated at CFAF 24,000,000 per year thereafter.

7. Debt Service

The anticipated loan terms for the project loan component are that the GURC shall repay the loan to the USG in United States dollars within forty (40) years from the date of first disbursement of the loan, including a grace period of not more than ten (10) years. The GURC shall pay interest from the date of first disbursement of the loan at a rate of (a) two percent (2%) per annum during the first ten years and (b) three percent (3%) per annum thereafter on the outstanding disbursed balance of the loan and any due and unpaid interest accrued thereto. The level of loan disbursement and interest payments due will be as follows. It should be noted that annual payments will increase to CFAF 234,422,101 in 1994/95 when repayment of the principal of the loan begins.

Year	Total Disbursement	Interest Due
1984/85	$ 1,640,000	$ 32,800
1985/86	9,226,000	184,520
1986/87	13,747,000	274,940
1987/88	16,265,000	325,300
1988/89		325,300
1989/90		325,300
1990/91		325,300
1991/92		325,300
1992/93		325,300
1993/94		325,300
1994/95		829,824

D. Project Costs:

As noted earlier, the budgetary costs to the GURC arising from the project will be the difference between outlays with the project and those which would have been spent without the project. For the five years of the project's life such expenditures will total $6,492,000. This is a modest sum indeed when compared to the increased capacity of the five schools to produce qualified teachers.

The reason for the modest additional amount of expenditure is that the renovation and construction activities will prevent any expansion in either enrollment or in the number of teachers produced until the last year of the project. Thereafter, of course, there will be substantial increases in both.

E. Recurrent Costs:

For purpose of this analysis recurrent costs can be defined simple as those costs which recur as a direct result of the project. Thus, the GURC financed expenditures for the architectural and engineering plans for the new and renovated buildings are not a recurrent cost. Likewise, the cost of the land donated by the GURC for the new campus at Maroua is a non recurring cost. Outlays in student stipends for the difference between the 1,310 students enrolled in the schools as a result of the project and the 1,020 students that would be enrolled in any event are, on the other hand, a recurrent cost. Likewise, the difference between the amount paid to 450 graduating teachers and the 710 that result from the project is a recurring cost. Higher salary payments

to upgrade teachers will also be recurring. In addition, the maintenance expenses of the new and renovated buildings, the replacement, the operating and maintenance expenses of the fleet of vehicles and the debt service payments are also recurring costs.

Expenditures for these recurrent costs vary between CFAF 1.1 and .9 billion in the two years following the completion of the project in 1988/89. As noted from Table VI, the great majority of these expenditures are occasioned by the increase in stipends paid to students after enrollment is expanded and the increase in salary payments to 260 additional teachers each and every year.

F. Findings:

In exchange for $6,492,000 disbursed over a five year period, plus the remaining amortization payments on the loan, the GURC obtains five ENI-ENIAs with completely renovated, expanded and better equipped facilities. Upon completion of the construction portion of the project, the schools can increase annual enrollment from 1,020 to 1,310 or by 28 percent, and the number of annual graduates from 450 to 710, or by 58 percent. They will also have the added capability of upgrading up to 200 additional teachers each year. If it is assumed that each new graduate will teach in a class with an average enrollment of 50 students, the number of additional students that can be taught by the annual graduating class of new teachers would increase from 22,500 to 35,500 or by 13,000. Over a 10 year period a total of 130,000 additional students could receive instruction. This figure represents over 25 percent of the number of students enrolled in the two provinces at present and nearly 10 percent nationwide. Furthermore, as a result of the additional teachers, it will be possible to have 63 percent, as opposed to 52 percent without the project, of the school age population enrolled in primary school in the Northwest Province by the year 2000. For the North, the comparable figures are 50 percent as opposed to 42 percent. The project, in other words, at a comparatively modest cost makes possible a substantial difference in enrollment in primary school in two provinces. It brings much closer to reality the current five year plan's goal of universal primary education for the nation by the year 2000.

TABLEAU I
TABLE I

Coût Total pour les Bourses des Etudiants, les Enseignants et les Opérations, par Campus, pour l'Exercice Budgétaire 1982-1983

Total Costs of Student Stipends, Faculty and Operation by Campus for Fiscal Year 1982-83

a. Maroua

Etudiants / Students	Nombre / Number		Bourse/mois / Stipend/mo.		Nb. de mois / No. of mos.		Total CFA
	68	x	40 324	x	13	=	35 646 416
	59	x	48 048	x	13	=	36 852 816
	64	x	71 073	x	13	=	59 132 736
	191						131 631 968
Enseignants Faculty	11	x	250 000	x	13	=	35 750 000
Operations							1 825 000
Total							169 206 968
Coût moyen/étudiant/an Average Cost/Student/yr							885 900

b. Garoua

Etudiants Students	281	x	78 748	x	13	=	287 666 444
Enseignants Faculty	17	x	250 000	x	13	=	55 250 000
Operations							3 600 000
Total							346 516 444
Coûtmoyen/étudiant/an Average Cost/Student/yr							1 233 155

c. Pitoa

Etudiants Students	70	x	71 073	x	13	=	64 676 430
Enseignants Faculty	7	x	250 000	x	13	=	22 750 000
Operations							3 400 000
Total							90 826 430
Coût moyen/étudiant/an Average Cost/Student/yr							1 297 520

d. Ngaoundere

Etudiants Students	Nombre Number		Bourse/mois Stipend/mo.		Nb. de mois No. of mos.		Total CFA
	113	x	40 324	x	13	=	59 235 956
	41	x	48 048	x	13	=	25 609 584
							84 845 540
Enseignants Faculty	12	x	250,000	x	13	=	39 000 000
Operations							1 825 000
Total							125 670 540
Coût moyen/étudiant/an Average Cost/student/yr							816 041

e. Bamenda

Etudiants Students	180	x	48 048	x	13	=	112 432 320
	40	x	71 073	x	13	=	36 957 960
							149 390 280
Enseignants Faculty	13	x	250 000	x	13	=	42 250 000
Operations							4 000 000
Total							195 640 280
Coût moyen/étudiant/an Average Cost/Student/yr							893 335

f. Résumé des dépenses dans les cinq ENIA pour les Bourses des Etudiants, les Enseignants et les Opérations pour l'Exercice Budgétaire en cours (1982-1983)
Summary of Expenditures at five ENI-ENIA's for Student Stipends, Faculty and Operations for current Fiscal Year (1982-1983)

COUT TOTAL
TOTAL COST

Campus Campus	Nombre d'étudiants Number of Students	Coûts Totaux Total Costs CFAF
Maroua	191	169 206 968
	par étudiant / per student	885 900
Garoua	281	346 516 444
	par étudiant / per student	1 233 155
Pitoa	70	90 826 430
Ngaoundere	154	125 670 540
	par étudiant/ per student	816 041
Bamenda	219	195 640 280
	par étudiant / per student	893 335
Total	915	927 860 662
Coût moyen/étudiant/année Average Cost/Student/Year		1 014 055

TABLEAU II
TABLE II

Estimation des Coûts Totaux pour les Bourses des Etudiants, les Enseignants et les Opérations, par Campus, pour l'Exercice Budgétaire 1984-1985
Estimated Total Costs of Student Stipends, Faculty and Operation by Campus for Fiscal Year 1984-1985

a. Maroua

Etudiants Students	Nombre Number		Bourse/mois Stipend/mo.		Nb. de mois		Total CFA
	70	x	40 324	x	13	=	36 694 840
	70	x	48 048	x	13	=	43 723 680
	70	x	71 073	x	13	=	64 676 430
							146 094 950
Enseignants Teachers	11	x	250 000	x	13	=	35 750 000
Dépenses de fonctionnement Operating Expenses							2 006 545
Total							182 851 495
Coût moyen/étudiant/an Average Cost/Student/yr							870 721

b. Garoua 84/85

Etudiants Students	300	x	1 023 724	x	13	=	307 117 200
Enseignants Teachers	17	x	250 000	x	13	=	55 250 000
Dépenses de fonctionnement Operating Expenses							3 843 416
Total							366 210 716
Coût moyen/étudiant/an Average Cost/Student/yr							1 220 702

c. Pitoa 84/85

Etudiants Students	70	x	71 073	x	13	=	64 676 430
Enseignants Teachers	7	x	250 000	x	13	=	22 750 000
Dépenses de fonctionnement Operating Expenses							3 400 000
Total							90 826 430
Coût moyen/étudiant/an Average Cost/Student/yr							1 297 520

e. Bamenda 84/85

Etudiants	180	x	48 048	x	13	=	112 432 320
Students	40	x	78 748	x	13	=	40 948 960
							153 381 280
Enseignants	13	x	250 000	x	13	=	42 250 000
Dépenses de fonctionnement Operating Expenses							4 000 000
Total							199 631 100
Coût moyen/étudiant/an Average Cost/Student/yr							

f. Tableau Résumé des Coûts Totaux Estimés pour les Bourses des Etudiants, les Enseignants et les Opérations dans les Cinq ENI-ENIA pour l'Exercice Budgétaire 1984-1985
Summary Table of Estimated Total Costs for Student Stipends, Faculty and Operations at Five ENI-ENIAs for Fiscal Year 1984-1985

Campus Campus	Nombre d'Etudiants Number of Students	Coûts Totaux Total Costs (CFA)
Maroua	210	182 851 495
Garoua	300	366 210 616
Pitoa	70	90 826 430
Ngaoundere	220	167 979 102
Bamenda	220	199 631 280
Totaux/Totals	1 020	1 007 498 923
Coût moyen/étudiant/an Average cost/student/year		987 744

TABLEAU III
TABLE III

Coûts Totaux Estimés pour les Bourses des Etudiants, les Enseignants et les Opérations, avec le Projet, par Campus. Exercice Budgétaire 1985/89 et au-delà
Estimated Total Costs of Student Stipends, Faculty and Operations with Project by Campus. Fiscal Year 1985/89 and Beyond

a. Maroua

Etudiants / Students	Nombre / Number		Bourse/mois / Stipend/mo.		Nb. de mois / No. of mos.		Total (CFA)
	90	x	40 324	x	13	=	47 179 080
	90	x	48 048	x	13	=	56 216 160
	90	x	71 073	x	13	=	83 155 410
							186 550 650
Enseignants / Teachers	11	x	250 000	x	13	=	35 750 000
Dépenses de fonctionnement / Operating Expenses							2 346 429
Total							224 647 079
Coût moyen/étudiant/an / Average cost/student/yr							832 027

b. Garoua

Etudiants / Students	300	x	1 203 724	x	13	=	307 117 200
Enseignants / Teachers	17	x	250 000	x	13	=	55 250 000
Dépenses de fonctionnement / Operating Expenses							3 843 416
Total							366 210 716
Coût moyen/étudiant/an / Average cost/student/yr							1 120 702

c. Pitoa

Etudiants / Students	200	x	71 073				184 789 800
Enseignants / Teachers	7		250 000				22 750 000
Dépenses de fonctionnement / Operating Expenses							9 714 286
Total							217 254 086
Coût moyen/étudiant/an / Average cost/student/yr							1 086 270

d. Ngaoundere

Etudiants	110	x	524 212			=	57 663 320
Students	110	x	624 624			=	68 708 640
							126 371 960
Enseignants	12	x	250 000	x	13	=	39 000 000
Teachers							
Dépenses de fonctionnement							2 607 142
Operating Expenses							
Total							167 979 102
Coût moyen/étudiant/an							763 541
Average cost/student/yr							

e. Bamenda

Etudiants	180	x	48 048	x	13	=	112 432 320
	100	x	71 073	x	13	=	92 394 900
							204 827 220
Enseignants	13	x	250 000	x	13	=	42 250 000
Teachers							
Dépenses de fonctionnement							5 818 182
Operating Expenses							
Total							252 895 402
Coût moyen/étudiant/an							
Average cost/student/yr							790 298

f. Tableau Résumé des Coûts Totaux pour les Bourses des Etudiants, les Enseignants et les Opérations dans les Cinq ENI-ENIA, avec le Projet, pour l'Exercice Budgétaire 1988-1989 at au-delà
Summary Table of Total Costs for Student Stipends, Faculty and Operations at five ENI-ENIA's with Project - Fiscal Year 1988-1989 and beyond

Campus Campus	Nombre d'étudiants Number of Students	Coûts Totaux Total Costs (CFAF)
Maroua	270	224 647 079
	par étudiant/per student	832 027
Garoua	300	336 210 716
	par étudiant/per student	1 120 702
Pitoa	200	217 254 086
	par étudiant/per student	1 086 270
Ngaoundere	220	167 979 102
	par étudiant/per student	
Bamenda	320	252 895 402
	par étudiant/per student	790 298
Totaux/Totals	1 310	1 198 986 385
Coût moyen/étudiant/an Average Cost/Student/Year		915 257

TABLEAU IV
TABLE IV

Salaires des Etudiants qui deviennent des Nouveaux Instituteurs
Exercices Budgétaires 1982/83, 1984/85 et, avec le Projet, 1988/89 et au-delà
Graduating Students Wage Bill as New Teachers Fiscal Years 1982-1983, 1984-1985 and with the Project, 1988-89 and Beyond

Campus	Nombre de Diplômés Numbers of Students Enrolled and Graduating (shown in relation to numbers enrolled)					
	1982/83		1984/85		1988/89-Beyond	
	Enrolled	Graduates	Enrolled	Graduates	Enrolled	Granduates
Maroua	191	64	210	70	270	90
Garoua	281	124	300	100	300	100
Pitoa*	70	70	70	70	200	200
Ngaoundere	154	41	220	110	220	110
Bamenda	219	80	220	100	320	210
Totals	915	379	1 020	450	1 310	710

Nouveaux Coûts Recurrents par An pour les Diplômés
New Recurring Costs per Year for Graduates

379	x	78 748	x	13	=	CFAF	387 991 396
450	x	78 748	x	13	=		460 675 800
710	x	78 748	x	13	=		726 844 040

* At Pitoa students graduate in one year. The sudden increase in Pitoa's enrollment in 1988/89 explains in large part the ensuing increase in percentage of graduates from the TTCs.

Table V

Estimated Recurrent Financial Costs for Teacher Training at Five TTCs Without the Project

($ 000s)

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Student Stipends	2655	2655	2655	2655	2655	2655	2655	2655	2655	2655
Faculty/Staff Salaries	650	650	728	728	815	815	913	913	1023	1023
Operating Expenses	53	53	53	53	53	53	53	53	53	53
Utilities	40	40	40	40	40	40	40	40	40	40
Graduating Teachers' Salaries		2382	4765	7281	9798	12557	15317	18315	21314	24491
Total	3398	5780	8241	10757	13361	16120	18973	21976	25085	28262

Table VI

Project and Recurrent Costs for the GURC
($ 000s)

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Personnel										
Student Stipends	2665	2665	2665	2665	3366	3366	3366	3366	3366	3366
TTC Staff & Faculty	650	650	728	728	815	815	913	913	1023	1023
New Teachers' Salaries		2382	4765	7380	11546	16133	20672	25211	30237	35263
Upgraded Teachers' Salaries				239	479	798	1118	1495	1873	2290
MINED Staff			115	217	237	258	264	279	288	309
Library Staff			21	45	46	46	51	51	59	59
Subtotal	3315	5697	8297	11274	16489	21416	26384	31315	36546	42310
Land	800									
Construction	820									
Training										
Participant Travel	13	33	29							
Instructor Travel		11	11							
Facility Costs		1	1	1	1	1	1	1	1	1
Subtotal	13	45	41	12	12	12	12	12	12	12
Other Costs										
Vehicle Maint. & Operation	20	29	98	117	117	30	125	125	125	125
Facility Maintenance	60	60	60	100	120	250	120	120	120	120
Utilities	52	52	56	131	131	150	150	160	160	178
Subtotal	132	141	210	348	383	430	395	405	405	423
Total Expenditures	5080	5883	8548	11634	16884	21858	26791	31732	37263	42745

ANNEX H.2

Financial Analysis

The long-term viability of an external assistance project depends primarily upon the ability of the host country to absorb the incremental costs generated by the project during the project and after project completion.

In addition, the host country must bear the expense of the debt service which results from the loan component of external funding. Such financial viability is related to the concept of absorptive capacity - the ability and the willingness of the government to assume the recurrent costs (including maintenance and replacement of facilities and equipment) of project-related activities. Because recurrent costs effects for the government are normally minimal during the early period of the project's life, adequate analysis of absorbtive capacity requires a longer term view. In the case of the present project, the project life is scheduled from 1984 to 1989. The analysis of absorptive capacity will cover the time period from 1984 to 1994 with some discussion of post 1984 burdens.

1. The Determinants of Financial Absorbtive Capacity

The ability of the GURC to absorb the project-related expenses after project funding terminates in 1989 is related primarily to the government's revenue, growth and stability. The willingness of the GURC to absorb these costs will be indicated by the budgetary allocation to the MINED within the GURC budget, the allocation to Primary and Nursery Education (DPNE) within the MINED budget, and the allocation to continuing project programs within the Primary and Nursery Education Budget.

The ultimate determinant is, of course, the continued strength of the Cameroon economy. Cameroon has experienced a strong and broadly based expansion of economic activity while maintaining relative financial stability. This is due in large part to the combined effects of a high level of investment, both public and private, and a continued attractiveness for foreign assistance and investment (the political stability of the GURC is crucial to the latter). In contrast to Cameroon, other African nations such as Senegal and Ivory Coast have had neither the variety of exports nor the success in increasing export quantities which has allowed Cameroon to continue to prosper. Table I presents Cameroon's gross domestic product history over the 1975-1980 period.

In looking forward to the next decade, the variety of agricultural exports, the evolving strength of the oil industry, and increased domestic manufacturing capacity (for export and for import-substitution) allow for continued optimism. For the Fifth Plan, a rate of growth at or above the 7 percent annually through 1985/86 is projected. The GURC is continuing its present rural development strategy which emphasizes stimulating the rural sector by providing adequate price incentives to farmers for their crops and through the provision of improved public services. A primary aim of this program is to reduce the strong tide of immigration to urban centers.

2. GURC Finances

The government budget, with a fiscal year of July 1 to June 30, incorporates the current and capital outlays for the central administration, several decentralized national agencies (e.g., the social security system), local authorities, and the wide variety of public and parastatal enterprises that characterize Cameroon's agricultural and manufacturing sectors. During the period 1976-1980 revenues rose at a rate of 22 percent annually while expenditures rose at an average of 20 percent. As Table II indicates, the result is the creation of a fiscal surplus for the last two years of the period. The surplus has allowed an expanded government budget at the same time as government and net lending have declined as a percent of GDP. The only worrisome factors in the budget picture is that capital expenditures tend to lag behind projections in a systematic pattern; this is primarily due to administrative bottlenecks in the implementation of construction activity.

3. GURC Educational Finances:

Table III indicates the functional classification of budgetary expenditures for the GURC for the four most recent years for which data is available. It is important to understand that the educational item under the functional classification includes educational activities which may occur outside of the MINED's direct or even indirect control. Education is the single largest functional item in the GURC budget outside of the general public service category. However, it should be noted that for the four years shown, education as a percent of total budgetary expenditure varied as follows: 18.5-17.0-17.5-18.1. It is estimated that for 1980-81 the figures will indicate an achievement of the 1976/77 level of 18.5 percent.

Table IV illustrates a similar view based upon the relative increases in the national budget and that of MINED. Only between fiscal years 1975/76 and 1976/77 did the MINED budgetary increase fail to exceed the general budget increase. The budget for 1981/82 reveals that the MINED received 32.4 billion CFA F, an increase of 29 percent over 1980/81. The total budget, on the other hand, increased by 26 percent.

Within the budget of the MINED, the primary item of expenditure is salaries. As indicated in Table IV, the general personnel item represents approximately 86 percent of total expenditures for both the 1979/80 and the 1980/81 fiscal years. Unfortunately, the budget format does not allow for separation of teacher salaries by level, either in aggregate or by province. The relative sizes of administrative and teaching staff suggest, however, that total teachers' salaries represent less than one-half of the total MINED expenditures on personnel. The figures for the DPNE include only the Yaounde administrative program base. The total allocation for the DPNE remained the same in the two budget years, although there were minor reallocations among budget items.

4. Recurrent Costs

Three major types of recurrent cost effects will be generated by the project: the support costs and salary effects for the pre-service, in-service and participant training programs; the increased maintenance and replacement costs created by the construction activities; and the effect of the loan

Component upon debt service requirements of the GURC. Because of the extended time period over which these effects may be expected to accrue, the following discussion will concentrate upon the fiscal years between 1984/85 and 1993/94.

a) Pre-service and In-service Cost Effects:

The Pre-service training program effects will be of three main types: effects on student stipends, effects on faculty and staff salaries, and effects on graduates' salaries. Table summarizes these effects over the ten year period. Under the current system, new students are paid as government employees as soon as they arrive at the TTC; their placement within the government salary scale is determined by their previous level of education. They are eligible for normal step increases in pay, benefit from the (normal) annual increases in the government pay scheme, and, if successful in their concours after graduation, are promoted to their pay rank as a Grade II or Grade I teacher.

This "salary-scholarship" scheme is one source of the high cost of TTC programs. Even though 30% of the students' money is given directly to the training institutions to pay for boarding expenses, the students receive 45% immediately, with the residual 25% accumulated in a form of forced savings for which they are eligible after graduation. The amount received by the students varies from $146 U.S. per month for CEPE holders to $324 U.S. for BAC holders. It is obvious to most observers that these are excessively generous stipends. The increases in "scholarship" costs after 1984/85 which appear in Table reflect the changes in enrollment anticipated under the expansion. By 1988/89 all schools will be at their new capacities and no further expansion is anticipated.

Faculty and staff salaries are calculated from present numbers and an average salary figure for staff at each institution. The increases in costs after 1984/85 are not reflective of inflation but do include the effect of increases in salary index steps which occur every two years.

TTC graduate salaries are calculated based upon expected annual graduation rates under the project expansion. Again, they do not reflect inflation but do include increases in index levels over time. The figures assume that 75 percent of the graduates are successful in their concours within one year after graduation and do not include resignation or mortality effects. Thus, the levels shown are based upward in terms of recurrent cost obligations.

Table presents the recurrent cost effects of the in-service program for underqualified teachers and for the project's participant training component. The in-service programs for inspectors, TTC staff, and head-masters do not affect their salary levels and thus have no significant recurrent cost effects. As in earlier calculations, the increases over time represent the effects of step increases but not of inflation. No salary effects are calculated for the in-service program until FY 1986/87. This is because the program will first be offered in the Summer of 1985 and teachers will not be able to pass their exams before Spring,

1986. The calculations qre based upon assumed success rates of 50% on the teacher credential examinations for in-service participants at each level.

b) Maintenance and Replacement Costs:

Maintenance for buildings and vehicles, along with expenditures for utilities, also appears in Table . Replacement costs for the project-related expenditures will be limited to the need to replace the original eleven vehicles which were purchased in Year One. This will result in a cost of $198,000 in Year Five.

c) Debt Service Costs:

The anticipated loan terms for the project loan component are that the GURC shall repay the loan to USAID in United States dollars within forty (40) years from the date of first disbursement of the loan, including a grace period of not more than ten (10) years. The GURC shall pay to USAID interest from the date of first disbursement of the loan at a rate of (a) two percent (2%) per annum during the first ten years and (b) three percent (3%) per annum thereafter on the outstanding disbursed balance of the loan and any due and unpaid interest accrued thereto. The level of loan disbursement and interest payments due will be as follows:

YEAR	TOTAL DISBURSEMENT	INTEREST DUE
1985/86		
1986/87		
1987/88		325,000
1988/89		"
1989/90		"
1991/92		"
1992/93		"
1993/94		"
1995/96		"

d) Other Recurrent Costs:

As was indicated in Table , the only other recurrent cost items of note are for travel. In-country travel expenses will be small after the end of the project period and inconsequential in their budgetary effect.

e) Longer-Term Recurrent Costs:

Table presents an extension of the information presented on GURC costs in Table to the fiscal years between 1989/90 and 1993/94. Because of the cumulative nature of the teacher output process, and the fact that the TTC program outputs will reach their new levels only in the final years of the project period, the earlier table tends to underestimate the GURC obligations to be incurred. Between 1989/90 and 1993/94 the salary costs will increase from $16,132,747 to $35,263,449.

Other recurrent costs show no such dramatic increase with the exception of the inflation component which exceeds 1984/85 costs over the five year period shown in the table.

5. Absorbtive Capacity:

As indicated in the discussion of GURC finances, there are good reasons for a generally sanguine perspective of GURC revenues over the next five years. The educational finances section showed that the GURC has a record for a strong and sustained level of support for education and, within education, for support to primary education.

The 1982/83 budget for the MINED of 160.3 million allows for absorbtion of the project costs with little difficulty. Assuming a constant budget in real CFA F over the five year project period (which is extremely conservative), total GURC costs for the project would amount to 8.9 percent of the total MINED budget ($71.6 million/$803 million). It is obvious from this figure that the absorption of project costs requires continued growth of the MINED budget in real terms. A more realistic growth rate would be ten percent a year in real terms. This would result in a MINED budget between 1984/85 and 1988/89 totaling $960 million. The project effect would be only 7.5 percent.

The continuing increase in personnel obligations reflected in Table does raise the need for the GURC to consider carefully its long-term teacher development strategy. The concomitant programs proposed for funding under the 4th IBRD Loan would create personnel obligations equal to or even larger than those created by this AID project. A major factor in all this is the relatively high salary levels for teachers within the GURC public service. If increases in the government pay scheme could be kept to less than ten percent a year the personnel budgetary obligation could be sharply reduced.

The IBRD projects that the current debt service ration of 12 percent will increase to only 16 percent by 1986. Given the size and extent of projected obligations, the debt service obligations related to this project again are inconsequential. In addition, the hardening terms of other funding sources should make the USAID loan proposal even more attractive to the GURC and provide the project with more leverage than its relatively small scale would otherwise permit.

The opinion expressed by Aklog Birara in his review of absorptive capacity issues in Cameroon for 1981-1985 is still applicable:

> "... local counterpart/recruitment financing is not a major constraint in Cameroon. Furthermore, balance of payments and debt service problems are more than likely within the capacity of the Cameroon economy to absorb; provided that substitutes in semi-processed and general agricultural commodities are undertaken and provided that Cameroon resorts to concessionary rather than commercial loans."

Of special relevance to the project, given the issues of GURC commitment and administrative capacity, is Birara's further comment that:

> "... the problem that is foreseen in this research of recurrent cost absorption is not financial inadequacy to cover recurrent costs but institutional, administrative, technical, manpower, and general infrastructural constraints.."

In conclusion, absorption of recurrent costs will require continued growth in the economy with resultant GURC and MINED real budgetary increases. The expected levels of such increase, combined with a program of moderate salary increases, should allow for absorption of the project-generated costs with little disruption of other MINED activities.

Table I (H.2) Cameroon: Gross Domestic Product and Expenditure
1975/76-1979/80 1/

	1975/76	1976/77	1977/78	1978/79	1979/80
	(In billions of current CFA francs)				
Consumption	556.1	627.2	751.8	875.2	1,032.0
Private	(481.6)	(545.3)	(655.1)	(760.4)	(900.0)
Public	(74.5)	(81.9)	(96.7)	(114.8)	(132.0)
Gross fixed capital formation	118.8	163.5	200.0	241.0	275.0
Change in stocks	3.0	18.2	19.5	38.0	35.0
Exports of goods and nonfactor services	150.5	202.3	250.3	268.4	369.0
Imports of goods and nonfactor services	-171.1	-221.8	-284.6	-331.9	-386.0
GDP at current market prices	657.3	789.9	937.0	1,000.7	1,325.0
	(Annual change in per cent)				
Consumption	16.9	12.8	19.9	16.4	17.9
Private	(18.2)	(13.2)	(20.1)	(16.1)	(18.3)
Public	(9.5)	(9.9)	(18.1)	(18.7)	(15.0)
Gross capital formation	119.7	37.6	22.3	20.5	14.1
Exports of goods and nonfactor services	3.3	34.8	23.4	7.2	37.4
Imports of goods and nonfactor services	15.3	29.6	28.3	16.6	10.9
GOP at current market prices	13.3	20.2	18.6	16.4	21.5

Source: Table 1, IMF Background Paper,
Cameroon - Recent Economic Developments,
June, 1981

1/ Fiscal year basis (July-June),

2/ Provisional.

TABLE II (H.2) CAMEROON: FISCAL TRENDS IN RELATION TO GDP, 1976/77-1979/80
(IN PER CENT OF GDP)

	1976/77	1977/78	1978/79	1979/80
GURC Budgetary revenue and grants	15.31	17.32	18.41	16.52
Of which: tax revenue	13.01	15.34	14.64	13.97
nontax revenue	0.88	1.15	1.15	1.34
GURC Budgetary expenditure	14.60	15.76	14.82	13.36
Of which: current	12.04	12.69	11.80	10.74
capital	2.72	3.13	2.82	2.79
GURC Extra budgetary outlays	1.38	1.70	1.07	1.62
GURC Net lending and special accounts	0.39	0.34	0.14	0.29
GURC Expenditure and net lending	16.27	17.79	16.03	15.28
GURC Overall Treasury deficit (-) or surplus	-0.97	-0.47	2.38	1.24

Source: Table 6, IMF Background Papers,

Cameroon - Recent Economic Developments.

June, 1981.

Table III (H.2)

Cameroon: Functional Classification of Budgetary Expenditure

1976/77-1979/80

(In millions of CFA francs)

	1976/77	1977/78	1978/79	1979/80	1980/81
General public services	27,058	26,698	30,895	41,871	49,385
Education	21,321	25,117	28,348	32,404	39,430
Defense	11,137	14,385	17,118	18,092	21,663
Health	6,373	8,048	8,608	9,920	11,596
Housing	2,674	3,296	4,330	1,853	6,069
Social affairs	844	959	384	1,284	1,492
Other social services	2,529	3,544	4,087	3,721	4,348
Economic services	25,750	32,098	20,567	25,929	22,725
General administration	(4,569)	(4,621)	(4,754	(6,618)	(4,751)
Agriculture, forestry, animal husbandry, and fishing	(5,603)	(6,829)	(7,910)	(8,673)	(8,312)
Mining and energy	(486)	(1,597)	(1,105)	(720)	(889)
Transportation	(11,662)	(15,574)	(3,542)	(5,705)	(4,133)
Telecommunications	(3,458)	(3,477)	(3,256)	(4,213)	(4,640)
Interest on public debt	2,371	3,788	7,140	7,947	7,984
Other	16,447	29,795	37,987	58,443	
Total classified expenditure	116,591	148,235	159,464	201,464	
Adjustment items 2/	-1,244	-585	2,192		
Total budgetary expenditure	115,347	147,650	161,656	201,464	239,214
Memorandum item:					
Public debt amortization	6,222	6,074	11,448	12,743	16,016

Source: Data provided by the Cameroonian authorities.

1/ Provisional

2/ Unclassified items.

TABLE IV (H.2)

RELATIVE INCREASES IN THE NATIONAL BUDGET
AND THE BUDGET OF THE MINISTRY OF
NATIONAL EDUCATION (IN PERCENTACES)

	1971-72 1972-73	1972-73 1973-74	1973-74 1974-75	1974-75 1975-76	1975-76 1976-77	1976-77 1977-78	1977-78 1978-79	1978-79 1979-80	1979-80 1980-81	1980-81 1981-82
National BUDGET	+15,1%	+11,2%	+13,0%	+19,0%	+28 %	+7,0%	+20,5%	+1,6%	+21,7%	+29,0%
BUDGET of the Ministry of National Education	+22,4%	+19,7%	+16,4%	+19,1%	+14,4%	+8,1%	+34,9%	+13,7%	+21,7%	+26,3%

TABLE V (H.2) MINISTRY OF EDUCATION OPERATING BUDGET

(Million CFA)

Expenditures	1979/80	1980/81
Total	20,727	23,580
Functional Categories		
General Personnel	17,811	20,204
Other Personnel Expenses	116	176
Service Expenditures	1,610	1,928
Maintenance of Buildings	111	130
Scholarships	578	804
Other Expenses	229	336
Expenditures of the Department of Primary and Nursery Education	302	302

This excludes salaries of teachers which are listed in budget, only by province, not by level of instruction.

Source: National Budget, Chapter 15: Ministry of National Education, 1980-81

Table VI (H.2)

Project and Recurrent Costs for the GURC

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Personnel										
Student Stipends	2665	2665	2665	2665	3366	3366	3366	3366	3366	3366
TTC Faculty and Staff	650	650	728	728	815	815	913	913	1023	1023
New Teachers' Salaries		2382	4765	7380	9995	14161	18748	23287	28313	33339
Upgraded Teachers' Salaries				239	479	798	1118	1495	1873	2290
MINED Staff			118	217	237	258	264	279	288	309
Library Staff			21	45	46	46	51	51	59	59
Subtotal	3315	5697	8297	11274	14938	19444	24460	29391	34922	40386
Land	800									
Construction	820									
Training										
Participant Travel	13	33	29							
Instructor Travel		11	11	11	11	11	11	11	11	11
Facility Costs		1	1	1	1	1	1	1	1	1
Subtotal	13	45	41	12	12	12	12	12	12	12
Other Costs										
Vehicle Maint. & Operation	20	29	98	117	117	30	125	125	125	125
Facility Maintenance	60	60	60	100	120	250	120	120	120	120
Utilities	52	52	52	131	131	150	150	160	160	178
Subtotal	132	141	210	348	383	430	395	405	405	423
Total Expenditures	5080	5883	8548	11634	15333	19886	24867	29808	35339	40821

Table VII (H.2)

Comprehensive Comparison of Costs With and Without the Project

($ 000s)

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
With Project	5080	5883	8548	11634	15333	19886	24867	29808	35339	40821
Without Project	3398	5780	8241	10757	13361	16120	18978	21976	25085	28262
Difference (Additional, of Marginal Cost to GURC)	1682	103	307	877	1972	3766	5889	7832	10254	12559

ANNEX H.3

Economic Analysis

The economic analysis of social investment programs in areas such as primary education presents special problems in that the outcomes of the project and the resultant benefit streams are extremely difficult to monetarize. Indeed, the more competent and responsible the analyst, the less willing he or she will be to engage in processes which result in a "quantification of the unknowable". However, project judgements require the maximum amount of quantitative, even if not monetary, data on project benefits, outcomes and costs.

The appropriate compromise is: (1) to detail to the extent possible the nature and incidence of the project benefit stream; (2) to link project outputs to benefits and evaluate the efficiency of this linkage, (3) to specify all project costs - direct and recurrent - in terms of probable incidence and amount; (4) to review the nature of internal efficiencies, i.e., the fit of inputs to outputs; and (5) to examine the overall incentive configuration of the project (subsidies, salaries, assignment policies, etc.) and the degree of congruence of the incentives with desired project outcomes and eventual benefits. Each of these activities will be examined below.

Cost Benefit Analysis

Initial investigation of Cameroonian educational data quickly led to the conclusion that the project could not reasonably be justified solely on the basis of this kind of analysis. Virtually no attempt has been made thus far to estimate the rate of return to primary or any other kind of education in the country. Indeed, such basic data as primary school enrollment figures are seldom available sooner than 18 months after the beginning of the school year. Even when they do become available, the data are, from all accounts, highly inaccurate, inconsistent and incomplete.

Nonetheless, cost/benefit analysis has proven to be an extremely useful tool in the economic evaluation of the present project. Although country specific data are lacking in many instances, it is possible, based upon the results obtained from cost/benefit analyses of primary education in other LDCs, including some African countries, to make assumtions about the values of the variables.* Based upon the estimated project costs, these assumptions can then be utilized to determine whether or not the project can reasonably be expected to have an acceptable rate of economic return.

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* cf. George Psacharopoulos. Returns to Education: An Updated International Comparison, appearing in the IBRD publication Education and Income, 1980, pp.73-110. cf. especially pp.84-85.

Based upon a considerable amount of time spent in simulating the various possible values for internal and external efficiencies under a variety of assumptions, it is possible to reach the following conclusion. Employing moderate assumptions concerning the likely range of values obtainable from internal and external benefits, the project produces an acceptable rate of return.

Table H.1 presents the project's incremental costs and benefits. The total, or gross benefit stream is fairly typical of those derived through the simulation studies mentioned previously. The benefits are broken down into those obtained from internal and external economies. Concerning the former, benefits in the form of reduced repetition and dropout rates have been estimated. The estimates were derived from the following assumptions.

1. Commencing with year three of the project, each new teacher produced by one of the five TTCs affected by the project will reduce the combined repetition and dropout rate in their class of 50 students by one half.

2. The prevailing combined annual repetition and dropout rate in the two provinces averages 25 percent of enrollment.

3. The cost to the primary education system for each repeater or dropout is $40.

These assumptions are somewhat ambitious in the sense that the reduction in repetition and dropout rates is substantial. Based upon experience elsewhere, however, it is far from being unreasonable.* Moreover, the assumption excludes any economic benefits from the improved administration of the TTCs and the primary schools in the two provinces.

The external benefits, or those accruing directly to the students who will benefit from studying under a teacher produced by either the project's pre-service or in-service training programs are estimated under the following set of assumptions.

1. The productivity of each student who receives instruction under the prevailing system experiences a permanent increase of 20 percent annually for each year that they are productively employed.

2. The productivity of each student who receives instruction with the system proposed by the project will experience a permanent increase of 25 percent annually for each year that they are productively employed.

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* IBRD. Teacher Training and Student Achievement in Less Developed Countries. 1978. pp. 19-30 and especially p. 22.

3. The five percent per year increase in productivity will occur in four annual increments of 10, 25, 50 and 100 percent respectively. That is, that if a student dropped out after only 2 years of instruction they would receive 25 percent of the five percent differential, or 21.25 percent altogether.

4. The average annual income of a Cameroonian who is a member of the labor force is $2,000. For a farmer or worker who has completed four years of primary school education under the prevailing system, their annual income averages $2,400. For a product of the proposed system, the average income would be $2,500.

Given this set of assumptions, the stream of benefits generated by the internal economies above is sufficient to produce an IRR of 19.5. It is more than adequate to justify the project, in other words, even if no internal economies were to be forthcoming. With those economies present, the IRR increases to 21.5. Sensitivity testing disclosed that a 10 percent decrease in gross benefits reduces the IRR to 17.5 while a 10 percent increase in costs reduced the IRR to 16.7.

Additional assumptions made for the externally produced economic benefits are that there will be no student dropout and that there will be no leakage of the new teachers out of the primary school systems in the two provinces. Thus, even though most of the other assumptions are quite modest, the latter ones do, ceterus paribus, bias the returns upward. At the sametime, however, it has also been assumed that there will be no spread effects of the students improved education to either their families or their communities at large. Likewise, no economic benefits have been assigned for factors such as improved nutritional practices, better general health, enhanced ability to obtain employment, although they obviously do have a monetary value. Overall, then, the assumptions do appear to lead to reasonable results.

Cost Effectiveness Issues

This form of economic analysis involves primarily a quantitative estimate of costs and a qualitative evaluation of benefits. The project's financial costs were presented in the previous section of this paper. The benefits include improved TTC facilities, more teachers, increased teaching quality, and eventually more children receiving a better quality education. The latter is, of course, particularly important. Studies by the IBRD and other development specialists have shown that a primary education program that provides training in literacy, numeracy, and life and environmental sciences can reduce infant mortality, fertility, and general morbidity, improve local participation in political and social equity, increased agricultural and general productivity, and increase employment and training options. One may assume that a long term result of the project would be direct economic gains for those taught in the schools. It is important to

Table H.3

Cost/Benefit Analysis of Primary Education Project
(In thousands of U.S. $)

	1984/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/2000	00/01	01/02	02/03	03/04
I. Costs																				
A. USAID																				
Technical Assistance	751	1299	2043	1271	854															
Personnel	5	27	31	32	32															
Construction		869	3911	2613	1299															
Commodities	262	591	1083	88	86															
Training	177	474	398	232	232															
Other	7	22	28	70	49															
Contingency	120	328	749	430	255															
Total USAID	1322	3610	6243	4736	2807															
B. GURC																				
Personnel			139	600	1660	3407	5565	7498	9920	12207	15000	18224	21349	24635	28121	31727	35181	38803	42529	46306
Land	800																			
Construction	820																			
Training	13	45	41	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Other Costs	12	129	198	308	343	390	345	365	365	383	383	400	400	430	430	465	465	498	498	550
Total GURC	1645	174	378	920	2015	3809	5922	7875	10297	12602	15494	18636	21761	25077	28563	32204	35658	39313	43039	46868
Total Incremental Project Costs	2967	3784	6621	5656	4822	3809	5922	7875	10297	12602	15494	18636	21761	25077	28563	32204	35658	39313	43039	46868
II. Benefits																				
A. Reduced Repetition and Dropout	-	-	113	225	338	515	693	870	1048	1225	1402	1585	1763	1940	2117	2294	2471	2648	2825	3002
B. Monetized Return to Student's Schooling	-	-	225	838	2088	4718	7013	11193	15743	19793	23843	27893	31943	35993	40043	44093	48143	52193	56243	60293
Total Benefits	-	-	338	1063	2426	5233	7706	12063	16791	21018	25245	29478	33706	37933	42160	46387	50614	54841	59068	63295
Net Benefit Stream	-2967	-3784	-6283	-4593	-2396	1424	1784	4188	6494	8416	9751	10842	11945	12856	13597	14183	14956	15528	16029	16427
Internal Rate of Return	21.5 percent																			

note, however, that a project such as this creates necessary but not sufficient conditions for the realization of the economic benefits ascribed to the project. Many of the factors leading to such gains are not within the control of the project. Nonetheless, given the generally prosperous economic forecasts for Cameroon and the GURC's evidenced commitment to a regionally-based economic development strategy, the confidence which one can place in the project's economic benefits is reinforced.

A. Project Benefits

In this section the first two issues in our framework of analysis will be reviewed: to whom do benefits accrue and what are the linkages between benefits and project outputs. The beneficiaries appear to be divisible into four main categories:

(a) Affected Institutions
(b) Affected Personnel
(c) Students and Families
(d) Government/Society of Cameroon

(a) Affected Institutions

Since the project uses institutional support as the major vehicle for its attempt to promote primary education, the initial impact will be upon these organizational structures. The Department of Primary and Nursery Education (DPNE), the National and Departmental Primary School Inspectorates and the Teacher Training Colleges (TTCs) in the North and Northwest Provinces will have the major responsibility for implementing the primary school teacher training program. Two MA students will be trained and assigned to the DPNE to assist with activities in the area of educational administration and management. During the time period of the project, the Team Leader will work in the DPNE.

The TTC's are, of course, the major institutional beneficiaries. They will receive new facilities, refurbishment and expansion of present facilities, vehicles, equipment, furnishing and increased enrollment. The last may be perceived as a "cost" to faculty since the project assumes that the majority of increased enrollments will be absorbed by increasing the student-faculty ratio. The effect of this increase on the internal efficiency of the teacher training system is a major benefit and is discussed later.

In addition to their current role in preservice training, the TTC's will expand to become centers of inservice training, hosting programs for primary school teachers, primary school directors, and the TTC faculty and staffs themselves.

The Inspectorate General of Pedagogy will receive three MA graduates, one in library science and two in curriculum development and evaluation, to assist the Yaounde based staff. The Departmental Primary School

Inspectorates will receive one vehicle for each inspector. Inservice training will be provided to inspectors and sub-inspectors to upgrade the administrative capacity of the inspectorates.

The IPARs and ENS will also benefit as a result of increased responsibility. The IPARs will have a role in both the inservice and preservice teacher training programs. Both the IPARs and the ENS will have a role in the training programs for the TTC faculty and staff.

(b) Affected Personnel

Affected personnel include TTC students, faculty and staff, primary school teachers, directors and inspectors, and the five participants trained to the MA level in the U.S.

TTC students will benefit from the higher level of training they will receive as a result of upgraded facilities and faculty. The expanded facilities will allow more of them to receive this training. The TTC faculty and staff will benefit from the improved facilities and from the inservice training they will receive. Although the former will have to teach a normal instead of half load, the additional training and the increased administrative support should increase job satisfaction.

Unqualified teachers will benefit from the inservice training program both in terms of greater competence and the opportunity for a higher public service classification and a higher salary. The salary benefits have alreay been detailed in the financial analysis section. It is important to remember that the benefits to participants will come both in financial and nonfinancial forms. The ability to adapt to the teaching environment and to achieve a feeling of accomplishment from an individual's work should be viewed as a benefit just as much as is the higher status and pay an individual receives. In fact, the former benefit may be a more important one in terms of social or governmental evaluation.

The primary school inspectors will benefit from improved administrative skills which will enable them to accomplish their tasks more efficiently and rapidly, and from vehicles which will enable them to visit primary schools, and thus fullfil their pedagogical responsibilities. Primary school directors will benefit from this increased support from inspectors, from the upgraded skills of the teachers in their schools, and from improved administrative skills as a result of inservice training.

Lastly, the five individuals trained to the masters level in the U.S. will benefit through increased competancy, responsibility, and salary. The five people will, in turn, assist all the previously mentioned categories of personnel through their involvement in the designing and conducting of in-service training programs and through their efforts to increase coordination between the TTCs, primary schools, inspectorates and the MINED in Yaounde.

(c) Students and Families

The ultimate beneficiaries should be the students who attend primary schools in the North and Northwest and their families. If the ultimate goals of the project are realized, students will have greater access to primary education, face lower student-teacher ratios, experience higher retention and lower drop-out rates, have better qualified teachers, and receive a more relevant and practical education. The result should be that students will graduate from the primary education cycle with the skills necessary for further formal academic education, the prerequisite skils for SAR and SM terminal post-primary vocational adaptation necessary to succeed in their local economies.

(d) Government/Society of Cameroon

In social investment projects, the justification for project activities depends ultimately upon the benefits generated for the society Cameroon as a whole obviously receives, as part of its benefits from the project, the sum of the individual and institutional benefits discussed above. There are, however, four very special forms of benefits which the project will generate for GURC. First, the project will facilitate the GURC's attempts to modify the inherently elitist French educational model to one better adapted to its national and regional economic and social development goals. This will be achieved through USAID's assistance to the GURC to help them implement their reform program and increase the number of teachers trained. This will further disseminate the benefits of the GURC's present educational curriculum. As an important supplementary benefit, the emphasis within the project on rural needs will reinforce the GURC's general rural development strategy.

Second, the programs of inservice training and expanded preservice teacher training will be useful in the design of the extensive training programs which will be required for implementation of the expected national educational reform. They will also serve as useful models for expansion of teacher training in the other five provinces, with special relevance to the East where similar educational shortages exist.

Third the GURC and the Cameroonian society will benefit from the increased allocative and distributive improvements in the local economy which result from increased and more relevant education within the project provinces. As the North and Northwest are presently disadvantaged relative to the national standards, there will also be benefits from the reduced inequalities in educational, and eventually in economic, status between the project provinces and the remainder of the nation.

The final major benefit will result from the increased reationalization of the MINED budget for teacher training (and ultimately for primary education) in two provinces. Both the IBRD and USAID have noted the excessive per student cost of teacher training (it exceeds even the University of Yaounde's level of per student expense). This high unit cost result from two major factors. First, students accepted into teacher training programs

have in the past immediately been classified as government employees. The effect of this on "scholarship" costs is highlighted in the financial analysis section. The second factor is the low rate of utilization of faculty. Although in the majority of cases class sizes are at the appropriate level, teachers at most of the TTC's are not teaching the expected hours per week. This is because of excessive specialization and the failure to exploit economies of scale. By expanding enrollments at these institutions, significant gains in the efficiency of instructor utilization may be made.

Except for the Maroua campus, there will be no increase in faculties or staffs. The pre- and post expansion annual unit costs for administrative and instructional staff expenses (but excluding housing, food, and other costs) for the four campuses are (in CFAF):

TTC		PRE		POST
Garoua	:	81,600	-	73,800
Ngaoundere	:	85,926	-	35,151
Pitoa	:	387,100	-	135,500
Bamenda	:	342,400	-	90,900

B. Project Costs

Project costs are discussed in detail in the financial analysis section. It is only necessary to emphasize here that the proposed project does not appear to involve any substantial negative externalities. Because the major effect of an increased quantity and quality of graduates will be to raise skill levels in rural economic activities, there should be fewer problems that are normally found in educational expansion projects of producing adverse labor market effects for other levels of school leavers or for uneducated or less educated sectors of the population.

The above is contingent upon continued implementation of a primary curriculum which is not solely a pre-secondary school program. It also assumes a continuance of the GURC's emphasis on rural development. If either of these assumptions is not realized, there is the danger of encouraging an acceleration of the normal pattern of increased urban migration and a larger than optimal increase in the demand for secondary school places. Even a rurally-based curriculum which results in increased literacy and numeracy may have some of these effects.

A potential negative externality may exist in the long term. Because the salaries of teachers are relatively high (especially for those whose pre-teacher training education is at the CEPE level), the heavily subsidized public TTC's may generate an excessive financial burden and the GURC should continue to monitor this situation. At present, with an extensive shortage of classroom teachers, the problem is one only of efficiency in finance, i.e., more teachers could be trained for less money if Government scholarships were reduced. In the future, as enrollments in schools level off and new teachers contine to graduate, it could become an employment issue as well.

C. Project Alternatives

Cost-effectiveness discussions are meaningful only in terms of alternative ways the project budget could be expanded and to evaluate the relative effectiveness of these expenditures in terms of the stated goals of wider access, higher rates of retention, and better quality of primary education graduates. The major opportunities foregone by investing in the project appear to be:

(a) Direct financing of primary school buildings, facilities, and equipment;
(b) A restriction of financing to construction activities at ENS and the TTCs;
(c) A concentration of funding on activities designed to improve the planning and implementation capacity of the MINED;
(d) Direct financing of literacy and numeracy skill acquisition through a nonformal educational program.

As data in the background section indicated, the primary education problem in the North and Northwest is not created by an aggregate shortage of classrooms. While there is a distributional problem - areas of growing parental demand may not have an adequate number of facilities - the major constraint on improvements in the quantity and quality of primary education is teacher supply. In addition, school construction in the North and Northwest involves a large degree of local effort. It appears favorable for the long term development of educational policy to maintain this type of local participation. Certainly the forms of schools which exist are extremely rudimentary, but they are not at great variance with the indigenous styles of housing and the schools are similar in construction to those found in other nations in the region. A program which only expanded classroom construction would simply aggravate the present imbalance between facilities and teacher supply and do little to improve the actual quality of classroom experience and increase the number of students.

It is possible to question the balance between construction expenditures and the financing of training and technical assistance. One alternative to the project would be to restrict financing to construction activity at the major sources of teacher supply. Increasing the capacity of

the ENS would lead eventually to more teaching staff for the TTCs in the North and Northwest. Increased construction at these same TTCs would lead to a greater production of qualified teachers.

Again, however, facilities and equipment are only a part of the teacher training problem for the North and Northwest. Institutional administration, planning, and curricular revisions are all required if the investments in construction are to be meaningful. A program which would finance only construction (or even construction plus maintenance) would simply establish a necessary condition--but a far from sufficient one--for the attainment of the project's goals.

The last two alternatives deserve special consideration because both represent activities which are valuable in themselves, but also are complementary to the project activities. The operation of the MINED is beset by all of the problems of coordination and management that one would expect in a rapidly evolving bureaucratic structure with a wide range of functions and high social (and political) visibility. There is a need for improvement in the MINED's management and planning skills. To an important degree, the success of the project, both during implementation and in the long term, will be dependent in part upon the administrative capacity of the MINED's participating units.

The USAID has already begun to consider various forms of assistance to MINED's planning unit. Assuming that both the Agricultural Education project and the Support to Primary Education project become operational, the USAID should seriously consider expanding the assistance program to include participant training and increased technical assistance to improve this unit's management and operational skills. However, this should not be viewed as an alternative to the project. It would not impact directly on the regional, institutional, and individual benefits the project is designed to promote. It would, however facilitate these benefits and implementation of the project will increase the need for administrative and technical improvement in the MINED generally and the planning unit specifically.

Other management/administrative reforms within the MINED lie outside the scope of USAID's present priorities and are properly a matter of GURC initiation. Yet the administrative capacity of the MINED is one of the largest question marks in regard to the project's success. Normally, financial absorptive capacity is the crucial issue in project design. As the preceeding financial analysis shows, however, in this case it is not a dramatic issue (except in terms of the GURC's <u>willingness</u> to absorb the recurrent cost effect).

The final alternative to be considered is that of a non-formal educational program. The potential benefits of a literacy/numeracy program for adults and young school leavers are substantial. The justification for preference at this time for a program which emphasizes investment in the formal education system are the following:

First, the GURC investment in primary education is substantial and increasing. The present state of teacher preparation is a major barrier to the efficient utilization of these expenditures. To the extent that the project can aid in the rationalization of the primary education budget, it will have had a major program impact. The rationalization should be accomplished primarily through the project's impact upon the quality of teachers and the implementation of a primary curriculum which assures graduates of the primary education cycle of skills relevant to local occupapational alternatives as well as to higher levels of education. The assistance to Departmental Inspectors is especially important in this regard.

Second, by working within the formal primary education system, the project gains leverage for the USAID expenditures. As the figures in the financial analysis section have shown, the USAID contribution will elicit a significant increase in expenditure from the GURC. Thus USAID is able to create a multiple effect for every dollar expended. Because of the fixed governmental commitment to formal education, there is little chance the GURC could fund participation in a nonformal program to a significant level. However, USAID should continue to explore the possibility of assistance to nonformal education, either as an extension to the present USAID nonformal education project or as a complement to the Support to Primary Education Project.

A third factor justifying USAID support to formal primary education is the GURC's expressed desire to reform the primary education system and to implement an applied practical curriculum. This break with the French elitist model is a significant event for Francophonic Africa and has great relevance for the lives of rural people in Cameroon. It is these groups which have been most poorly served by the traditional curriculum. Admittedly assistance at the higher levels of education might provide greater opportunities for influencing the formation of the nation's leadership elite. Politics aside, however, the long term economic and societal effect of the project is potentially more profound than would be any alternative activities at higher educational evels.

D. Least Cost Alternative

Granted that none of the above alternatives would produce as desirable an outcome as the proposed project, the question nonetheless must must be posed--has the project been designed in such a way that no other alternative can be found that will accomplish the same result within a comparable time frame at less expense? Given the constraints involved, the Mission believes that none is available. A single campus that would consolidate the five existing TTCs and, indeed, all 15 of them, would unquestionably be more cost effective than attempting to work with the system of numerous small campuses that now exist. The economies of scale obtained through the elimination of the duplication entailed by having numerous faculties and supporting staffs, libraries and laboratories, and so forth, are manifest. It is not an alternative that the GURC is willing to accept, however. The present system has evolved over a considerable

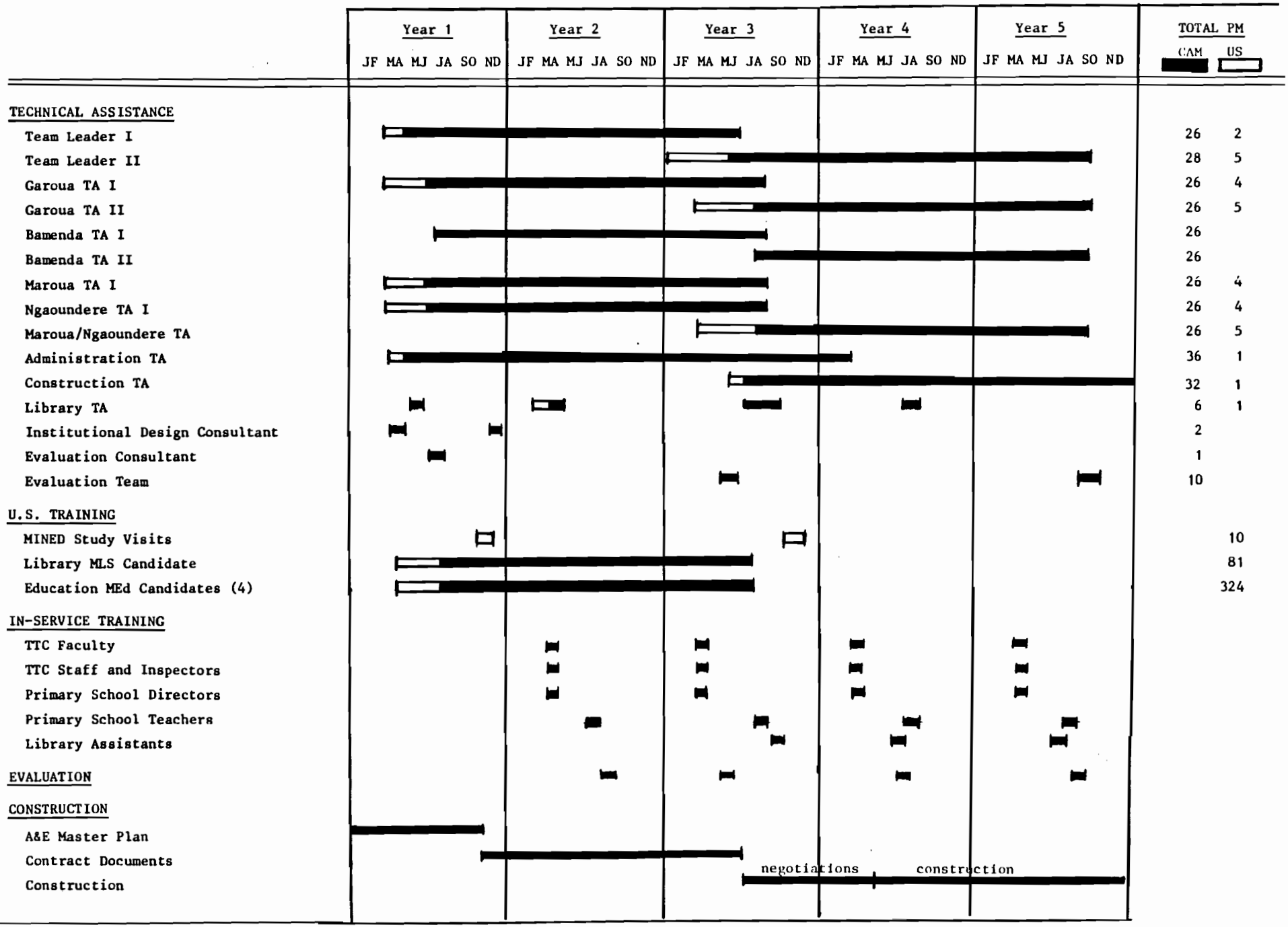
number of years. It is consistent with the GURC's desire to decentralize the nation's cumbersome, bureaucratic institutions. Likewise, it is in tune with the GURC's perceived need to respond to diverse ethnic groups in one of the most bewilderingly complex tribal areas of Africa. Finally, it serves well the nation's extremely complicated array of educational systems, programs and standards. To high officials of the GURC, the economies that would be forthcoming from the consolidation of the 15 TTC's would be overwhelmed by the social and political tensions and the accompanying pressures that would emerge from the attempt to implement such a policy.

A second possible method for producing a more cost effective design is more narrowly focused on the construction component. A number of experts opined that while more expensive initially, over the long run there could be some marginal cost savings by building all new buildings instead of refurbishing older ones. This approach was rejected by the design team based on its own preliminary analysis, since most of the buildings to be refurbished are fairly new and structurally sound. Then too, the construction component would have increased the loan portion of the project to between $45 and $50 million. Neither donors nor the GURC can finance such large infrastructure projects given the budgetary resources that are presently available and that are likely to be available in the future. Discussions were held with the IBRD to explore the possibility of co-financing, with that institution picking up the construction component. This alternative was eventually mutually rejected by both institutions and the GURC.

Under the circumstances, and after examining all practicable alternatives, USAID/Cameroon has proceeded with the present design. It is confident that there are no alternative means available for accomplishing as much at a lower cost.

PROPOSED SCHEDULING AND SEQUENCING OF MAJOR ELEMENTS*

ANNEX I.1



Annex I
Exhibit I.2

IMPLEMENTATION SCHEDULE FOR GRANT AND LOAN FUNDED ACTIVITIES

Technical Assistance

Year	Month	Activity	Responsibility
One	04	PP completed and submitted to AID/W for review and approval	USAID; AID/W
"	04	AID/W authorizes project	AID/W
"	05	Technical assistance requests for expressions of interest (REIs) issued	USAID
"	05	Receive REI responses	Contractors
"	07	Project Agreement signed	USAID/MINEP
"	09	Conditions Precedent met	MINED
"	10	RFTP issued	USAID
Two	01	Proposals due in	Firms
"	02	Review of proposals	USAID/MINED
"	02	Contractor selected	USAID/MINED
"	03	Institutional design consultant arrives for one month TDY	USAID
"	03	Contract negotiations	REDSO
"	03	Contract signed	REDSO/Contractor
"	03	French training of TAs (except construction) begins if necessary	Contractor
"	03	Administration TA begins one month work in U.S.	Contractor
"	04	Team Leader begins one month work in U.S.	Contractor
"	04	Administration TA arrives in Cameroon	Contractor
"	05	Team Leader arrives in Cameroon	Contractor
"	05	Library TA arrives for one month TDY	Contractor
"	06	Evaluation advisor arrives for one month TDY to set up baseline studies	Contractor
"	07	TTC TAs (4) arrive in Cameroon	Contractor
"	08	TTC TAs move to posts	Contractor
"	12	Institutional Design Consultant arrives for one month TDY	Contractor
Three	01	Language training for Construction TA begins if necessary	Contractor
"	03	Library TA works one month in U.S.	Contractor
"	04	Library TA arrives for one month TDY	Contractor
"	06	Construction TA arrives	Contractor

Year	Month	Activity	Responsibility
Four	01	Team Leader II begin language training if necessary	Contractor
"	03	TTC TA replacements begin language training if necessary	Contractor
"	05	5 person evaluation team arrives for one month TDY	Contractor
"	06	Team Leader II arrives in Cameroon (one month overlap)	Contractor
"	06	Library TA arrives for three month TDY	Contractor
"	07	TTC TA replacements arrive in Cameroon (one month overlap)	Contractor
"	07	Team Leader I departs	Contractor
"	08	Original TTC TAs depart	Contractor
"	03	Administration TA departs	Contractor
"	07	Library TA arrives for one month TDY	Contractor
"	09	Construction TA departs	Contractor
"	09	5 person evaluation team arrives for one month TDY	Contractor
"	10	Team Leader and TTC TAs depart	Contractor
		Training	
One	06	Begin search for appropriate MA candidates	MINED
"	08	Candidates selected	MINED
"	09	USAID approval of candidates	USAID
"	10	Send information to DS/IT concerning placement of candidates	USAID
"	11	Appropriate graduate programs chosen, application made	DS/IT
Two	03	Notification of acceptance from universities	DS/IT
"	04	MA candidates depart for U.S. for language training and orientation	MINED, USAID
"	08	MA candidates begin Masters programs	DS/IT
"	09	Contractor makes arrangements for one month study/observational tour for MINED officials	Contractor
"	10	5 MINED officials depart for one month study/ observational tour in U.S.	Contractor
Three	03	DS/IT and contractor arrange appropriate summer experience for MA candidates	DS/IT, Contractor
"	08	Summer program for MA candidates	DS/IT, Contractor
"	08	Resume studies	DS/IT, Candidates
Four	06	Masters graduates return to Cameroon	DS/IT, Graduates
"	11	5 MINED officials depart for one month study/ observational tour in U.S.	Contractor

Procurement

Year	Month	Activity	Responsibility
One	04	AID/W project approval	USAID
"	11	Project Agreement signed	USAID/MINEP
"	11	Vehicles, spare parts, and household furnishings ordered for 6 TAs	USAID
"	11	Office furniture for 6 TAs ordered	
Two	04	Office furniture for TA and Admin. arrives	
"	04	Vehicles for TA and Admin TA arrive	
"	04	Two sets household furniture from Admin. stock loaned to project for Team Leader and Admin. TA (replaced when new sets arrive).	USAID/Admin. TA
"	05	Household furnishings for TL and Admin. TA arrive	Supplier/Admin. TA MINED
"	06	Vehicle, spare parts, household equipment and office furniture for construction TA ordered	USAID
"	06	Vehicles for TTC TAs arrive	
"	08	Household furnishings for TTCs arrive	
"	11	Vehicles and spare parts for inspectors and TTCs ordered	Admin. TA/MINED
Three	03	In-service training materials procured	Supplier/Admin. TA/ MINED
"	06	In-service training materials procured	Supllier/Admin. TA/ MINED
"	07	Vehicles, spare parts, household furnishings, and office furniture for construction TA arrive	Admin. TA/MINED
"	07	Specifications for furniture and equipment for TTCs developed	Construction TA/ MINED
"	09	Furnishings for first phase TTC buildings ordered	Construction TA/MINED/ Admin. TA
"	09	Maintenance kits procured	Construction TA/MINED
"	09	Library books and periodicals ordered (first set)	Library TA/MINED/Admin.
"	09	Vehicles for inspectors and TTCs arrive	MINED/Admin. TA
Four	03	In-service training materials procured	
"	06	Furnishings for second phase TTC buildings ordered	MINED/Admin. TA
"	06	In-service training materials procured	Construction TA/MINED/ Admin. TA
"	07	First set of library books and periodicals arrive	"
"	08	Supplemental library order place	"
"	10	Furnishings for first phase TTC buildings arrive	"

Year	Month	Activity	Responsibility
Five	03	In-service training materials procured	Construction TA/MINED Admin. TA
"	05	Commodities for other buildings arrive	"
"	06	In-service training materials procured	"
"	06	Supplemental library order arrives	"
"	06	Second supplemental library order placed	"

CONSTRUCTION

(NOTE: For Detailed Design and Construction Implementation Schedule-- See Annex G.2, Section 09).

PROCUREMENT PLAN AND INDICATIVE EQUIPMENT LIST

I. Responsibilities

The procurement financed by AID under this project will be the responsibility of the Ministry of National Education with the exception of the following commodities:

1) Household appliances and furniture and vehicles for the technical experts will be procured by USAID or the contractor. Chart G.7.1, and schedules V-6 and V-7 detail these responsibilities.

2) All other off-shore procurement will be done by the contractor.

3) Construction materials will be procured by the construction contractor.

The Division of Planning, Guidance and School Equipment will be the MINED office responsible for procurement. The School Administration and School Construction U.S. experts will assist the Division. Procurement documents will be submitted to USAID to assure that they are correctly prepared and conform to AID regulations.

The Planning Division will be responsible for all in-country handling of commodities, including customs clearance, documentation, and onward shipping of commodities to their final destination in-country. All commodities will be procured according to a timetable to coincide with the completion of the AID financed facilities in order to allow immediate installation of equipment.

II. Shelf Items

Imported shelf items having their origin in the United States (Geographic Code 000) can be purchased without restriction, except for the limitation on the total amount available for local procurement. Shelf items having their origin in Geographic Code 000 and Code 941 countries are eligible for local cost financing in unlimited quantities, save for the limit on local procurement funding. Shelf items having their origin in Geographic Code 899, but not Code 941 countries, are eligible for local costs financing if the unit cost does not exceed $5,000 and the total of such financing does not exceed ten percent of total local cost financed by AID or $25,000, whichever is higher. However, in no case may the total amount of such purchases exceed $250,000 without first obtaining a specific geographic source waiver. Procurements in excess of the limits specific in this paragraph may be authorized only as source waivers in accordance with the provisions and limitations of Delegation of Authority No. 40 and any redelegation thereunder. Procurement of imported shelf items shall conform to good commercial practices, shall be at reasonable prices, and shall not be in a manner which conflicts with local laws and practices. A supplier furnishing shelf items for the project must provide a statement attesting to the sources and origin of the commodity sold.

III. Commodity Eligibility

All commodities listed are eligible for AID financing.

IV. Waivers

See attachments, pp. 6-9.

V. Delivery and In-Country Transport

All imported commodities specifically for the project will be shipped CIF Douala, port of entry in Cameroon. In-country transport and insurance will be the responsibility of and paid for by the GURC. Suppliers will provide all risk marine insurance in the amount of 120% of the CIF cost of the commodities. AID's marking requirements for overseas shipments will be enforced by the contractor (or Procurement Agent).

VI. Title of Commodities

Vehicles, furniture and appliances in the custodial care of the U.S. project technicians will be entitled to the U.S. Government during the life of the project. Upon departure of U.S. project technician, all will be turned over to MINED. All other commodities will be titled to the GURC.

VII. Customs Clearance

It is the responsibility of MINED to initiate documentation required for customs exoneration prior to arrival of goods in Douala and to assure that such documentation is made available to the freight forwarder to permit goods to be moved from port of entry promptly upon arrival.

Transportation costs beyond port of entry in Cameroon will be the responsibility of MINED. AID funds may not be used to cover such costs. MINED is responsible for issuing an Order of Transit to its predetermined freight forwarder promptly upon commodity arrival to move such commodities out of the port of entry to its warehouse facilities and on to the appropriate site. An amount of 10 percent of the CIF cost of commodities has been budgeted into the GURC expenditures for the project to pay for inland insurance and transportation costs beyond port of entry in Cameroon.

VIII. Payments

Payments to the contractor for services rendered is expected to be made by AID/W (FM/BFD). The Letter of Commitment is sent to the contractor to initiate procurement. When the contractor has completed its purchasing actions, documents are presented to the AID Certifying Office in New York, for payment. Suppliers will be required to submit AID Form 1450-4 "Supplier's Certificate and Agreement with AID for Project Commodities". Other forms of ARD financing may be used as appropriate.

For local procurement payments, documentation is presented to the Controller, USAID/Yaounde who will effect payment after verification of appropriate documents.

IX. Conditions of Goods upon Arrival

It is the responsibility of the MINED to inspect goods upon arrival for any shortages or damages so that appropriate insurance claim(s) can be initiated. MINED will employ the services of an independent surveyor in the event significant shortages or damages are encountered and the surveyor will prepare and submit a written report. Additionally, MINED should immediately inform the USAID project officer.

X. Receipt and Utilization

MINED is responsible for the proper reception and clearances of incoming project commodities. Inspections of incoming shipments must be made, and receiving documents shall be annotated with comments on evident or possible damages/losses.

Reports of damages/losses must be made promptly; if incoming cargo has been procured in the United States, the contractor must file a claim against the ocean carrier or freight forwarder(s) involved. Once the contractor has filed its claim, the carrier must await the filing and adjudication of the claim to permit MINED to acquire more information and particulars about the claim. In most cases where damages or losses are noted, a picture of the damaged commodity and/or its container is the best possible evidence to be presented. Receiving documents properly annotated, are valuable. If damages or losses are not noted on the documents, however, there would be little or no possibility of having a claim settled.

MINED is required to put into project use all commodities procured for the project within one (1) year of receipt; USAID/Yaounde wil inspect MINED's utilization reports as a matter of course.

XI. Commodity Summary

The following is a summary of commodities appearing on the Indicative Equipment List, Annex G.6, expected to be procured for project implementation. This list will be revised yearly as necessary by the Contractor in collaboration with the MINED and USAID. Charg G.7.1 shows anticipated commodity ordering and receiving dates as well as procurement responsibility. The procurement schedule is found in the implementation section.

All prices are CIF Douala.

A) Grant Financed Commodities:

1.	Support to TA team		
	Household furniture	$ 147,000	
	Office equipment and supplies	33,000	
	Seven utility vehicles	105,000	
	Subtotal		$ 285,000

2.	Libraries		
	Books and periodical	$ 415,000	
	Supplies	30,000	
	Subtotal		$ 445,000
3.	Maintenance kits for teachers		13,000
4.	In-service training materials		46,000
	Total Grant Financed Commodities		789,000
B)	Loan Financed Commodities:		
1.	Furniture and equipment		
	Libraries	198,000	
	Teachers' rooms	13,000	
	Classrooms	43,400	
	Science laboratories	22,000	
	Domestic science	16,250	
	Shops/Maintenance	23,000	
	Administration	75,500	
	Dormitories	376,000	
	Dining rooms	77,000	
	Kitchens	83,600	
	Laundries	12,000	
	Infirmaries	16,250	
	Subtotal		956,000
2.	Vehicles and Spare Parts		
	Eleven 4 wheel drive vehicles	165,000	
	Five pick-up trucks	65,000	
	Five 20-passenger vans	90,000	
	Subtotal		320,000
	Total Loan Financed Commodities		$ 1,276,000

Notes:

1. Source/origin waivers were requested for:

Books and periodicals for library	$ 415,000
Five 20-passenger vans	90,000
Equipment and appliances to be bought as shelf items in excess of $250,000 limit	300,000
Total waiver request	$ 805,000

2. Contingency of 10% and inflation 12% (compounded annually) are included in the Financial Plan (Part IV B).

ATTACHMENT I

Request for Source/Origin Waiver from Code 941 (Selected Free World) to Code 935 (Special Free World).

Problem:
A waiver is requested to authorize the procurement of five vans with tools and spare parts. Details are as follows:

A)	Cooperating Country	: Cameroon
B)	Authorizing Document	: Project Agreement 631-0033
C)	Nature of Funding	: Loan
D)	Description of Commodities	: Five vans with tools and spare parts
E)	Approximate Value	: $90,000
F)	Probable Source	: Cameroon
G)	Probably Origin	: Western Europe, Japan

Discussion and Justification:

The vehicles, required for the transportation of trainees, must travel over roads which are in poor condition. It is essential that these vehicles receive the best maintenance support available. There are no U.S. dealers of comparable vehicle types in the project area and local mechanics are unfamiliar with U.S. models and lack necessary skills or tools essential for maintenance. The vehicles will be under direct control of Cameroonian institutions; consequently, they will have access to neither USAID garage facilities nor mechanics.

Ordering spare parts for U.S. manufactured vehicles has been and continues to be a tedious and time consuming process. U.S. suppliers have the tendency to give very low priority to orders often consisting of several hundred line items.

Vans suitable for project purposes are available from dealers in Cameroon. These dealers are also able to provide spare parts and maintenance support.

Based upon the justifications provided above, it is recommended that you approve a procurement source/origin waiver from Code 941 to Code 935 and conclude that special circumstances exist to waive the requirements of section 636 (i) of the Act, and certify that exclusion of procurement from Free World Countries other than the cooperating country and countries included in Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the foreign assistance program.

Approved _____

Disapproved _____

Date _____

ATTACHMENT II

Request for Source/Origin Waiver from Code 000 (U.S. only) to Code 935 (Special Free World)

Problem:
A waiver is requested to authorize the procurement of equipment appliances, supplies, maintenance kits and in-service training materials for the Teacher Training Colleges. Details are as follows:

A)	Cooperating Country	:	Cameroon
B)	Authorizing Document	:	Project Agreement 631-0033
C)	Nature of Funding	:	Grant and Loan
D)	Description of Commodities	:	Equipment, appliances, supplies, maintenance kits and in-service training materials for the Teacher Training Colleges.
E)	Approximate Value	:	$300,000

Discussion and Justification:
The above items (detailed in the Indicative Equipment List Annex G6) are available in Cameroon and can be purchased as shelf items whose origins are in Code 899 but not Code 941 countries. None of the units exceed the price of $5,000.

A.I.D. HB 1B, Chapter 18, Section 4b states that the total amount of imported shelf item purchases from countries included in Code 899 but not in Code 941 may not exceed $25,000 or 10% of the total local costs financed by AID for the project, whichever is higher; however, in no case may the total amount of such purchases exceed $250,000 without first obtaining a specific geographic source waiver. Procurements in excess of the limits specified in this paragraph may be authorized only as source waivers in accordance with provisions and limitations of Delegation of Authority No. 40 and any redelegation thereunder.

The amount of $300,000 requested in this waiver is in excess of the $250,000 limit set for imported shelf items from countries included in Code 899 but not in Code 941.

Most of the items required hereunder are equipment and electric appliances for the Teacher Training Colleges. Cameroon does not manufacture these items. U.S. made appliances and equipment usually are 110V and cannot be maintained properly in Cameroon. Spare parts for U.S. made appliances and equipment would be very difficult to obtain. Consequently, in order to facilitate maintenance and spare parts support it is recommended that non-U.S. products be procured.

The maintenance kits to be used for the upkeep of the TTCs should be procured locally to assure that the TTCs can replace the items in them as is necessary. In-service training materials should be purchased locally to allow other provinces to replicate the in-service programs and to help assure continuity after project financing ends.

Recommendation:

Based upon the justification provided above it is recommended that you approve a procurement source-origin waiver from Code 000 to Code 935 and that you certify that exclusion of procurement from Free World Countries other than the cooperating country and other countries included in Code 941 would seriously impede the attainment of U.S. foreign policy objectives and objectives of the foreign assistance program.

Approved_____

Disapproved_____

Date_____

Indicative Equipment List

	UNITS	UNIT COST	TOTAL COST	SOURCE/ ORIGIN
A. LOAN FINANCED EQUIPMENT				
1. LIBRARY				
Desks	7	300	2,100	Cam
Desk chairs	7	80	960	Cam
Reading Tables (seats 8)	80	400	32,000	Cam
Chairs	640	50	32,000	Cam
Bookshelf Units	125	350	43,750	000
Circulation counters	4	2,000	8,000	Cam
Kardex Units	6	600	3,600	000
Book Trucks	7	200	1,400	000
Typewriters	3	1500/300	3,300	935
Filing Cabinet	7	250	1,750	000
Typing Tables	7	100	700	Cam
Card Catalog units	6	2,000	12,000	000
Microfiche reader	1	2,000	2,000	000
Photocopy machine	1	15,000	15,000	935
Duplicator	1	2,000	2,000	935
Air conditioners	10	2,000	20,000	935
Binding			17,440	935
Sub Total			$198,000	
2. TEACHERS' ROOM				
Refrigerator	5	440	2,000	935
Conf. Table	5	400	2,000	Cam
Chairs (study)	80	50	4,000	Cam
Chairs (lounge)	40	80	3,200	Cam
Lockers	80	20	1,600	Cam
Sub Total			$ 13,000	
3. CLASSROOM				
Teachers' Desk	14	200	2,800	Cam
Teachers' Chairs	28	50	1,400	Cam
Desk Armchair	560	50	28,000	Cam
Chalkboard, 4m	28	400	11,200	000
Sub Total			$43,400	

	UNITS	UNIT COST	TOTAL COST	SOURCE/ ORIGIN
4. SCIENCE LAB				
Demonstration Table	4	350	1,400	Cam
Teachers' Chairs	8	50	400	Cam
Desk Armchair	160	50	8,000	Cam
Chalkboard 4m	4	400	1,600	000
Tackboard 4m	4	250	1,000	000
Wall Counter 8m (cabinets under)	12	800	9,600	Cam
Sub Total			$ 22,000	
5. DOMESTIC SCIENCE				
Teachers' Table	5	200	1,000	Cam
Teachers' Chairs	10	50	500	Cam
Refrigerator	5	500	2,500	935
Traditional Stove	5	150	750	Cam
Butagas Stove	5	200	1,000	935
Kitchen Cupboard	5	250	1,250	Cam
Sewing Machines	10	400	4,000	935
Cutting Tables	10	200	2,000	Cam
Materials' Cupboard	5	250	1,250	Cam
Demonstration Table	5	150	750	Cam
Bed	5	250	1,250	Cam
Sub Total			$ 16,250	
6. SHOP/MAINT.				
Work benches	20	250	5,000	Cam
Bench vises	100	40	4,000	935
Wall counter 8m	5	800	4,000	Cam
Shelving (misc.)		1,000	6,000	Cam
Tool storage panels	20	200	4,000	Cam
Sub Total			$ 23,000	
7. ADMINISTRATION				
Executive desks	30	400	12,000	Cam
Secretarial desks	20	200	4,000	Cam
Desk chairs	50	80	4,000	Cam
Side chairs	60	50	3,000	Cam
Side tables	30	150	4,500	Cam
File cabinets	60	250	15,000	000
Bookshelves	40	150	6,000	Cam
Typewriters	30	800	24,000	935
Mimeograph	5	600	3,000	935
Sub Total			$ 75,500	

	UNITS	UNIT COST	TOTAL COST	SOURCE/ ORIGIN
8. DORMITORIES				
Single beds/mattress	800	250	200,000	Cam
Side tables	800	100	80,000	Cam
Wall Closet (built in)	800	120	96,000	Cam
Sub Total			$ 376,000	
9. DINING ROOM (For 220)				
Tables for 8	110	300	33,000	000
Chairs	880	50	44,000	000
Sub Total			$ 77,000	
10. KITCHEN				
Large refrigerators	8	1,500	12,000	935
Butagas stoves	8	900	7,200	935
Wood range (large)	4	1,200	4,800	935
Food prep tables	16	300	4,800	Cam
Freezer equip.	4 sets	5,000	20,000	000
Stock, pots	12	400	4,800	000
Stainless countertops	12	1,000	12,000	000
Exhaust Hoods	12	1,500	18,000	000
Sub Total			$ 83,600	
11. LAUNDRY				
Ironing tables	20	100	2,000	Cam
Linen Cabinets	20	200	4,000	Cam
Extractor	5	1,200	6,000	935
Sub Total			$ 12,000	
12. INFIRMARY				
Beds and Mattresses	30	300	9,000	Cam
Desk	5	250	1,250	Cam
Chairs	40	50	2,000	Cam
Medical Supply Cabinet	5	200	1,000	Cam
Examination Table	5	600	3,000	000
Sub Total			$ 16,250	
13. VEHICLES				
Four wheel drive vehicles with spare parts and tools	11	15,000	165,000	935
Pickup trucks with spare parts and tools	5	13,000	65,000	935
20 passenger vans with spare parts and tools	5	18,000	90,000	935
Sub Total			$320,000	
TOTAL LOAN FINANCED EQUIPMENT			$1,276,000	

	UNITS	UNIT COST	TOTAL COST	SOURCE/ ORIGIN
B. Grant Financed Equipment				
1. SUPPORT TO TECHNICIANS				
Household furniture and appliances	7 sets	21,000	147,000	Cam/935
Vehicles (jeeps) with spare parts and tools	7	15,000	105,000	000
Office furniture and equipment				
Photocopy machine	1	2,500	2,500	935
Desks	3	400	1,200	Cam
Desk Chairs	3	80	240	Cam
Typewriters	3	800	2,400	935
Typing Tables	3	150	450	Cam
Filing Cabinets	3	250	750	000
Bookshelves	3	200	600	Cam
Miscellaneous supplies		1000/yr/TA	24,860	935
Sub Total			$285 000	
2. LIBRARY				
Supplies			$30,000	935
Library Core Collection and supplemental orders of books, journals and periodicals (see Annex)	5 sets		$15,000	935
SubTotal			$45,000	
3. MAINTENANCE KITS FOR TTCs (to be determined by Construction advisor)	5 kits	2,600	13,000	935
4. IN-SERVICE TRAINING MATERIALS (to be determined by Team Leader, TAs, TTC staff, Inspectorate)	10		46,000	935
TOTAL GRANT FINANCED EQUIPMENT			$789,000	
TOTAL COMMODITIES			$2,064,700	

EVALUATION STRATEGY AND METHODOLOGY

A. Evaluation of Specific Project Components:

In addition to the above described project evaluations, there should be evaluations of specific project components. In particular:

1. The Sub-Committee for In-Service Training should design and implement pre and post-tests for participants of all the in-service training programs to evaluate the success of the training in conveying program concepts and skills. In addition, the sub-committee should design a system of tracking participants of the in-service training courses after they return to their respective jobs so that their performance can be assessed during evaluations.

2. MINED should design and implement a permanent system for evaluating the performance of the divisional inspectors, primary school directors, and teacher training college staff. This system will emerge naturally out of project evaluations; however, MINED should make an effort to institutionalize the system so that it will continue after project intervention.

B. Evaluation Design and Collection of Baseline Data:

This section details what issues will be addressed and what variables must be measured in the above-listed evaluations and how measurements will be made and data collected. Since education evaluation is such a highly developed discipline, an education consultant with expertise in evaluation will spend a minimum of one month in Cameroon at the outset of the project to perfect the evaluation system.

1. Baseline Data: Baseline data should be collected on the pre-project conditions of variables and an evaluation design selected which will track changes in these conditions and attribute these to project interventions. These variables include:

(a) Quantity of Education in the North and Northwest Provinces

(1) number of children who attend primary school in the North and Northwest Provinces.

(2) number of students who complete primary school in the North and Northwest Provinces.

(3) number of primary school teachers.

(4) teacher training college enrollments.

(b) Quality of Education in the North and Northwest Provinces Student Performance:

(1) drop-out rate in primary schools in the two provinces.

(2) percentage of students who pass the C.E.PE.

(3) repeater rate in primary schools in the two provinces.

2. Teacher Performance:

(a) percentage of the teacher training college graduates who qualifying examinations at class I level within one year of graduation.

(b) percentage of the teacher training college graduates who pass qualifying examinations at class II level within one year of graduation.

(c) percentage of the currently teaching primary school teachers who pass the qualifying examinations to become qualified class I or class II teachers.

The technical assistance team and the Project Implementation Committee will be responsible for gathering this baseline data from MINED reports and from Provincial and Teacher Training College records.

A qualitative assessment of the pre-project level of performance of the targets of in-service training programs (primary school directors, library assistants, TTC professors, staff, and inspectors) must also be made. This qualitative assessment will take measurements of the objectively verifiable indicators listed for performance under "purpose" in the logical framework. These indicators include:

Primary School Teacher Performance

(1) amount of classroom participation
(2) number of class projects completed
(3) amount of lecture versus class discussions
(4) amount of group work
(5) amount of counseling of students by teachers
(6) use of lesson plans
(7) use of local materials
(8) amount of teaching of concepts
(9) number of questions asked by students

Inspector Performance

(1) number of visits to primary schools
(2) use of checklist for performance evaluation
(3) number of individual teacher conferences
(4) number of model classes and workshops given
(5) current professional records
(6) number of conferences with school directors

Teacher Training School Clerical and Administrative Staff Performance

(1) keeping of current records
(2) amount of school maintenance
(3) procurement of school supplies
(4) quality of budgets

Primary School Director Performance

(1) frequency of teacher counseling
(2) number of staff meetings
(3) number of classroom visits
(4) time taken to prepare reports and budgets
(5) quantity and quality of school maintenance
(6) frequency of contact with parents and community leaders

Teacher Training School Professor Performance

(1) amount of student classroom participation
(2) number of class projects completed
(3) amount of lecture
(4) amount of group work
(5) quantity of counseling of students by teachers
(6) quality of lesson plans
(7) use of local materials
(8) teaching of concepts vs. facts
(9) number of questions asked by students

Finally, baseline data should be collected on the quality of the existing pre-service training programs for primary school teachers. The following qualitative indicators should be assessed by technicians:

a. student use of library, laboratories, and workshops
b. amount of and quality of practical training for students
c. amount of and quality of practice teaching for students
d. implementation of existing curriculum

The Technical Experts, together with the PIC, will be responsible for collecting the baseline data. Standard observation techniques for evaluating classroom behavior will be employed to measure baseline primary school

teacher performance. Interviews with inspectors, individuals within the Inspectorate, and primary school teachers and directors, as well as a review of inspectors' records will be used to assess baseline inspector performance. Review of Teacher Training College Records and interviews with primary school directors and professors will provide baseline data on Teacher Training College staff. Classroom observation techniques and interviews with Teacher Training College staff and students will be employed to establish initial TTC professor performance. Baseline conditions for the TTC pre-service training program will be measured by observing student behavior as well as by researching MINED records.

These baseline assessments must be carefully discussed with USAID and MINED and realistic targets set for how much improvement in the objectively verifiable and performance indicators can be expected by the end result of the in-service training courses, and other institution building activities. During each of the four project evaluations, data on the same indicators will be collected again in the same fashion. Changes in the indicators will be attributed to project interventions.

3. Evaluation Designs

(a) Year Two:

The first evaluation, a formative one, will first review the initial "gearing-up" of the project, review the adequacy of the inputs to produce the outputs, and review the validity of the project design. Administrative and organizational arrangements will also be reviewed and attempts made to remedy any problems in logistical support, reporting and communications. The technical assistance team, the PIC, and USAID will be responsible to review the above using the standard evaluation methodology of the AID Evaluation Handbook.

In addition, since this evaluation will be conducted after the first cycle of in-service training, it will be necessary to assess the efficacy of these courses in imparting the required skills. Pre and post-tests designed by the Sub-Committee for In-Service Training will be given to target trainees. Results will be discussed by the PIC, USAID, and the technical assistance team and changes in the content of the training courses made if necessary. The results of one year of teachnical assistance in improving the performance of the teacher training and support systems should be assessed by again taking measurements of the variables described in the baseline data section above. The collection of this data should be completed to only a limited extent for primary school teachers, teacher training college professors, teacher training college staff and inspectors, and primary school directors, since the project interventions in these areas will have been limited at this time. More effort should be made to measure improvements in the pre-service training programs at the teacher training colleges.

(b) Year Three:

The evaluation conducted by an outside evaluation team during year three should be scheduled after the second cycle of in-service training courses for TTC faculty, TTC staff and inspectors, primary school directors,

and primary school teachers and after the first cycle of in-service training courses for library assistants. The timing should also coincide with the completion of Phase I of construction, the third TDY of the library Technical Expert, the return of the US trained Masters graduates, and the end-of-tours of the team leader, Garoua TE I, Bamenda TE I, Maroua TE I, and Ngaoundéré TE I. The replacement TE's should already be on board so that they can gain experience from participating in the evaluation.

The main focus of the evaluation will be to measure the effectiveness and impact of the in-service training courses on the performance of TTC faculty, TTC staff and inspectors, primary school directors, primary school teachers. Changes in the indicators of performance listed above under baseline data will have to be measured by the evaluation team. In addition, changes in the quality of pre-service training will have to be measured by the team. By taking these measurements, the evaluation team will be able to determine progress made to date in the achievement of project objectives. In the event that training courses are not having their intended effect on performance, changes in curriculum, training schedules, or target trainees should be made.

(c) Year Four:

The formative evaluation conducted in year four should be similar to that conducted in year three. Again, changes in the indicators of performance must be measured as well as changes in the quality of pre-service training. Since both Phase I and Phase II construction will have been completed at this time, the evaluation should measure changes in the enrollment at teacher training colleges to determine whether they are on target, and if not, to determine why. Moreover, this evaluation should also serve to assess the efficacy of the project targets for increasing enrollments in the teacher training colleges. Demand for teachers should be re-assessed to assure that increased supply is and will be absorbed. Project enrollment targets should be adjusted if necessary.

(d) Year Five:

The final project evaluation conducted by an outside evaluation team should again measure changes in the indicators of performance and quality. Measurements of goal level indicators and purpose level quantitative indicators must be made to measure the impact of the project. Moreover, the evaluation should focus on the institutional capability of MINED to carry on the project benefits and make recommendations for so doing.

C. Evaluation Resources:

The primary evaluation resources will include TE reports, reports of site visits and meetings, government data, and primary data collected through baseline studies. The main human resources in the evaluation process include project personnel, the evaluation consultant, USAID personnel, GURC personnel, and the external team. The external evaluation team will consist

of five individuals. Their professional skills should be in the areas of educational institution design, teacher training, curriculum development and evaluation, educational administration and management, and library sciences. If possible the same individuals should conduct the evaluations in years three and five.