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9. ABSTRACT

This report summarizes a study on the feasibility of conducting a coordinated international evaluation of models of vernacular education for rural, poor, linguistic minority populations in LDCs. Since its inception in 1959, the Center for Applied Linguistics (CAL) has been concerned with the role of language in the growth of LDCs. For purposes of this study, seven countries were selected; they include: India, Philippines, Ghana, Nigeria, Sudan, Mexico, and Peru. The choice was based on CAL's awareness of the existence of bilingual education activities, contacts with potential cooperating centers, and the desire to include a wide range of contextual situations. The feasibility study consisted of three parts: a literature review; an on-site visit to each of the selected countries; and the development of a final research design. An examination of the country profiles in Chapter 2 reveals the complexity of the language situation in these countries. The profiles include a 1977 estimate of the population, a general overview of the language situation, the patterns of urban and rural school populations, educational research and innovation, and local resources and interest. The subsequent chapter addresses the feasibility of a study of an international evaluation and includes a research design. In all of the countries surveyed, the expansion of educational opportunity implies the need for strategies to cope with children who do not speak the official or national language. This presents the dilemma of how to engineer two contradictory goals: student comprehension and rural development, and national identity and preparation for economic survival in a state controlled by agro-business or industrial interests. There is much evidence of continuing compromise between these two philosophical poles. However, little attention is directed to the premise that rural education can be

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designed to make rural citizens more effective in a rural, rather than urban, setting.

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FINAL REPORT

TO

AGENCY FOR INTERNATIONAL DEVELOPMENT

Pursuant to Contract No. AID/ta-G-1396

FEASIBILITY STUDY FOR AN INTERNATIONAL
EVALUATION OF THE EFFECTIVENESS OF BILINGUAL
APPROACHES IN EDUCATING RURAL POOR LINGUISTIC
MINORITIES

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May 1, 1978

ARDA

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CHAPTER I

Introduction and Overview

Since its inception in 1959 as an international center dealing with the application of linguistic science to problems of national development, the Center for Applied Linguistics (CAL) has been deeply concerned with the role of language in the growth of developing countries.* By virtue of its extensive international network of contacts with similar centers (many of which were formed on the model of CAL) and appropriate individuals, CAL has been very closely involved with the growing use of vernacular languages in education -- the most widespread education movement in the world today. Over the years, centers in several developing countries have indicated to CAL considerable interest in the evaluation of the affect of bilingual/vernacular approaches in education.

In late 1976, the Agency for International Development (AID) awarded a small research Grant No. AID/ta-G-1396 to CAL to conduct a study on the feasibility of conducting a coordinated international evaluation of models of vernacular education for rural, poor, linguistic minority populations in developing countries. For purposes of this study, seven countries representing Asia, Africa, and Latin America were selected. The choice was based on CAL's awareness of the existence of bilingual education activities, CAL's contacts with potential cooperating centers, and CAL's desire to include a wide range of contextual situations.

*E.g., CAL held a conference in 1961 under AID funding on The Study of the Role of Second Languages in Developing Countries and in 1974 organized the First Inter-American Conference on Bilingual Education (Mexico City), for which AID provided support.

The feasibility study consisted of three parts:

1. A literature review to:

- a. prepare a series of major linguistic profiles on seven countries and minor linguistic profiles on six countries.
- b. develop a preliminary research design, including candidate variables for evaluation.

2. An on-site visit to each of the selected countries to:

- a. examine possibilities for participation in a collaborative study.
- b. refine research design and country data.

3. A review by the project advisory panel* and country experts of initial plans for the study and the final research design.

This report will present an overview of pertinent information on each of the countries listed below, a proposed research design, and an assessment of the feasibility of conducting a coordinated international study of the effects of various factors in the education of the rural, poor, linguistic minorities.

The seven countries chosen in this feasibility study, after consultation with AID and the advisory panel were Africa: Ghana, Nigeria, Sudan; Asia: India, Philippines; Latin America: Mexico, Peru. In place of Indonesia as suggested in the original proposal, Ghana was reviewed extensively because the situation there proved more appropriate for purposes of the study. Indonesia and five other countries visited

*Advisory panel members included:
John B. Carroll - University of North Carolina,
E. Glyn Lewis - Porthcawl, Wales, and
Carolyn Massad - Educational Testing Service

by the Principal Investigator are discussed and incorporated in Chapter 3⁴. They are, Africa: Kenya; Asia: Indonesia; Latin America: Bolivia, Ecuador, Guatemala, Paraguay. These countries were included in the Appendix because of their relevance to the body of literature that has developed in this area. It was decided by CAL staff and consultants that the extensive research in many of these countries (particularly Kenya and Paraguay) by such organizations as UNESCO and AID precluded the need for further comprehensive narrative. Although the necessity for longitudinal studies should not be ignored it was felt that some of the introductory and seminal work had been done. Of particular importance, however, to this study are the compilations of names of linguists, scholars and educators relevant to conducting the proposed study.

An examination of the country profiles in Chapter 2 reveals the complexity of the language situation in these countries. While there is clearly a wide range of variation in the education systems, a common thread is evident with regard to a growing appreciation of the problems facing poor, linguistic minority groups. For example, the Yoruba Six Year Primary Project, the Rivers Project in Nigeria, and the numerous projects in the Philippines lead one to conclude that there is an increase in focus on the role of vernacular languages in education.

In order to address this issue the country profiles have been organized to include: (1) a 1977 estimate of the population, (2) general overview of the language situation, (3) patterns of urban and rural

*Australia was included in the itinerary of site visits to explore the possibility of Australian participation in the study. Since it is not an LDC, it has not been included among the country profiles given in this report. Two site visits were carried out by the field investigator, Mr. H. Ned Seelye, during 1977. See Appendix III for itinerary. In addition, he attended a conference in Zaire and visited Peru in 1976, at the expense of the Center for Applied Linguistics to obtain background information and to make initial contacts for the conduct of the study.

school populations, (4) educational research and innovation, and (5) local resources and interest.

The subsequent chapter addresses the feasibility of a study of an international evaluation and includes a research design. It was the conclusion of the research staff involved with the project that the proposed study would have to differ from that outlined in the original proposal to AID. For a variety of reasons which are outlined in the chapter, it can be concluded that there do not now exist reliable or available data bases in the countries under examination to conduct the proposed secondary analysis to assess the relationship among various approaches to primary education and achievement. Thus we have proposed a study which would permit analysis of available or easily collectable new data in several of the countries. Included in this section are the variables which would play a critical role in the analysis of the effectiveness of an educational treatment.

The Appendices include: (1) Short country profiles, (2) Extensive Bibliography, and (3) Itinerary for field investigator.

In conclusion, in every one of the thirteen countries surveyed in the present feasibility study, the expansion of educational opportunity necessarily implies strategies to cope with children who do not speak the official or national language. These strategies, in turn, face the dilemma of how to engineer two generally contradictory goals: (1) student comprehension and rural development (thought to be best accomplished in the vernacular), and (2) national identity and preparation for economic survival in a state controlled by agro-business or industrial interests (generally thought to be best accomplished through the official language of the state).

There is much evidence of continuing compromise between these two philosophical poles. Depending largely on the relative strength of rural ethnic populations, language policy is proclaimed, and sometimes implemented, favoring either use of vernacular or official languages as media of instruction. Typically, a pattern close to the following is followed: children are taught through their vernacular language for the first three years of primary school while introduced to the national language (or occasionally the predominant regional language) as an additional language. Instruction then shifts to the national (or sometimes regional) language. The curriculum tends to be urban-oriented and the goal seems to be the preparation of urban people (with concessions made to rural interest to the extent power politics deem it necessary) to insure national stability. Relatively little attention is yet directed to the premise that rural education can be designed to make rural citizens more effective in a rural, rather than urban, setting.

It is clear, though, that the consequences of ineffective rural education practices will continue to exacerbate regional factionalism, frustrate rising expectations, and perpetuate the wastage of much individual potential among linguistic minorities.

CHAPTER II

GHANA

Estimated Population 1978: 10,900,000

General Overview of the Language Situation

Ghana lies on the west coast of Africa a few degrees above the equator and covers an area of 92,010 square miles. There are five major geographic regions. The high plains occupy the north and northwestern part of the country; the Volta Basin occupies the central part of Ghana and covers about 45% of the country. To the south are the Ashanti Uplands and the low plains. The Akwapim Togo Ranges form a narrow strip along the lower eastern border. About 70% of the inhabitants live in the southern half of the country, especially along the coast. The greatest population concentration is found in the triangular area formed by the cities of Accra, Takoradi, and Kumasi, where densities have been estimated at more than 200 persons per square mile. Relatively high densities are also found in the northeast and northwest because of favorable agricultural conditions. Approximately three-fourths of the people live in rural communities, but significant migrations to urban centers have occurred since independence. Migrant workers annually move from the north to the centers of employment in the south, and the urban population is growing rapidly.

The official national language, in Ghana as in most former British colonies, is English. It is, of course, not the native language of any appreciable segment of the population. It is learned as a second language principally in the schools. (Some older Ghanaians

learned English while serving with British units in World War II.) Estimates as to how many in the country can actually use the language do not appear very reliable. In the last two decades school enrollments, teacher qualifications, and mean length of time spent in school have all increased. Comparisons with other anglophonic African countries suggest that the figure for Ghana should be in the neighborhood of 20 percent.

Pidgin English serves as a means of inter-ethnic communication in some of the larger urban areas, but it does not have the significant function it holds in some other West African countries, particularly Nigeria and the Cameroons.

The major African language of Ghana is clearly Akan, the home language of over 4,500,000 people. It is the West African language in which the largest body of indigenous literature has been published. Its position is slightly weakened by the fact that it exists in three standard dialects: Fante, Ashante, and Akuapem Twi. Speakers of each have a vested interest in maintaining its local forms, and attempts at unification are met with some of the same kind of resistance Croats show towards Serbianization of their standard dialect.

Akan is the African idiom most readily adopted by members of other groups. Some neighboring peoples -- Nzema, Kyerepong, Afutu, and speakers of several of the smaller languages -- are to a great extent bilingual since they are also quite proficient in Akan. Considering the extent to which this phenomenon is reported -- and also that a great part of the internal migration in Ghana has been from

the north, to Kumasi, Takoradi, and the Akan-speaking cocoa-growing areas of the south -- it seems plausible to estimate that Akan is spoken as a second language by 1,000,000 or more members of other groups. (The language effects of migration to the capital area are more problematic. Accra and Tema, its port, are in the Ga' speech area, but Akan is also important there.)

Learning other second languages is, in fact, almost routine in many parts of Ghana, and individual multilingualism is a widespread phenomenon. Speakers from the tiny "Togo Remnant" groups in the east have a particular reputation for versatility, often displaying fluency in Ewe, Akan, Ga', and English.

There are approximately 50 distinct languages indigenous to Ghana. Except for Hausa, an Afro-Asiatic (Hamitic) language of the Chadic group, spoken particularly by traders, all are languages of the vast Niger-Congo family. In general, the southern areas of the country, with over three-quarters of the population, speak languages of the Kwa branch of this family, while the remaining quarter living to the north speak predominantly languages of the Gur branch.

Hausa is extensively learned as a second language in the north and used to some extent by probably several 100,000 of the population. It is generally used for communication among Muslims who are not native speakers of the same language. It is also particularly characteristic among northern-origin day laborers in the south, to the extent that many southern Ghanaians assume that Hausa is the native language of most northerners.

As in quite a few other countries, a certain number of the more widely spoken languages have been officially designated as appropriate for educational purposes and the development of indigenous literature. In Ghana, these are the nine marked "E" in Table 1. Dagaari and Gonja are recent additions. Kassem is a much more important language over the border in Upper Volta than it is in Ghana. International politics as well as a certain importance given it by local conditions in the Upper Region prompted its designation as an educational language.

Dagbani is supposed to serve for half a dozen other, rather closely related, Gur language groups of the eastern part of the northern and Upper Regions. (Manprusi and Nanume are dialects of Dagbani with a separate political history, and for which separate literacy materials have been developed to some extent.)

The local languages find a definite, although limited, place in the media. The Ministry of Information publishes bulletins semi-monthly in the three Akan dialects, Nzema, Gã, and Ewe and monthly ones in Kassem and Dagbani. Akan, Gã, and Ewe have all been used extensively on television, and radio broadcasts are made regularly in these three languages and in Nzema, Dagbani and Hausa.

(Figure 1, A Language Map and Table 1, Principal Languages on the following pages.)

Patterns in Urban-Rural School Populations

31 percent of the population of Ghana is considered urban. Like a number of other developing countries, Ghana has recently been experiencing the "primate city" phenomenon -- an influx of population to the area of the capital. Two other urban areas have undergone intensive

THE DISTRIBUTION OF GUANG IN GHANA
A LANGUAGE MAP OF GHANA

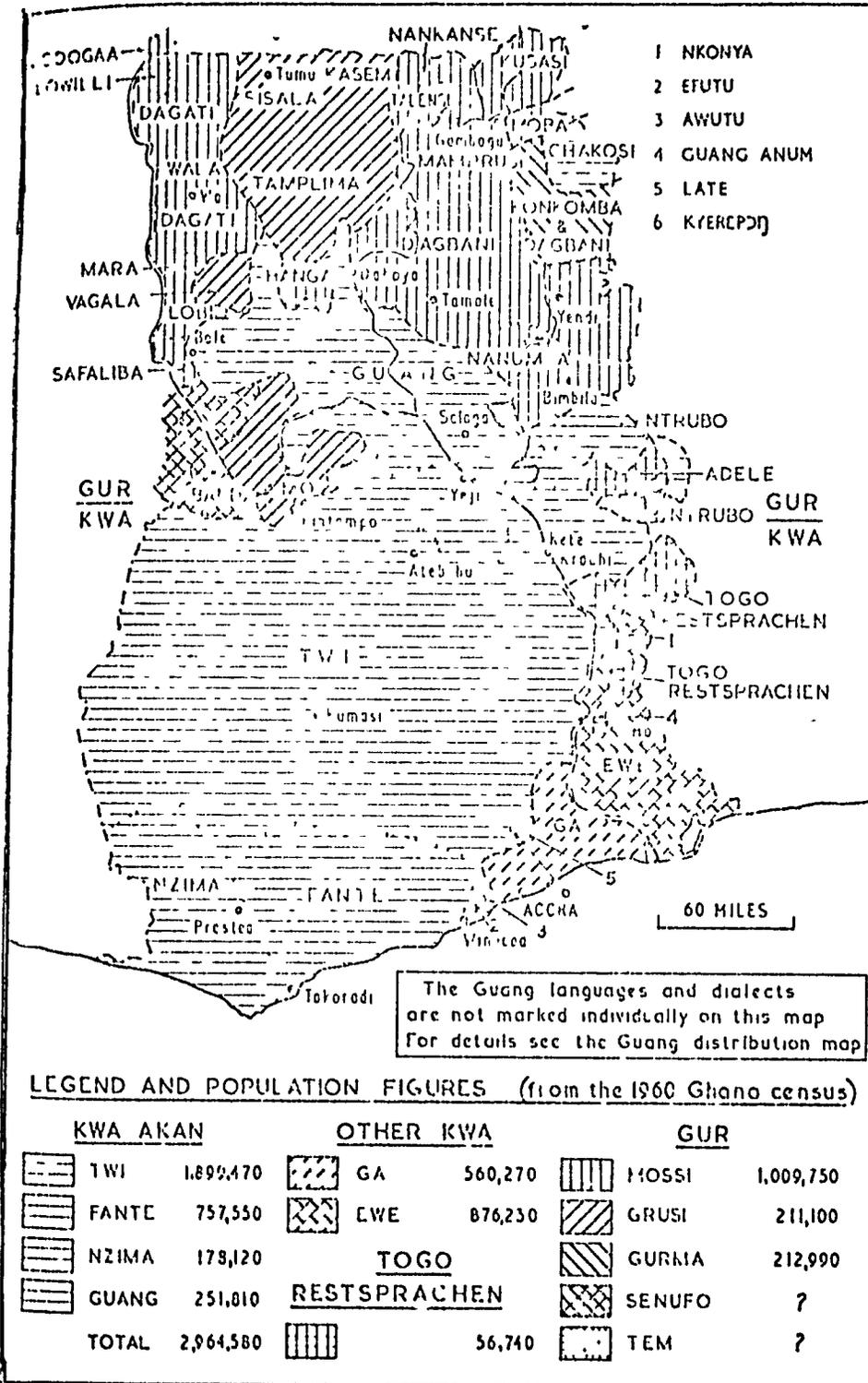


Figure 1

Table 1

Principal Languages of Ghana
(first-language speakers)

<u>Language</u>		<u>Group</u>	<u>Number</u>
Akan	E	Kwa	4,650,000
Ewe	E	Kwa	1,550,000
Dagbani	E	Gur	500,000
Nzema	E	Kwa	490,000
Adangme	E	Kwa	450,000
Dagaari	E	Gur	435,000
Gã	E	Kwa	415,000
Nankani		Gur	330,000
Kusaal		Gur	200,000
Konkomba		Gur	180,000
Moré		Gur	175,000
Kyerepong		Kwa	130,000
Gonja	E	Kwa	115,000
Buli		Gur	105,000
Hausa		Chad	103,000
Yoruba		Kwa	100,000
Afutu		Kwa	100,000
Sisala		Gur	95,000
Busu		Mande	95,000
Kassem	E	Gur	86,000
Tem		Gur	85,000
Tobote		Gur	81,000
Bimoba		Gur	54,000

urban growth: the Secondi-Takoradi area (Ghana's main port) and Kumasi (the hub of its up-country road network). In the northern part of the country Tamale with a 1970 population of 120,000 is the only major urban center.

For some years, Ghana has had the highest enrollment percentages in West Africa. The level for the primary school-age group has now reached 74 percent. (The figure has shown considerable fluctuation; it reached a temporary maximum in 1965-6, declined for a few years, and began rising again after 1970-1.) Secondary schools continue to be highly selective so that the percentage in attendance is much lower, around 8 percent. For the northern and Upper Regions, the figures are barely above a third as large, around 27 percent for the primary schools and around 3 percent for the secondary. The relative position of these northern territories has continually improved since 1951, but they still remain underschooled.

The Educational Situation

Ghana has seen a number of changes in official educational policy in the last 25 years. Difficulties of implementation, however, have meant that actual practice has changed very slowly. Further revisions of the system are being considered at present.

In recent years the official syllabus has provided for eight years of primary education. This can be followed by two years of middle school for those who have not been admitted to secondary schools. Secondary school admission is contingent upon results of an examination, which, under differing circumstances, may be passed as early as the sixth grade or as late as the tenth. The regular secondary program

takes five years. There follows, then, a possible two year period of what may perhaps best be viewed as advanced secondary education, designed largely to produce suitable entrants for the university level.

Before 1962 the Ghanaian system consisted of primary schools (six grades), middle schools (four grades), and the same type of secondary program as the present. The middle schools were normally separate schools from the primary schools, and were considerably fewer. In rural areas this often meant leaving the local community for education beyond the sixth grade. When the organization of primary education was officially changed in 1962, the same schools continued to function; in the middle schools, they began very slowly to relabel their first two years as Primary VII and Primary VIII.

The somewhat grueling pace of education in Ghana has been attributed largely to the difficulties of acquiring, in the face of considerable obstacles, the proficiency in English needed for pursuing advanced studies. Reading in primary schools, both in the Ghanaian language and in English, is generally reported as greatly in need of improvement. Only in 1969-70 did the proportion of trained teachers in the schools rise above 58 percent. One book for a 100 pupils was not uncommon. In 1960, the modal age for students to enter a university was 23, and such an age is apparently still frequent. A desire to shorten the process has long been voiced. Planners now wish to experiment with a system of a six year primary school followed by three years of junior secondary and three or four years of secondary education.

The present language policy for education makes multilingual education the norm, prescribing a gradual switch starting in the fourth grade from a locally-dominant language to English as the primary medium of instruction.

The use of Ghanaian languages in education was begun by the Basel Mission in 1827, eventually using Akan, Gá, and Ewe as school media. In 1887, the Governor of the coastal areas, then under British control, issued an ordinance requiring that indigenous languages be replaced by English, but the government lacked sufficient interest in the problem to bother enforcing it. In 1925, a new constitution for the country was promulgated and a government now conscious of its educational obligations issued a new Education Ordinance encouraging a bilingual approach to education. From 1927 to 1952 all teachers employed by the government were required to take an examination in one of the indigenous languages in order to receive promotions. A 1941 report favorable to bilingual education stimulated the development of textbooks in local languages. At the beginning of self-government, the pendulum began to swing in the opposite direction. The Accelerated Development Plan of 1951 specified that: "At the beginning of the course, instruction will be given through the medium of the local vernacular, with English taught as a new language. As soon as possible there will be a transition from the vernacular to English as the medium of instruction..."

The Barnard Committee, charged with studying the feasibility of English-medium schools, expressed the view that requiring this

universally "could only lead to chaos in many schools." Its survey during the school year 1955-56 of 1,652 primary schools showed that 67 percent made no use of English as a medium; nine percent used it in the sixth grade, six percent from the fifth grade, and only eight percent were in accord with the then-recommended policy of introducing it by the fourth year or earlier (Report, 27). The minority report of the Committee (Yankah report) advocated entire replacement of local languages by English as the language for general-subject-matter instruction in primary schools, and this was the report accepted by the government. With independence in 1957, the official policy favored monolingual English education, and it was decreed to be the medium of instruction for grade two and up, starting in January 1959. Nevertheless, for the next decade, in quite extensive areas a local indigenous language continued to be the actual medium even through grade ten.

A civilian government in 1970 introduced the present official policy. Although more specifically formulated, this is essentially the 1941-51 policy, formally differing only by saying that English should not be the medium before the fourth year. In actual practice, schools deviate in both directions. Some, mostly urban, continue the policies of the 1960s. For many rural areas, knowledgeable observers suggest, today as in 1956, much of primary education is in the local language well beyond the third grade. Since many students still do not get very far in school, it is not surprising that five percent of the population became literate only in an African language.

Ghanaian languages are to be taught as subjects beyond the level where they are used as media. Their position in the schools has not been very strong. The Association of Teachers of Ghanaian Languages is working to develop professional commitment in an area of pedagogy previously left largely to intuition. The Ministry of Education has started an innovative Teacher Training Institute offering trained teachers a three year course in this specialty. Back in 1938, 75 percent of the students seeking secondary school places offered a Ghanaian language for examination, but by 1967 only 32 percent did so. The African languages have been considered, in the British jargon, "soft options," so that many headmasters discount them in screening applicants; French looks more impressive on a student's record. One commentator has gone so far as to say that in secondary school "the students tend to regard these vernacular periods as a rest-cure (Chinebuah, 1970)."

Although Akan, Ewe, and Gã have been examinable since 1934 for the Overseas Certificate of Education, most materials for teaching them have been antiquated, and the situation for other Ghanaian languages is far worse. As of the school year 1972-3, the list of recommended texts issued by the Ministry of Education included texts up through the tenth grade level for the three Akan dialects, Ewe, Gã, and Nzema, but for Adangme only one book each for the first three grades and nothing for the other two then-designated educational languages Dagbani and Kassem.

The language of the school may not in all cases be the native language of the school children if they belong to one of the smaller

language groups. Also a child of migrant parents may live in an area where another language is used in the schools. This has been alleged to cause problems only in the environs of Accra, which is in the heart of the traditionally Gã-speaking territory. There, the majority of the children are often from other regions and dominantly Akan speakers (Afful, 1976:24). Such children are, of course, exposed to the indigenous language of instruction in many circumstances outside the classroom.

The proposal has been made, although it has only begun to be implemented, that the education of all Ghanaians should include the study of a second Ghanaian language. In most other communities, it is felt, this is likely to be a form of Akan except under particular countervailing local conditions. Such school use would further promote the slow trend towards Akan's becoming the de facto national language without riding roughshod on any other group's sensibilities. It is hoped that the learning of another language in Akan schools -- particularly if a northern language is studied -- would lead to a decrease in ethnocentrism. Spoken French, needed for interaction with neighboring francophonic countries, is also to be a subject when conditions allow.

Educational Research and Innovation

The primary research conducted in Ghana that bears on language in education has been the extensive study of the extremely multi-language community of Madina, a suburb of Accra. A 1967 questionnaire demonstrated the great degree of individual multilingualism of the urban adults, the extensive learning of Akan as a second language in such circumstances and a generally favorable attitude towards it, and

an expressed willingness to know more languages. (Ansre: 1975, 166). This last finding has, it would seem, played a part in furthering the suggestion mentioned towards the end of the previous section: That a second Ghanaian language might become a subject in the schools.

The great dearth of written materials of any sort in the languages of the North may be somewhat alleviated by literacy projects of the Institute of Linguistics. Bumoba was the first language for which much was produced. A total of 19 languages or dialects have been slated for inclusion in these efforts are area at various stages of development. While intended primarily for adult-literacy programs, readers are being designed with a view to their usefulness in the schools. So far only the Sisala schools of Tumu district, some Kusaal schools and one school in the area of a small language community, the Vagla with an estimated 6,400 speakers, have been reported as using texts from this project, but plans for utilizing them have been broached in several language areas. In time this should also include Dagbani, the main northern language, although to date work and plans have centered on the Mamprusi dialect.

Development of textbooks in Akan, Ewe, Gã and Adangme for primary classes in mathematics, general science, and environmental science is proceeding under the aegis of the Language Centre at the University of Ghana, Legon.

Resources

The Language Centre of the University of Ghana was set up in 1970 as a research and teaching department in the Faculty of Arts. It is charged with looking at the formulation of educational language policies in the country and in assisting in finding ways to implement them.

It is also the principal agency in Ghana for applied research directed to improving the teaching of English. It has worked closely with the Ministry of Education and the National Teacher Training Council. In particular it set up courses for Language Organizers, teachers, and textbook writers in order to begin implementing the renewed emphasis after 1970 on the place of indigenous languages in education. The Director, Dr. Gilbert Ansre, is an outstanding linguist and socio-linguist in Ghana and is internationally known for studies of the history of the use of indigenous languages in education. His colleagues at the Centre also have considerable experience relevant to any study demonstrating the effects of bilingual education.

The Ghanaian Ministry of Education has collected statistics on school achievement at a number of sites in the country.

It is felt that a worthwhile project looking at the results of bilingual education could be organized in Ghana provided it was limited to two or three carefully selected localities. These should be in different parts of the country, have secondary as well as primary schools, and have had documentably-consistent language practices for some time.

NIGERIA

Estimated Population 1977. 66,600,000

General Overview of the Language Situation

The Republic of Nigeria, covering 356,669 square miles, is the largest coastal state of West Africa and the most populous on the continent. The country lies wholly within the tropics. There are five major geographic divisions: the low coastal zone along the Gulf of Guinea; succeeded northward by areas of hills and low plateaus; the Niger-Benue Valley which bisects the central part of the country on an east-west axis; a broad stepped plateau stretching to the northern border with highest elevations exceeding 4,000 feet; and the mountainous zone along the eastern border. The population is unevenly distributed, with the areas of highest density in the Southeast, Southwest, and central section of the North. About one-fifth of the people live in urban centers of 20,000 or more. The rest live in basically rural settings. Ibadan had over one million inhabitants in 1970 and approximately 700,000 resided in Lagos.

The Nigerian people fall into five broad cultural categories: the Muslim Sudanic cultures centered traditionally on northern city-states; the nomadic pastoralists scattered throughout the North; the forest and independent coastal village communities of the Southeast; the former forest kingdoms of the Southwest; and the many small groups of the Middle Belt. More than 200 indigenous languages and dialects are spoken in Nigeria. The principal northern language is Hausa (mother tongue to some 16 million people). The other major languages are Ibo in the Southeast and Yoruba in the Southwest. English is the official language and is used for

government affairs, education, and mass communication. Arabic has special religious significance in the north.

Nigeria is the most linguistically complex country in Africa. In addition to some large language groups, there are many areas, particularly in the Plateau State, where tribal units are traditionally fragmentary and where the language relationships are bewilderingly complicated. Hoben (1973) notes 150 languages in the country, many Nigerians in informal conversation estimate the number at 250, Voegelin and Voegelin (1977) give 294 entries (but not all are classified by comparable criteria), Ohannessian and Gage (1975) suggest 450, Grimes (1974) lists 513 (494 of which are spoken primarily in Nigeria), and David Dalby estimates that the total might be as high as 800 (lecture on "The Linguistic Map of Africa" delivered at SOAS, University of London, March 22, 1977).

Official announcements are written in English, which serves as the official language of government activity and education beyond primary school. With the proliferation of local languages, English serves an important function as a means of communication between diverse groups within the country. Particular care has been taken to minimize linguistic differences in political life, and suggestions that an African language be taken as the language of government has been sidestepped to avoid charges of favoritism by the government. In spite of the fact that the widespread use of English finds strong political support in the South of the country, it remains a fact that, at best, only ten percent of the population is able to utilize standard English.

A form of West African Pidgin English is, on a practical level, the lingua franca between speakers of different languages in the cities of the South. Its use is considerably more widespread than that of standard English,

with at least 15 percent of the population using it as a means of communication. It is more vital to the day to day life of the country than standard English.

Of the languages of the region, the ones which are considered to be separate languages frequently depend on attitude as much as on linguistic fact. After the Igbo- (also referred to as Ibo) inspired civil war of the 1960's, several groups became conscious of the linguistic distinctiveness of their languages and insisted upon the recognition of their languages as different and distinct from Igbo rather than remaining content with being referred to as speaking dialects of Igbo. These groups include, from the list, OguUku, which might later be considered three different languages, Ikwerrri, and Ika, as well as a number of smaller groups.

In the northern half of the country, Hausa is of major importance. It is the language with the largest number of speakers, being the first language not only of those who refer to themselves as Hausa, but also of the great majority of the Fula outside the Gongola and Borno States and of virtually all the Tuareg. Beyond this, it was traditionally the language of trade throughout the North and to some extent further south. It was the language of local administration in much of this territory before British occupation, and to some extent continued during it. It is used as a second language by large numbers of Nigerians in the North, probably by at least an additional 8,000,000 (12 percent). Even a larger number have some familiarity with it, but non-native Hausa quality diminishes as its use decreases; some use an almost unrecognizable variety of it for only a few greetings and basic market transactions.

However, its widespread use and vitality have caused a number of individuals to suggest that it might be a reasonable candidate, political

objections aside, for a national Nigerian language. Paden (1968, 201) praises the language because of its users' ability to adopt new vocabulary, allowing the language to "deal with patent medicine, 'western democracy,' and nuclear devices."

In Gongola state, Fula rather than Hausa became the dominant language in the early nineteenth century, and there and in part of what is now Cameroon, it fulfills a lingua franca function similar to that of Hausa in most of the northern states.

Other Nigerian languages are much more limited in their communication function, and both of the other languages with the largest numbers of speakers, Yoruba and Igbo, apparently are learned less as second languages now than they were a few decades ago. Still, considerably more than half of the population of the country speaks Hausa, Yoruba, or Igbo, although not necessarily natively.

After the division of the country into 12 states in 1967, the government recognized nine languages as having the somewhat unclear status of "national languages." These were to be used by the Federal Government for disseminating official information. The number was picked so that at least one group in each state would be included. Eight of these are marked with an N on the list. The ninth language, Ijaw, for the Rivers State, was presumably not the Western Ijaw, at the end of the list, but the much smaller Nembe (about 72,000), which has some claim to being a standardized Ijaw language since the Bible has been translated into it. Apparently Idoma was deemed a more useful publicizing language for the area which is now Benue state than was Tiv, a language with a larger number of speakers.

With the creation of the new Niger state in 1976, it would have been logical to add Nupe to the designated list; for the Plateau state

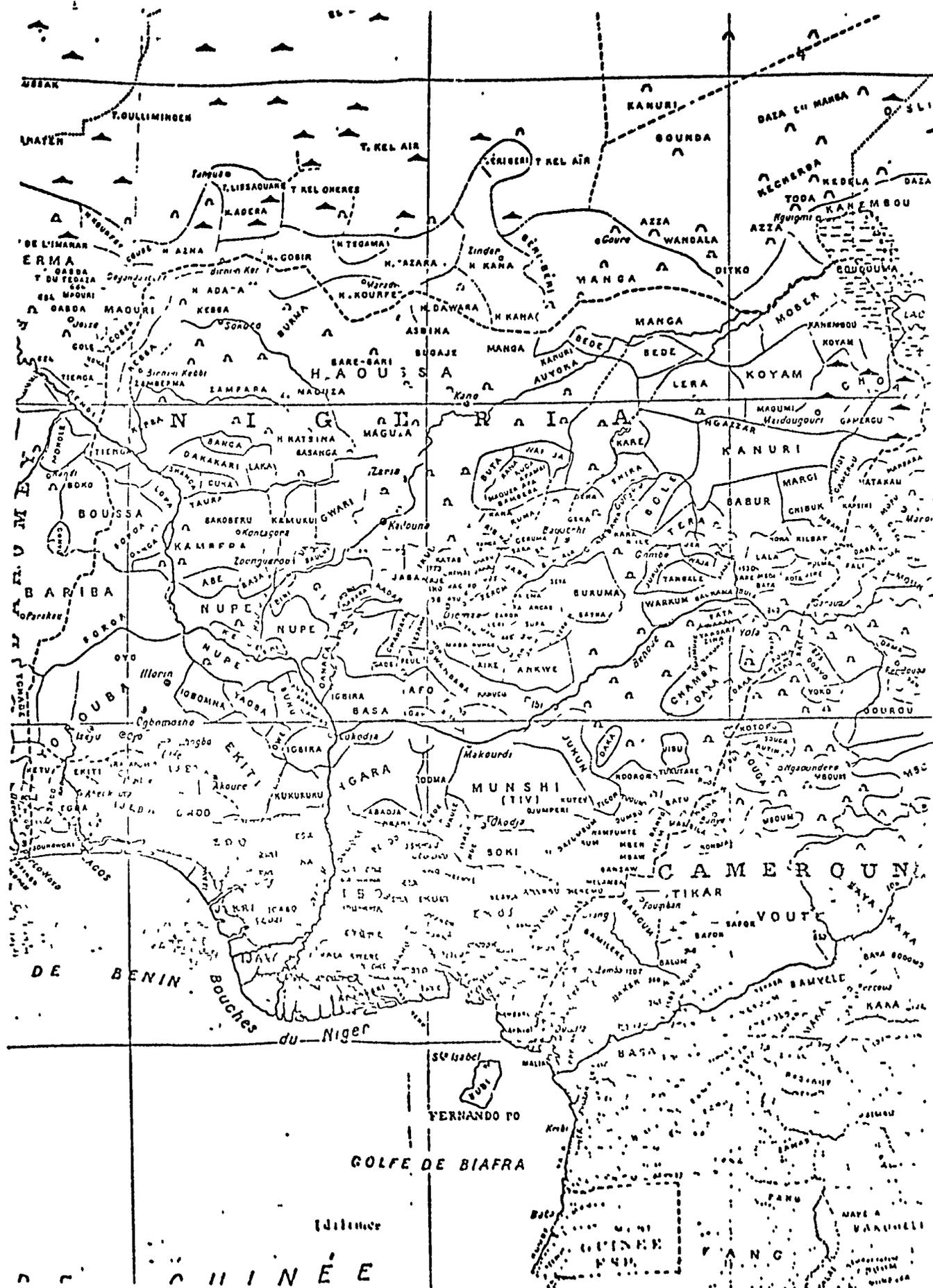
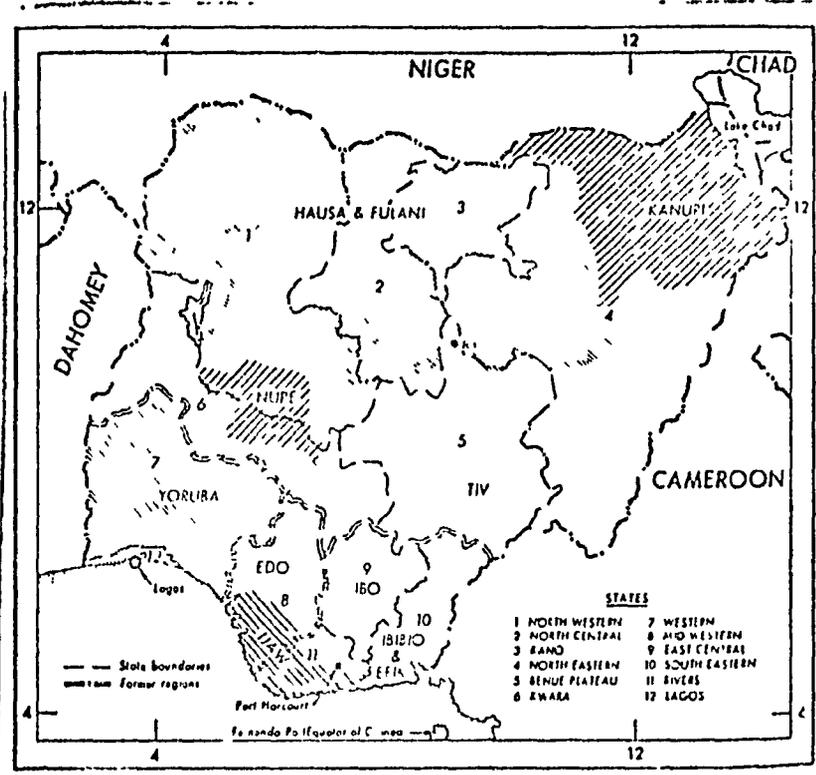


Figure 1



Source: Adapted from James L. Gibbs, *Peoples of Africa*, New York, 1965

Figure 2

TABLE I

PRINCIPAL LANGUAGES IN NIGERIA

Language		State of Principal Concentration	Family	Number of First-Language Speakers	%
Hausa	N	Kano	Chadic (Afro- Asiatic)	16,000,000	24
Yoruba	N	Oyo	Kwa (Niger-Congo)	10,300,000	17
Igbo	N	Imo	Kwa	8,350,000	12.7
Efik	N	Cross River	Benue (Niger-Congo)	3,130,000	4.7
Kanuri	N	Borno	Central Saharan	2,660,000	4.0
Fula	N	Gongola	Atlantic (Niger- Congo)	2,220,000	3.3
Tiv		Benue	Benue	1,570,000	2.3
OguUku		Anambra	Kwa	1,330,000	2.0
Edo	N	Bendel	Kwa	1,000,000	1.5
Ikwerrri		Rivers	Kwa	965,000	1.4
Jrhobo		Bendel	Kwa	930,000	1.4
Nupe		Niger	Kwa	870,000	1.3
Igala		Benue	Kwa	730,000	1.1
Ika		Bendel	Kwa	725,000	1.1
Idoma	N	Benue	Kwa	463,000	.7
Iwari		Niger	Kwa	440,000	.67
Ishan		Bendel	Kwa	412,000	.62
Igbira		Kwara	Kwa	405,000	.61
Calabari		Rivers	Kwa	405,000	.61
Ibirom		Plateau	Benue	380,000	.57
Western Ijaw		Bendel	Kwa	340,000	.51

there is no obvious choice. The most widely spoken language, Birom, is spoken by only 13 percent of the state's people, and it is not understood by any other groups. Hausa is probably native to about 11 percent, but realizing that making this area another Hausa state would displease many probably prevented that choice. The other states in the new 19-state system are already served by one of the designated languages:

Yoruba:	Kwara, Lagos, Ogun, Ondo, Oyo
Hausa:	Bauchi, Kaduna, Kano, Sukoto
Igbo:	Anambra, Imo
Efik:	Cross River
Kanuri:	Borno
Fula:	Gongola
Edo:	Bendel

Limiting either education or public communication to one or more of the national languages is not intended, but the use of other languages was considered to be an intrastate concern.

In a country that is approximately 47 percent Muslim, Arabic plays an important role. Especially in the Hausa area, Koranic education has been much more important than western-type schools. In Kano, the largest city of the North and site of an international airport, a survey of male heads-of-compounds by Paden (1968:212) showed that only 3 percent were literate in English, but that 65 percent were literate in Arabic. The ability to read Arabic, or to read Hausa or Fula in Arabic script, has never been counted as literacy in official Nigerian statistics.

Patterns in urban-rural school populations

Data on population in Nigeria are frequently the source of internal political problems, and the 1973 census results have been completely discarded. In addition to generally being unsatisfactory, a number of

decisions concerning the census are arbitrary. Urbanity has been defined, for census purposes, as being from a community of more than 20,000 inhabitants. In the 1952-53 census, 11 percent of the population was considered urban, in contrast to sixteen percent in 1963, representing 9,000,000 people. Seven communities with populations in excess of 100,000 were shown in the 1952-53 census, compared with 23 such communities in the 1963 census. These 23 communities in 1963 accounted for 55 percent of the urban population. Urban centers are concentrated in the Southwest and in the north central parts of the country.

As of 1963, urban growth was six percent yearly, while the general population increased at the considerably smaller rate of 2.5 percent. A selective Federal Office of Statistics study shows that in the particular area of the country studied, 1.3 percent of the population was migrating to the cities each year. Some of the largest cities are growing at a rate even faster than that shown above. In 1967, it was estimated that Kaduna was growing 11 percent yearly and Kano eight percent, and in 1971, the Lagos area was estimated to be growing at the combined rate of 11 percent annually, eight percent within the city and 20 percent in the suburbs. It is likely that the migration to the cities of the Rivers State, attracted to the growing oil revenue, is swelling the cities there at an even faster rate. The migrating population is motivated by a desire for better education, employment opportunities, and the desire for increased amenities promoted by the spread of new ideas. Generally, those who are motivated solely by the desire for increased employment opportunities retain their ties with the rural areas in a way which those motivated by the other two factors do not.

Up to 1971, the fact that agriculture provided half of the

national income and about 80 percent of the employment was probably a major factor in keeping the rural population large. When petroleum production skyrocketed, many of the rural population, especially the young men, came to the cities.

Of the rural population migrating to the cities, 67 percent in the South and 72 percent in the North are male, with 75 percent of the migrants under 35 years of age. This distribution of population by age and area is dramatically shown in the following table drawn from the 1963 census.

	<u>rural</u>	<u>urban</u>	<u>Lagos</u>
0-14 years	44%	37.3%	36.4%
15-64	53.8%	61.1%	62%
65+	2.2%	1.6%	1.2%

The ratio of males to females also shows this trend. In 1963 the overall ratio in Nigeria was 102 to 100. For urban areas the ratio was 115 to 100, whereas for rural areas it was 99.7 to 100. By 1964 it had jumped to a ratio of 117.6 to 100, with a decrease in rural areas to a ratio of 91.7 to 100 by 1965-66.

Part of the difficulty in obtaining thoroughly satisfactory data on ruralcy is the major reapportioning that has gone on in the past 15 years. From 1963 to 1967 there were four administrative regions in the country: the Northern, Eastern, West, and Mid-West. In 1967, these regions were converted into 12 states, and in February 1967, the Federal Republic was re-divided into 19 states.

Clearly one of the reasons for the migration from rural areas to the city is the stagnation of the agricultural sector, although the Rivers State has exceeded its planned rural growth. The traditional societal plans of the three major ethnic groups has also contributed to patterns of urban growth in their respective areas of the country. The Yoruba have traditionally focused more on crafts and commercial work than have

their southern neighbors, the Igbo, and therefore have developed more urban centers. The Hausa pattern of agriculture was one of farmers living in villages around a larger city. This, coupled with their trading tradition, accounts for the development of some of the north central cities.

There is no nationwide data on an urban-rural or ethnic basis about school attendance, but the basic disparities are expressed in regional, economic, and sexual terms. For example:

- (a) In the North, 7.8 percent of the primary school-aged children are in school. In the South, 96 percent of the primary school-aged children are in school.
 - (b) In the North, N₦.31 is spent per student; in the South, N₦2.00 is spent.
 - (c) There is only one university in the North.
 - (d) Girls account for 35 percent of the school population in primary school, and only 12.5 percent of the university population.
- (British Council).

In the second most populous state, Oyo, with Ibadan the capital, one-half of the total government capital allocation goes to education. Schools are to be built, science and math training intensified in primary school, and teaching kits and textbooks are to be produced in greater numbers (Africa Diary, Vol. XVII, No. 35, September 3-9, 1977, New Delhi).

In Ondo, perhaps the third most densely populated state, classroom construction is growing. The previous enrollment of 400,000 primary students in 6,000 classrooms will increase with the 4,800 new classrooms to be built. The 22 additional secondary schools being built to augment the existing 99 are hoped to bring the transition rate from primary to secondary school up to 40 percent. Additional benefits are also planned

for teachers in the hope of retaining more of the trained manpower as teachers (Africa Diary, Vol. XVII, No. 28, July 9-15, 1977).

Not all densely populated states give education as high priority as Niger. In that state education is listed as eighth on the list of government spending (Africa Diary, Vol. XVII, No. 25, June 18-24, 1977).

Kano, with a population nearing 6,000,000, is the most populous state, but its population density, and therefore its index of ruralcy, is somewhere in the middle of the 19 states. Universal Primary Education is very successful in this state with 210,000 of a possible 240,000 students enrolled. Post primary education is still unsatisfactory, with only 10 percent of possible enrollees enrolled. However, 50 percent of primary school leavers go on to secondary school. There are four new teachers' training colleges in the state as well as five new secondary schools (Africa Diary, Vol. XVII, No. 21, May 21-27).

In Gongola, another state somewhere in the middle with respect to population density, education has the single largest allocation of government money in the state budget. Students in primary schools went from 94,000 to 252,000 in a year, and emergency teachers' training was begun to train an additional 2,000 teachers to assist with the growing enrollment of students. In 1976, 7,200 classes with an enrollment of 22,667 were opened to combat illiteracy (Africa Diary, Vol. XVII, No. 29, July 16-22).

Although the population density of Bendel is twelfth in the nation, this state has the second highest education budget of all of the states, in spite of the fact that five other states have larger populations. (Africa Diary, Vol. XVII, No. 33, August 13-19, 1977.) Bendel

is obviously prospering from its oil revenues.

The Rivers State, fifteenth in population and thirteenth in population density, also is prospering from its oil wealth. The existing nursery schools in the state are being phased out in order to give massive assistance to the Universal Primary Education program. The effort here is to be left to private enterprise. In 1976, 177 primary schools were renovated, 396 new classrooms were built. In 1977-78, 234 new primary classrooms are to be built. Thirteen extensions to secondary schools are currently being completed and nine new secondary, as well as four prevocational, schools were scheduled to be built in 1977 (Africa Diary, Vol. XVII, No. 30, July 23-29).

Kaduna, the fifteenth most densely populated, but fifth most populous, state also allocated the largest proportion of its budget for education. Enrollment in 1976-77 rose to 476,000 compared to 218,000 in 1975-76. The next first year class in primary school is expected to include 200,000 students. UNESCO/UNICEF are aiding with primary education improvement projects. The quality of teaching is to be upgraded. There are presently 31 secondary schools with 11 more to be built (Africa Diary, Vol. XVII, No. 22, May 28-June 3, 1977).

Borno, the seventh most populous, but second from least densely populated state, has replaced the former education authority with local governments. There are 1,578 primary schools with a total of 220,000 pupils, 88,000 of whom were enrolled under the Universal Primary Education program. 6,000 new classrooms are to be built, and post-primary schooling in the future is to have a technical bias (Africa Diary, Vol. XVII, No. 26, July 25-August 1, 1977).

The Educational Situation

The earliest formal school systems in Nigeria were in the Muslim section of the country to the north where a few boys studied Islam and basic literacy in Arabic starting approximately 1,000 years ago. "By 1913 there were some 19,000 Koranic schools with about 135,000 students" (Area Handbook, 177). It is not unlikely that the traditional Koranic school was very much like its modern day counterpart in the parallel Koranic school which still exists in Kano state. In 1972 (British Council report), the Koranic primary system concerned itself with learning the first 10 chapters of the Koran by heart, followed by learning the Arabic letters, culminating in learning to read and write from the chalk board and the Koran. Secondary curriculum in the Koranic system involved Islamic studies, Arabic grammar, literature, Alkali law, arithmetic, astronomy, and translation from Arabic. The relative effectiveness of this traditional schooling might be seen in comparing figures.

	Primary		Secondary	
	<u>Islamic</u>	<u>State</u>	<u>Islamic</u>	<u>State</u>
students	163,000	96,380	34,293	9,084
female students	45,640	25,059	8,573	1,181
schools	8,119	530	1,630	27

In Kano and in the rest of the Islamic region, 20 percent of the school-age children are in Koranic schools while only 10 percent are in state schools, although 20 percent of the state budget goes to state schools while only three percent of it goes to the Islamic schools.

Western education came with the missionaries, first in the sixteenth century with the Portuguese, then in 1842 at Badagri with the British. By 1859, there were 50 such mission schools. The British colonial administrators started schools in 1877. Between World Wars I and II, interest in education increased. In 1945, 99 percent of the schools were run by

missionaries with financial assistance from the government. These schools enrolled 97 percent of the student population.

"In 1971 the educational structure consisted of a very broad base of primary schools students, a very small secondary school population, and a smaller postsecondary school population in relation to the whole" (Area Handbook, 178).

Presently, the Federal Ministry of Education sets broad general policy for education for the various states including setting basic curricula, but local governments control the practical aspects of education through state educational ministries. The formal structure of public schooling includes six years of primary school, although at times there have been seven and eight-year training planned for this level, followed by two years of sixth form or preuniversity preparation, terminated by three years of study for the first university degree.

In 1976 free Universal Primary Education went into effect, and compulsory free Universal Primary Education is planned for 1979. English and local languages constitute subjects for school study as do "geography, history, arithmetic, nature study, hygiene, cooking and needlework, handicrafts, religious studies, physical education, handwriting, and drawing" (Area Handbook, 181).

	Primary	Secondary	Technical	Teacher training	University
Number of Schools					
1960	15,499	n.a.	n.a.	n.a.	n.a.
1966	14,907	1,350	73	193	5
1967	9,043	n.a.	n.a.	n.a.	5
1972	14,500	n.a.	n.a.	n.a.	5
1973	11,500	n.a.	n.a.	n.a.	5
1976	n.a.	n.a.	80	169	6

	Primary	Secondary	Technical	Teacher training	University
Number of Teachers					
1960	96,317	6,889	359	1,496	n.a.
1966	91,049	11,664	789	1,837	1,328
1967	57,866	6,946	986	1,079	n.a.
1972	130,400	n.a.	n.a.	1,915	n.a.
1973	136,000	n.a.	n.a.	2,122	n.a.
1974	n.a.	n.a.	n.a.	n.a.	3,459
1976	125,000	n.a.	n.a.	n.a.	n.a.
1979	500,000	n.a.	n.a.	n.a.	n.a.
Number of Students					
1960	2,912,617	135,364	4,741	26,212	2,659
1966	3,025,617	211,305	15,059	30,493	9,105
1967	1,778,976	137,242	16,214	19,310	8,076
1968	3,100,000	n.a.	n.a.	n.a.	n.a.
1970	3,500,000	n.a.	n.a.	n.a.	n.a.
1971	3,900,000	351,000	n.a.	38,000	19,000
1972	4,391,000	n.a.	n.a.	40,045	n.a.
1973	4,653,000	n.a.	n.a.	42,771	n.a.
1974	4,368,778	476,567	20,423	47,590	23,228
1976	4,000,000	400,000	15,000	38,000	25,000
1979	13,000,000	n.a.	n.a.	n.a.	n.a.

The 1960, 1966, and 1967 figures are from the Area Handbook, with the 1967 figures representing reports from 9 of the 12 states. With the exception of the 1974 and 1979 figures, all of the figures from the 1970s are from the British Council Report, those from 1974 are from the United Nations Social Statistics, those from 1979 from Nigerian government estimates.

Unlike the primary schools, all instruction in secondary schools is in English and all secondary schools are residential. Courses taught in the secondary schools are "English, literature, religious knowledge, mathematics, history, geography, general science, physics, chemistry, biology, and physical education," and may include in some areas, "Latin, French, local languages, higher mathematics, agricultural science, various crafts, and home economics." (Area Handbook, 182.)

Of the eleven Nigerian universities, the University of Ibadan is the oldest, founded in 1948. The University of Nigeria at Nsukka was opened in 1960, the University of Ife in 1961, Ahmadu Bello University at Zaria in 1962, the University of Lagos in 1962, and the University of Benin in 1970. The remaining five (Bayero, Calabar, Jos, Ilorin, Sokoto) were founded between 1975-77.

Generally the language of instruction is English and the Bachelors degree program is three or four years in length.

In spite of this emphasis on education, the literacy rate for Lagos in 1970 was 20 percent and 10 percent for the rest of the country. Teachers are generally in short supply and there are still problems with textbooks and educational equipment. The high status of adults inhibits questioning, and the traditional role of rote memorizing hinders the implementation of modern educational approaches. The West Africa Examination Council formulates examinations for promotion from each level of education to the next and for certification of graduation. The unconditional requirement that these exams be passed conditions students, from the very beginning levels, to study to pass the examinations rather than to gain knowledge. The system rewards white collar workers with the result that most attempts at vocational and technical training are undermined.

Attrition in Nigerian schools is high and enrollment is low in spite of recent gains. As late as 1973, only 35 percent of those enrolling completed primary school. This attrition rate is reflected in the following figures:

<u>Level</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
University	20,800	3,700	24,500
B2	2,900	800	3,700
B1	3,700	1,000	4,700
Standard 5	30,600	14,700	45,300
Standard 4	41,600	22,700	64,300
Standard 3	58,300	31,100	89,400
Standard 2	70,900	37,900	108,800
Standard 1	86,400	47,400	133,800
Primary 7	40,000	11,900	51,900
Primary 6	257,600	136,300	393,900
Primary 5	318,300	189,700	508,000
Primary 4	397,400	254,300	651,700
Primary 3	491,900	334,300	828,200
Primary 2	549,800	397,800	947,600
Primary 1	645,500	489,800	1,135,300
Preprimary	30,500	12,200	42,700
Total	3,048,200	1,985,600	5,033,800

(British Council Education Report)

Primary drop out generally occurs immediately. Secondary drop out occurs after the fifth year, i.e. after the completion of the school certificate course.

The first formal concern for mother tongue education in Nigeria came from the Phelps-Stokes Commission of Inquiry in West Africa in 1919, followed by the Report of the Imperial Education Conference, HMSO 1927, affirming the place of mother tongues in primary education. The International Institute of African Languages and Cultures, founded in 1926 by F. D. Lugard, and the School of Oriental (and later African) Studies founded in 1917 gave Africans an opportunity to study African languages (Awoniyi, 1976, 38). In 1952, the UNESCO Conference on the Use in Education of African Languages in Relation to English, was held in Jos, Nigeria, and reaffirmed the ideal that each child should be able to learn in his mother tongue, but it also recognized the difficulty of implementing such a policy in multilingual urban areas. In 1970, 56 percent of the population of Nigeria had no contact with primary education. In recent years, there has been a growing tendency to introduce English as a subject in the first year of primary school and to switch over to English as the medium of instruction as early as possible. With the Universal Primary Education Act of 1976, education at the primary level was to be in the mother tongue, with English as a subject, followed by English as the medium of instruction in secondary school with Hausa, Yoruba, and Igbo as subjects (Bangbose, 1976c, 12).

A great deal of bilingual education has occurred in Nigeria. The normal procedure is in accord with that of the Universal Primary Education Act, where schooling is begun in a major local language. More than 20 local languages are known to be used in government schools, and

probably other smaller languages are used to some extent. It is known that some quite minor ones are used in Christian mission schools. For many children from small groups or from areas with different dominant languages, school is conducted in an unknown language.

In schools with a limited clientele, English may be the sole medium. This is the educational policy in Kwara and Bendel, although it is not generally followed where classes are reasonably homogeneous in one of the more important local languages.

The normative pattern is to begin in the locally dominant language, teach English as a major subject, and gradually switch to English after the middle of the third grade. In rural schools, the introduction of English as the medium of instruction is much more likely to come at the beginning of the fifth grade.

In Hausa using states, Hausa continues as the principal medium through grade 6 or the end of primary school. This is conditioned not only by the remoteness of these areas from the more western-oriented and English-using parts of Nigeria, but also by the infra-structure for Hausa education that was built up before independence. Native-language textbook publishing began there in 1912 and was pushed to an extent unprecedented elsewhere in colonial Africa. As a result a tradition of teaching content in the Hausa language developed. Hausa is the only native language of the continent beside Swahili to ever become examinable at the advanced level for the Certificate of Education.

All secondary schooling is in English. Major Nigerian languages, Hausa, Yoruba, Igbo, and Efik, may, however, be taken as subjects.

Since attrition is so high in the education system, there is considerably more literacy in local languages than in English. It has been estimated that approximately 15 percent of the population can read a Nigerian language but not English, with about 10 percent literate in both.

There seems to be no good basis for literacy figures, and Bamgboṣe (1976b, 24) puts literacy at only 12.5 percent.

In 1972 (UNESCO Statistical Yearbook) the number of textbooks for both the combined primary and secondary school population was estimated at 340,000, a ratio of 0.08 texts per student.

Two large scale adult literacy programs have been started by the state ministries of education for Kaduna and the Rivers State.

Educational Research and Innovation: Governmental Change

The two major examples of educational innovation related to language instruction in Nigeria are the Rivers Readers Project (reported in Bamgboṣe, 1976c; Ohanessian and Ansre, 1975; Williamson, 1976a and 1976b) and the Six Year Primary Project (Afolayan, 1976; Bamgboṣe, 1976c; Engle, 1975).

The Rivers State Readers Project has been an attempt to meet the general language education policy of the state. This policy provides for initial instruction in the medium of the mother tongue. Unfortunately, this is being attempted in one of the most linguistically complex areas in an already complex nation. In the Rivers State, there are five groups of languages, encompassing 23 distinct languages and a number of dialects exclusive of any of the major languages of the country. To provide materials for students in their mother tongues is an enormous task, but the state has adopted a policy of trying, to the extent that is possible, to provide materials for all of the languages spoken in the state.

In the Project, the aim has been to "produce readers and supporting materials in all the languages and major dialects of the state so that children can begin to learn to read in their own language before going on to English (Williamson, 1976a)."

Language Committees are established for each community to develop

readers for each of the languages. Following the general outline, a draft of the reader is produced with simple, natural language, but with a consideration for proper language. The text is handwritten by an artist, teachers' notes, and a booklet explaining the orthography are produced. The Ministry of Education formally launches the book in the community, and distribution occurs. By 1976, the following had been accomplished:

1. First-year readers in 15 languages
2. Teachers' notes in 14 languages
3. Booklets on the orthography of 11 languages
4. One Occasional Publication (in a series that is intended to provide further reading materials outside the actual readers)
5. Three sets of alphabet charts.

(Williamson, 1976a).

The Six Year Primary Project at Jfe has been designed with the belief that (a) English language instruction cannot be very effective when the English language proficiency of the teacher is not good and (b) that initial schooling can best be conducted in the students' mother tongue. A detailed description of this successful project appears in Afolayan (1976), and it seems in initial evaluations that cognitive gains, attendance, and English language proficiency (where English is taught by an expert EFL instructor rather than the classroom instructor) are all improved in students who have gone through the six year project.

Government willingness to support these two projects as well as the support for educational television and the recent major concern for the delivery of technical training seems to indicate an openness to innovation.

Resources

Local personnel who would be most useful in conducting studies in Nigeria include the following: Dr. Ayebisi Afolayan, Department of Linguistics, University of Ife, is a linguist interested in language education and literacy in Yoruba. He has worked in materials development, teachers training, and Yoruba language arts, and has been a prime force in the Yoruba Six Year Primary Project. Juliet Macaulay of the Faculty of Education of the University of Ife has expertise in ESL and would potentially contribute in areas of English language arts. Dr. Ola Oyalaran, of the Department of African Languages of the University of Ife, has worked in reading content teaching. Tunde Yoloye, of the Center for Educational Evaluation of the University of Ibadan, has worked with tests and measurements and could serve as the research advisor, coordinator. Adedibu Ojerinde, presently a graduate student at Cornell University who graduated from the University of Ife, is well experienced in tests and measurements and could do an evaluation of the Yoruba Six Year Primary Project. Phebean Ogundipe, a retired Federal Government employee, was the architect of the government national language policy white paper and would contribute a thorough knowledge of the system and the people. Dr. Ayọ Bamgboṣe, of the Linguistics Department of the University of Ibadan, has extensive knowledge of African linguistics and language education. Dr. C. M. B. Brann, Chairman of the Education Documentation Committee of the University of Ibadan, has access to much of the existing documentation.

Institutional capacity is greatest at the following institutions: The Department of Education of the University of Ife, under the Acting Directorship of Jonathan Sokoya. The former Director, A. Babs Fafunwa, would also serve as a resource. The Center for Educational Evaluation at the University of Ibadan, under the Directorship of Tunde Yoloye, is a key

center and has both the confidence and support of the Carnegie Corporation. The Department of Linguistics of the University of Ibadan is headed by Ayo Bamgboye and has been very active through Kay Williamson in the Rivers Readers Project.

Interest

The academic linguistic community has voiced interest in any project dealing with mother tongue education in Nigeria. Specific sources of funding have not been identified, but the government has shown willingness to assist in the two most visible of the innovative language education projects.

SUDAN

Estimated Population 1977: 17,100,000

General Overview of the Language Situation

The Democratic Republic of the Sudan covers some 967,000 square miles. Most of the country is a large, sparsely populated plain with plateaus or mountainous areas near the borders on the west, southeast, and along the Red Sea coast in the northeast. The southern provinces of Eastern Equatoria, Western Equatoria, Bahr al Ghazal, Lakes, Jonglei and Upper Nile receive heavy rainfall during much of the year and contain 50,000 square miles of permanent swamps. The Northern Provinces are primarily semi-arid savannah and desert; broad areas are devoid of vegetation and people. Narrow belts of irrigated cropland bisect the Northern Provinces along the Nile, the White Nile, and Blue Nile and Atbarah rivers. The three largest cities, most of the industry, and numerous small agricultural towns have developed in a small area near the confluence of the Blue and White Nile rivers. Accelerated urbanization doubled the population of the three largest cities between 1954 and 1972 and smaller towns grew rapidly also. Nevertheless 85 to 90 percent of the population is still rural, the majority sedentary farmers. Most others are nomadic herdsmen or transhumant cattle keepers combining tillage farming with seasonal herding.

The official national language of the Sudan is Arabic, although English is recognized as the principal language of the Southern Region. In the northern two thirds of the country, it is estimated that nearly 70 percent of the population speaks Arabic as their first language. Arabic is also the principal language of wider communication for the entire nation.

Radio news broadcasts and most public communication of a more or less official nature, are in Contemporary Standard Arabic (or Modern Classical). Classical Arabic is used for religious purposes by Muslims, some of whom do not speak Arabic natively. Competency in Contemporary Standard Arabic (the variety intended when stating that Arabic is the official language), is developed mainly through formal education in the schools.

For face-to-face communication between Arabs and non-Arabs, or between speakers of languages other than Arabic, varieties of Sudanese Colloquial Arabic serve as the inter-language in the North. Colloquial Arabic varieties differ from Modern Classical Arabic notably in such things as the simplification of verb forms and the elimination of case endings. Among many Sudanese groups, (Dongola, Mahas, Zaghawa, a considerable portion of the Fur and Beja, and some language communities of the Nuba Hills) it is common for a large percentage of the male population to be fluent speakers of the local dialect of Colloquial Arabic as well as their mother tongue.

The following table, listing the languages estimated to have at least 100,000 speakers, is based on the proportions of speakers reported in the 1956 census with an allowance for the increases of population in the last two decades. The total number who speak Arabic fluently must be considerably higher than the 52 percent projected as using it as their principal language in the home.

Next to Arabic, English plays the most important role in communication in the Sudan. This role is especially clear in the Southern Region where English was officially recognized by "The Southern Province Regional Self-Government Act" of March 3, 1972, Chapter II, Article 5, which states:

Arabic shall be the official language for the Sudan and English the principal language for the Southern Region without prejudice to the use of any other language or languages which may serve a practical necessity, or the efficient and expeditious discharge of executive and administrative functions of the Region.

The other major lingua franca of Southern Sudan is a much modified form of Arabic. This pidgin language is no longer comprehensible to speakers of ordinary Arabic without considerable training. Now most frequently referred to as Juba Arabic, it was formerly called Mongalese or Bimbashi Arabic. Egyptian troops entering the Southern Sudan before 1870 brought this pidgin with them and it spread as a lingua franca in the area between Malakal and the north of Uganda. While Arabic in most of its vocabulary, its pronunciation and grammatical structure are radically different from Standard Arabic.* This is the normal inter-group language in all the towns of the Southern Sudan, in one local variant or another. It is most characteristic of Juba, the capital of Equatoria, the country's most linguistically diversified province.

Serious linguistic study of Southern Sudan Pidgin Arabic has barely begun, and delineation of the social situations in which it is used is still entirely impressionistic. The way it functions "has become one of the priorities" in the investigation of patterns of multilingualism in the Sudan now being undertaken by the Institute of African and Asian Studies of the University of Khartoum. Research into its basic structure and dialectal variations looks to be one of the most

*It eliminates the doubling of consonants, simplifies most consonant clusters, and drops many word-final consonants. It drastically reduces the number of distinguishable consonants used in the language--though the exact extent of this simplification of the consonant system seems to depend both on the native-language backgrounds of speakers and on the style level of their conversations. All verbs appear in a single uninflected form. The distinction between masculine and feminine pronouns is reported to be generally ignored.

rewarding areas for linguistic studies in the Sudan, together with observation of how thoroughly it is learned by different segments of the population and how its use varies in different situations.

Juba Arabic has at times been used as the language of instruction in some urban primary schools in Equatoria, and the possibility of developing it as a regular school medium has been at least considered by the Southern Regional Ministry of Education. Since no other Southern language has any clearly dominant position in the region, English and Juba Arabic retain an important function as inter-group languages there. Zande, Dinka, and Bari are all learned to some extent as second languages by speakers of numerically insignificant dialects in their areas, but this can be considered merely a local phenomenon.

Beside those languages considered indigenous to the Sudan--the Institute of African and Asian Studies, University of Khartoum, lists 111--there are large numbers of speakers of languages from African countries further to the west. Such languages accounted for 3.5 percent of the returns on the 1955-56 census, but increased phenomenally during the drought in the West African Sahel. It is impossible to determine the exact number of such speakers of African languages since most had no legal rights to remain in the country and were subject to expulsion if they attracted the government's attention. With the end of the drought and subsequent famine in their home areas, many have now left the Sudan, others have remained, often joining the existent settlements of their fellow tribesmen. The resulting net population changes are undeterminable at present.

The location of Khartoum, on the pilgrimage route to Mecca, has led many West Africans to remain in the Sudan. Over the years, numerous settlements have been established. All these West Africans are loosely known in the Sudan as Fellata, a name historically associated

with the Fulani of Nigeria. The Fula language, originally characteristic of all Fulani, is also present to a significant extent. In addition there are known to be sizeable groups of Kanuri from Northern Nigeria, as well as some groups from almost every largely Muslim speech community in West Africa.

The linguistic position of the Hausa in the Sudan is interesting in that they are accustomed to reading and writing their own language in a modified Arabic alphabet, and are familiar with a considerable body of written literature. No similar extensive use of writing has ever taken hold among non-Arab groups indigenous to the Northern Sudan.

Some groups of languages spoken in the Sudan are not closely related to any other languages spoken in Africa, quite a number of these are known to linguists only as short word-lists. About a third of the country's languages are concentrated in the Nuba hills of Southern Kordofan.

The rather sharp cultural cleavages that exist between the Southern Region and the rest of the Sudan extend also to the realm of language attitudes. Throughout the North, regardless of any language loyalty to an ancestral form of speech, Arabic is considered the language of modernization and of contact with a wider segment of the world at large. Most of the small non-Muslim enclaves are willing to concede pride of place to Arabic in public life. Only some of the West African immigrant groups -- Hausa, Fulani, and Kanuri -- could be accused of maintaining that their language is just as good as Arabic.

In the Southern Region, besides an aversion to wide use of the Arabic of the North just because it is viewed as an outside imposition,

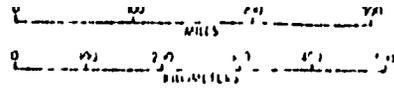
there is also a strong attachment to the indigenous languages. This was undoubtedly promoted to a certain extent by the work of Christian missionaries in the South from 1848 to 1964, but, at a more basic level, it appears to be part of the extreme localism of life in the Southern Region. Even today, communication and travel in the South are extremely difficult. There are many areas of impenetrable swamps and it is only with the advent of airplanes that individuals in the Southern Region have experienced anything like the mobility that cavalry and camels long ago provided in the Northern Sudan.

TABLE I

Home-Language Speakers of Major Sudanese Languages

<u>Language</u>	<u>Family Affiliation</u>	<u>Province of Greatest Concentration (pre-1978)</u>	<u>Number</u>	<u>%</u>
Arabic	Semitic (Afro-Asiatic)		9,000,000	52.4
Dinka	Nilotic (Nilo-Saharan)	Bahr al Ghazal	1,760,000	10.3
Beja	Cushitic (Afro-Asiatic)	Kassala	975,000	5.7
Nuer	Nilotic (Nilo-Saharan)	Upper Nile	740,000	4.3
Fur	isolated (Nilo-Saharan)	Darfur	380,000	2.2
Zande	Adamawa-Eastern (Niger-Kordofanian)	Equatoria	350,000	2.0
Bari	Para-Nilotic (Nilo-Saharan)	Equatoria	340,000	2.0
Hausa	Chadic (Afro-Asiatic)	Blue Nile	210,000	1.2
Toposa	Para-Nilotic (Nilo-Saharan)	Equatoria	195,000	1.1
Lotuho	Para-Nilotic (Nilo-Saharan)	Equatoria	185,000	1.1
Shilluk	Nilotic (Nilo-Saharan)	Upper Nile	175,000	1.0
Dongola	Nubian (Nilo-Saharan)	Northern	170,000	1.0
Masalit	Maban (Nilo-Saharan)	Darfur	115,000	.7
Zaghawa	Saharan (Nilo-Saharan)	Darfur	105,000	.6
Mahas	Nubian (Nilo-Saharan)	Northern	100,000	.6

SOUDAN MAJOR LANGUAGE GROUPS



- Language boundaries
- - - Language areas not classified
- Railways
- Province boundaries
- International boundaries
- Rivers

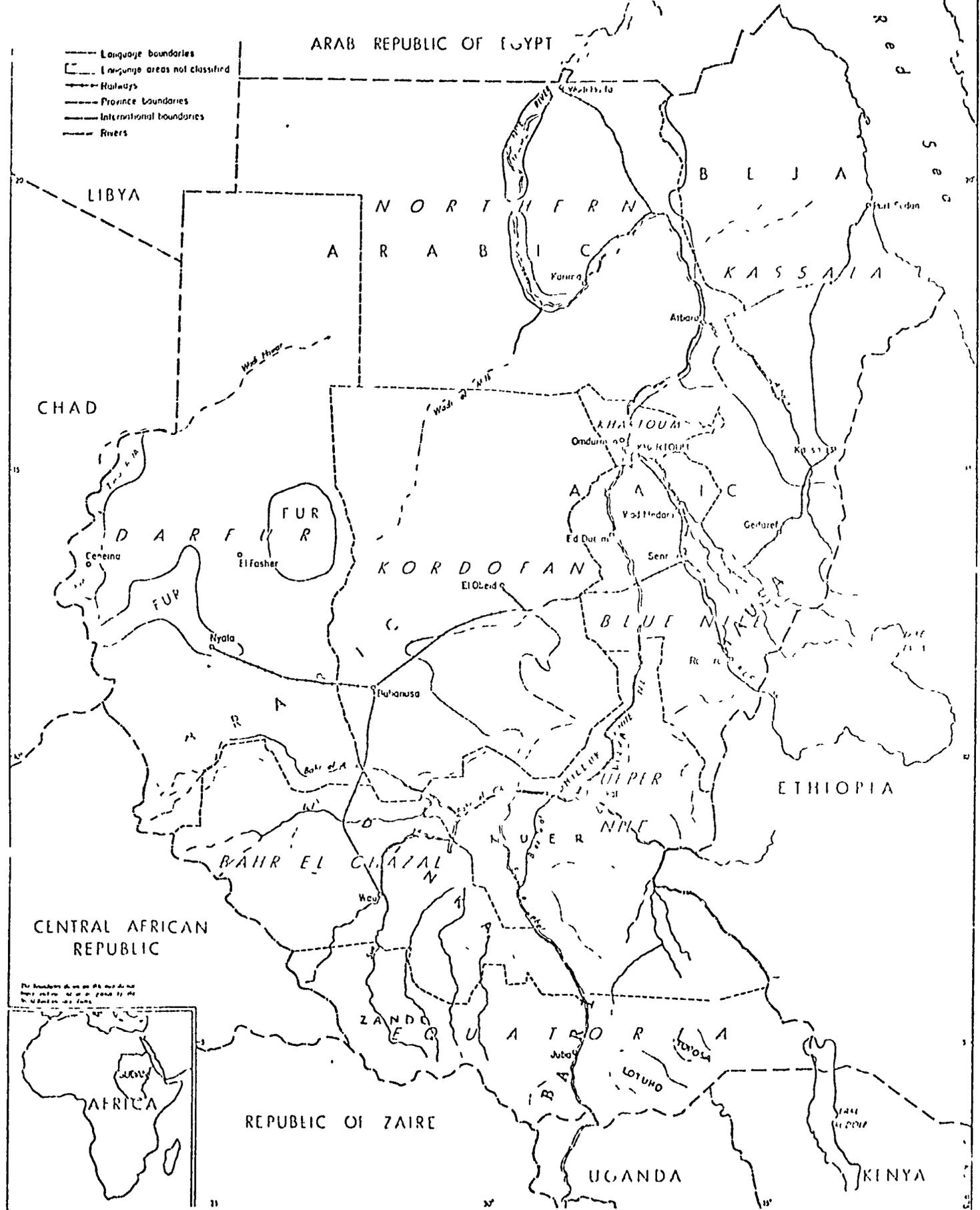


Figure 1

Patterns in Urban-Rural School Populations

Approximately 20 percent of the population is urban. About a quarter of the urban dwellers are concentrated in the "three towns" of the capital area -- Khartoum, Khartoum North, and Omdurman.

Of the rural population only about one half is truly sedentary. Nomads, who largely remain outside the national cultural system, amount to about 15 percent of the population of the country. A further 25 percent of the population is semi-nomadic, in that they relocate on a seasonal basis. Most of the pastoralists of the South would be considered semi-nomadic by this definition.

According to World Bank sources in 1974 47 percent of the eligible children in the North were enrolled in primary school and only 10 percent in the Southern Region (Appraisal, 7).

The Educational Situation

General education in the Sudan is divided into six years of Primary (grades 1-6), three years of General Secondary (grades 7-9), and three years of Higher Secondary (grades 10-12)

Prior to 1964, English was the medium of instruction for secondary education (then grades 9-12) and, until 1970, the study of English was introduced in the fifth grade. The national pattern of education, prevalent only in the North, now has Arabic as the medium of instruction for the entire 12 years. English is introduced at the seventh grade level and continues for six years. French may also be studied in grades 10 through 12. Higher education in Arabic is available, particularly at the Khartoum Branch of the University of Cairo, the Technical Institutes continue to teach in English.

Still important in the Sudan are the religious schools in which the Classical Arabic of the Koran is memorized and recited. In religious

and government schools the non-Arabic-speaking children must not only learn through an unfamiliar language, but also acquire a command of Arabic at several levels. The cultural assumption in the North is that schooling means instruction in Arabic.

The present national Sudanese education policy is for even greater uniformity in all schools with the only partial exception being in parts of the Nuba Hills where missionaries were allowed to operate after 1920 (and were not compelled to leave in 1964). Limited reading materials were produced for some of the Kordofanian languages, of which Koalib with 95,000 speakers is the largest. As a result, in a few cases in the North a low level of basic literacy has been introduced prior to the children entering the school system in which Arabic will be the medium of instruction.

The educational situation in the South is somewhat different from that of the North. The accords reached in 1972 between the central Sudanese government and the Southern Regional Government have permitted considerable autonomy in the South in the use of languages in education. In contrast to the efforts in the North to achieve uniformity, the South has been developing a considerable diversity of language use patterns. Following a long-established Southern pattern, most of the schools use a local language as the medium of instruction for the first two years and teach English and Arabic as subjects. In the third grade English becomes the language of instruction and Arabic continues to be studied as a subject throughout the primary school years. A few schools in the Upper Nile province shift from the local language to Arabic at the third grade level. Currently nine indigenous languages are used for initial instruction.

There are even some national-pattern schools operating in the

South, at least in Malakal. The British Council (1976) reports Southern urban schools beginning in Arabic and shifting to English after two years. The official position of the 1974 Regional Peoples Assembly was that English should be the medium of instruction at all levels -- something which is not currently being implemented.

Education in the Southern Region was instituted by Christian missionaries, commencing with the arrival of the Verona Fathers in 1848. The southern provinces were annexed to the Sudan in 1869, and never came under the control of the followers of the Mahdi. The missionaries, and later the colonial administrators, became sympathetic to indigenous-language schooling, and gradually settled on the pattern of bilingual education starting in the local language followed by a shift to English in the third year. In 1928 a conference at Rejaf agreed to concentrate on developing materials in nine of the larger languages: Dinka, Bari, Nuer, Shilluk, Lotuho, Zande, Moru, Ndogo and Kresh. Considerable development of reading materials went on in the 1940s, especially after 1946 when the mission school system of the South expanded rapidly with the aid of heavy subsidies from the colonial government.

Languages beyond those on the Rejaf list were used in some mission schools in districts where none of the officially promoted ones were spoken: Toposa in the Eastern District of Equatoria Province, Moru, in the Moru district, Ndogo in the southern half of the Western district of Bahr al Ghazal, and Kresh in the Boro Valley further north. Also, reading in Acholi was promoted through books in that language produced in Uganda.

After independence the national government sought to limit the use of English as a medium of instruction. The apparent plan, never

fully implemented, was to allow some initial literacy training in indigenous languages, using materials written in modified Arabic alphabets, as a bridge to Arabic-medium schooling. The policy-makers did not regard reading in local languages as an end in itself and planned to diminish the time devoted to practicing it.

During the unrest after 1965, schooling was nearly non-existent in the Southern Provinces. A few all-Arabic primary schools were kept open in some of the towns and one secondary school in Malakal. In areas not tightly controlled by the government a limited number of two-year indigenous-medium schools operated without formal school facilities.

Educational Research and Innovation

The formal language research in the Sudan most relevant to educational planning is the investigation of patterns of multilingualism conducted by the Institute of African and Asian Studies of the University of Khartoum.

A study of knowledge of Arabic among the Fur (Jernudd, 1966) showed several factors to be operating there which are probably generalizable to a great extent to other non-Arab groups: women generally do not know Arabic; younger men know more Arabic than their elders; less Arabic is known in the more inaccessible regions.

The Ministry of Education of the Southern Region of Sudan has a contract with the Summer Institute of Linguistics under which local personnel will be trained to produce pre-primers, primers, and post-primers in indigenous languages. At a later stage the project is also to produce bridge materials to guide the students from their home language into the learning of Arabic, as well as produce comparable materials for

English. Work on Dinka, Nuer, Bari, Shilluk, and Lotuho started in May 1977. Four languages were to be started in April 1978: Moru, Ndogo, Kresh, and Zande. After sufficient linguistic research has been conducted on them, still other languages are to be added to the project. Fourteen are specified as prospects, although it is apparently felt that further study might readjust priorities. Clearly the regional government intends to foster bilingual programs involving initial literacy for language groups far smaller than those that were earlier provided for.

Resources

The principal institution is the Sudan charged with conducting research related to language is the Institute of African and Asian Studies (IAAS) of the University of Khartoum, directed by Dr. Yousif Fadl Hassan. The Institute is planning a survey of language use in the Sudan. Key personnel there include Dr. Sayed Hamid Hurreiz, who is interested in the sociolinguistic aspects of language use and planning, Dr. Herman Bell, an expert on Nubian languages and concerned with the problems of language interference, Dr. James Dahab Gabjanda, a Southerner who is interested in language education, and Dr. Yousif al Khalifa Abu Bakr, an expert on the use and teaching of Arabic in Southern Sudan.

The University's Faculty of Education trains higher secondary schools teachers. On the faculty are Dr. Hamad al-Nil al Fadil, who is interested in the problems of underachievement, and Ustaz Mandour Ahmed al-Mahdi. Mohamed Osman Kambol, Lecturer at the University is interested in the problems of Arabicization and language teaching.

The Balkl al Ruda Teacher Training Institute is in charge of training junior secondary school teachers.

Dr. Mohamed Kheir Osman and Sayed Mohamed al-Tom al Tigani, officers of the Sudanese Socialist Union, are responsible for coordination of the Union's efforts with the executive branches of the Government. Dr. Osman, former Minister of Education and presently in charge of the Union's Adult Education Department, is interested in educational policies and planning. Mr. al Tigani, former Undersecretary at the Ministry of Education, is concerned with government plans for abolition of illiteracy.

Dr. Matthew Ubur is the newly appointed Minister of Education, of the Southern Region of Sudan which is currently engaged in implementing bilingual education in the South and is studying the feasibility of making one of a number of vernaculars the medium of instruction at the elementary levels. Even though there has been a recent change in government the new regional ministry has expressed interest in collaborating on a research project. The linguistic and literacy research in Southern language mentioned previously is under the local direction of Ed Warnock of the British branch of the Summer Institute of Linguistics. Oshari Mahmud, trained in sociolinguistics at Georgetown University, is participating in the IAAS survey of language use with special responsibilities for the South.

The Sudanese Government could provide personnel, transportation within Sudan, and other assistance for a project which is of immediate relevance in Government planning efforts. The Ministry of Education in the Southern Region's wholehearted support for indigenous language schooling seems favorable for studies of the effect of vernacular education programs.

The Curriculum and Textbook Section of the Ministry of Education in Khartoum would probably cooperate in such a study. The Ministry's Publications Bureau could provide samples of reading materials for children. Reports and figures on education are available from the Ministry's Department of Documentation and Statistics, and the Sudanese Department of Statistics can provide data on population and economic and social factors.

INDIA

Estimated Population 1977: 622,700,000

General Overview of the Language Situation

India's 1,266,600 square miles contain three main geographic regions: the high Himalayan mountain wall bounding the country on the north; the flat Indo-Gangetic Plain; and the Indian peninsula which includes the southern tableland of the Deccan Plateau. Chains of low mountains and hills lie roughly west to east across central India and along the peninsular coasts. Desert and arid regions in west-central India contrast with heavy forestation in eastern areas and elsewhere. The coastline stretches for some 3,500 miles.

Population density is heaviest in the Indo-Gangetic Plain and along the coasts of the peninsula, particularly the southern tip. Heaviest state densities occur in Kerala and West Bengal, and the territory of Delhi has the highest concentration of any administrative division. Lowest densities occur in the northeastern areas along the Burmese border, the desert regions of Rajasthan in the northwest, and in north-central India between the Indo-Gangetic Plain and the actual peninsula of India lying south of the Nerbada River. In 1971 about 20% of the total population was identified as urban, residing in a total of 2,641 town or city agglomerates.

1,652 languages were reported as mother tongues in the 1971 census. The vagueness of the criteria and the slipperiness of many of the linguistic designations used account in part for this huge

number. Some purported languages had only one speaker. Most of the significant Indian languages exist in a number of different dialects that are distributed among the population according to complex patterns of geographic, social and religious differentiation. According to the 1961 census, the languages spoken by more than 97% of the population belong to two great language families: Indo-Aryan and Dravidian. Indo-Aryan, spoken by 73% of the population, dominates north India, and Dravidian, spoken by 24.5% of the population, dominates the south. Schedule VIII of India's Constitution, ignoring the difficulties of meaningful discrimination, established fourteen Indian languages for official use in state administration. English was to be the main language of the central government until its planned replacement by Hindi.

India, the world's second most populous country, with 15% of the population of the world living within its borders, unsurprisingly presents an extremely complex language picture. The language situation in India, however, is one of the most extensively and earliest studied from the scientific perspective of linguistic geography and sociolinguistics. The language picture given in Grierson's (1894-1927) monumental Linguistic Survey of India, is summarized (77):

Language Family	Speakers	Languages	Dialects
Austriac	3,052,046	7	14
Tibeto-Chinese	1,984,512	116	86
Dravidian	53,073,261	16	23
Indo-European	231,874,403	38	402
Unclassed	101,671	2	19
Total	290,085,893	179	544

Das Gupta (1966, 34) characterizes the present situation in India as there being 1,652 mother tongues with 87% of the population (91% in Ishwaran, 1969, 125) speaking one of the 14 major regional languages. 2½% of the population speaks English, 223,000 of these having English as their mother tongue (Das Gupta, 1966, 38). The 1971 census includes 115 distinct languages in the 281 entries for groups with over 5,000 speakers. The number of smaller groups is considerable. Some tribal areas are not well explored linguistically, and more languages may yet be found.

Kachru (1977, 2-5) ("English and the Language Policy for a Multilingual Dinosaur: India's Case Reconsidered," Preliminary version of a working paper for the workshop on "Language Policy: An Integrative Perspective," University of Illinois at Urbana-Champaign, March 8, 1977) describes four historical phases of Indian governmental language policy. The first phase was directed to producing and maintaining a standardized form of spoken Sanskrit, from about the fourth century B.C. to the Islamic period, when the second phase came with the Persian conquerors as their language became the language of government and prestige until about 1838. The third phase is related to the British colonization of India (having its origins in 1600 with Elizabeth's charter to the East India Company) when English became the educational medium of instruction and governmental administration. Indian independence in 1947 marked the beginning of a fourth phase, and there have been a number of attempts to clearly relate the roles of the peoples' mother tongues and English in the various stages of this phase.

Although national policy at the time of independence called for making Hindi the recognized language of public life throughout the country, English has been retained as what is called the "associate official language."

Fifteen languages (Sanskrit and 14 asterisked in Table J) all having strong literary traditions, are given official status by the Indian constitution. Those languages listed from Telegu to Assamese are the administrative and educational languages of the states in which each predominates. Bengali serves for Tripura. After independence, states were reorganized with boundaries largely following lines of linguistic demarcation rather than accidents of past conquests.

The ordinary administrative language and medium of instruction of Jammu and Kashmir is Urdu, even though Kashmiri has a substantial literary tradition. Sindhi is a regional language of Pakistan. Sindhis in India are not concentrated in any administrative area, but have a strong communal literary and educational tradition. English is the state language in Meghalaya, Nagaland, and newly annexed Sikkim. It also serves the Union Territories of Arunchal Pradesh, Mizoram, and the Andaman and Nicobar Islands. Manipuri is used administratively in Manipur. In Goa, the Konkani dialect of Marathi, alternatively viewed as a separate language, serves for official purposes.

Hindi and Urdu do not constitute distinct languages, as is commonly thought, but may perhaps best be thought of as distinct facets of a greater speech community. The ordinary speech of the masses who are usually said to speak Hindi (or Urdu) lacks many of the characteristics associated with either Hindi or Urdu in the grammars of these languages. The Hindi spoken by illiterates more often resembles

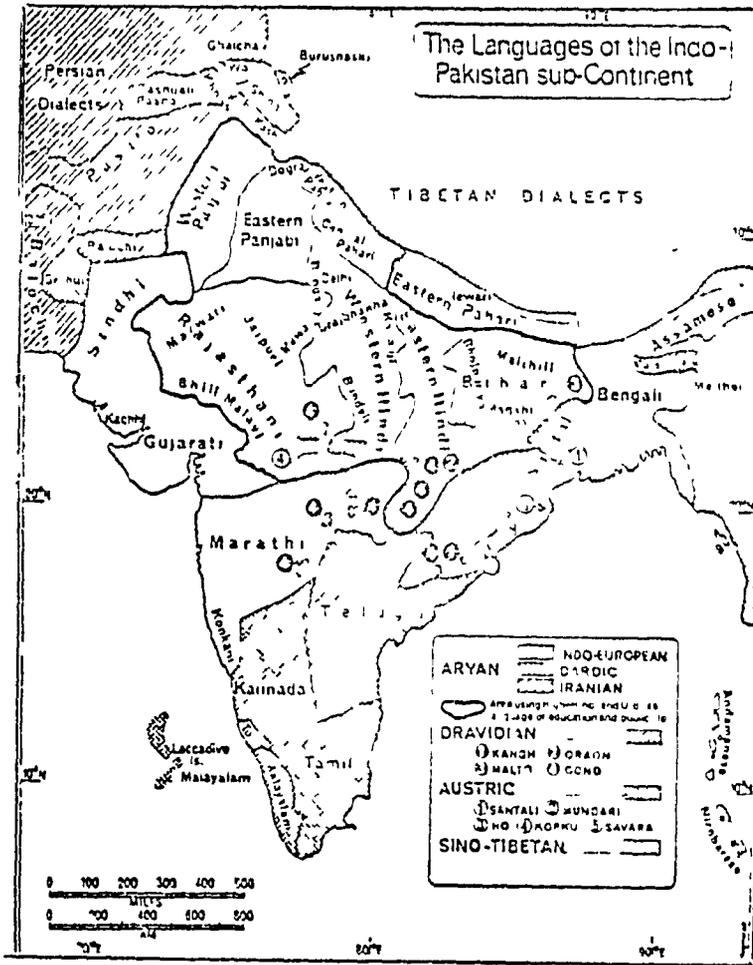
Table 1
Principal Languages of India

<u>Language</u>	<u>Family</u>	<u>State with Greatest Concentration</u>	<u>Number</u> (First Language)	
Hindi and Urdu	Indo-Aryan	Uttar Pradesh	118,000,000	18.54
[Hindi] *			83,800,000	13.17
[Urdu] *			34,200,000	5.37
Telegu *	Dravidian	Andhra Pradesh	51,600,000	8.11
Bengali *	Indo-Aryan	West Bengal	51,500,000	8.09
Marathi *	Indo-Aryan	Maharashtra	50,400,000	7.91
Eastern Hindi	Indo-Aryan	Uttar Pradesh	44,000,000	6.9
Tamil *	Dravidian	Tamil Nadu	43,400,000	6.82
Bhojpuri-	Indo-Aryan	Bihar	39,200,000	6.15
Gujarati *	Indo-Aryan	Gujarat	29,800,000	4.69
Rajasthani	Indo-Aryan	Rajasthan	26,000,000	4.1
Malayalam *	Dravidian	Kerala	25,300,000	3.98
Kannada *	Dravidian	Karnataka	25,100,000	3.94
Oriya *	Indo-Aryan	Orissa	23,400,000	3.68
Panjabi *	Indo-Aryan	Punjab	22,900,000	3.6
Maithili	Indo-Aryan	Bihar	19,100,000	3.0
Magahi	Indo-Aryan	Bihar	11,750,000	1.85
Assamese *	Indo-Aryan	Assam	10,400,000	1.63
Santali	Munda	West Bengal	4,350,000	.68
Kashmiri *	Indo-Aryan	Jammu & Kashmir	2,800,000	.44
Bhili	Indo-Aryan	Madhya Pradesh	2,750,000	.43
Mundari	Munda	Bihar	2,190,000	.34
Sindhi *	Indo-Aryan	Maharashtra	1,930,000	.30
[West] Pahari	Indo-Aryan	Himachal Pradesh	1,820,000	.29
Gondi	Dravidian	Madhya Pradesh	1,800,000	.28
Garhwali	Indo-Aryan	Uttar Pradesh	1,660,000	.26
Kumauni	Indo-Aryan	Uttar Pradesh	1,600,000	.25
Nepali	Indo-Aryan	Uttar Pradesh	1,490,000	.23
Kurukh	Dravidian	Bihar	1,430,000	.22
Tulu	Dravidian	Karnataka	1,335,000	.21
Manipuri	Tibeto-Burman	Manipur	915,000	.144
Bodo	Tibeto-Burman	Assam	645,000	.102
Garo	Tibeto-Burman	Meghalaya	535,000	.084
-Khasi	Austro-Asiatic	Meghalaya	431,000	.068
Tripuri	Tibeto-Burman	Tripura	422,000	.066
Kui	Dravidian	Orissa	398,000	.064
Korku	Munda	Madhya Pradesh	352,000	.055
Lushai	Tibeto-Burman	Mizoram (Union Territory)	312,000	.049

the other local languages than it does official Hindi (Das Gupta, 1966. 47). Hindi and Urdu speech is more similar than speech between "touchable" and "untouchable" Hindus in the same village (Das Gupta, 1966. 46).

The basic stratum of speech is perhaps best called Hindustani, as Gandhi called it. He crusaded to make this language the national language, and even though he lost, the fact that Hindustani was "a popular rather than a literary form purged of undue influence of either Persian or Sanskrit" gave it a great deal of popular support. (The term Hindustani has also been used with several other meanings.) This Hindustani is called Hindi when it is written in the Devanagari script, has terms drawn from Sanskrit for all its technical vocabulary, and commonly employs figures of speech drawn from the Hindu tradition. When the same basic language appears in a modified Arabic script, with its elevated vocabulary derived primarily from Persian together with appreciable elements of Arabic, and phrased with some Islamic cast to its ethos, it is called Urdu. A puristic and Sanskritizing tradition has influenced the standard Hindi of the present to the extent that it is often not understandable to a villager who speaks a Hindustani dialect.

The figures in the table for languages not in Hindi-dominated areas (see Figure 1) are based on proportions given in the 1971 census, extrapolated to account for presumed population growth up to 1977. For the areas where Hindi is the state language, much older percentage estimates have been used. The official position in India has been that the three languages of the state of Bihar (Bhoj -- commonly called



Bhojpuri, Maithili, and Magahi) and what is here called Eastern Hindi are dialects of Hindi, although they are, in fact, the products of a clearly different linguistic history. There is no good substitute for the name Eastern Hindi, which is also called Kosali, Chhatisgarhi-Awadhi, or Oudhi, or for any of these major dialect names separately. In the area of these languages, and also of Rajasthani and Punjabi, there has been a strong tendency to count oneself a Hindi or Hindustani speaker even when that represents a second language ability which is merely moderate. The phenomenal increase in returns for Magahi from 2.8 million on the 1961 census to 8.5 million for 1971 does not reveal anything about language growth, but only the greater willingness of respondents to classify themselves as -- and enumerators to list them as -- primarily speakers of this local vernacular. It has been presumed here that they were still appreciably under-counted in 1971.

The number of speakers of Hindi as a first, or additional, language makes these speakers the "single largest market" for linguistic consumables. Many books originally written in one of the other languages of the subcontinent are translated into Hindi as are a large number of films and popular songs. (Area Handbook, 147).

Newspapers in India are published in English, the 15 recognized literary languages, and 27 other languages or separately standardized dialects. Only English with 25% of the circulation and Hindi with 19% are of major national importance as languages of the press. The larger readership of English language newspapers, in spite of the fact that there are more newspapers printed in Hindi than there are in English,

may reflect the fact that English use is a major status symbol (Area Handbook, 148).

Bilingualism in India may be somewhat underestimated because of the census department's peculiar practice of listing no more than two languages as "also known" and then tabulating only the first. Still, most Indians are monolingual. It was earlier believed that less than 7% of the population knew a language other than their mother tongue (Das Gupta, 1966. 38) in a country where no one region or province has all of the communal groups speaking the regional language. Multilingualism as well as a knowledge of English (common among Indians abroad) appears to be an elite phenomenon. However, the fact that the Indian elite know their mother tongue, a regional language, Hindi, English, one of the ancient religious languages (Sanskrit, Arabic, or Persian), and one or more additional Indian or world languages, may be an indication of one of the conditions of upward mobility in Indian society. In the present situation, admission to upper class status and occupations requires English language skills with the regional language elite functioning as a middle class (Ishwaran, 1969. 137).

The major present use of communal organization with regard to language in India, is (Ishwaran, 1969. 140) Hindi and non-Hindi, Hindi and Hindi variants, Hindi and Hindustani, and Dravidian and Dravidian.

Patterns in Urban-Rural School Population

Precise figures on school children receiving education by areas are not readily available, and even the data at hand on enrollment is not consistent. The World Bank (1976, Figures on Education) gives the comparative adjusted school enrollment ratio for 1960 and 1970 as 42% and 79% for primary and 10% and 28% for secondary schools. While the United Nations (U.S., 1975, 85) suggests that considerably fewer than 60% of the students were enrolled in school, characterizing the 6-11 year group as 40% not in school and working and the 11-14 year group as 65% not in school and working; yet, the same source states that in 1965, 60% of those 6-12 year groups were enrolled.

In spite of an absence of data about the percentage of school-age children actually enrolled in schools by area, there is much that can be determined about the relative efficacy of the rural and urban educational situation. In urban areas which have the total number of grades, 57% of these schools teach all of the grades or classes; only 49% of the rural schools teach all of the grades (UNESCO Statistical Yearbook, 1972). Even more revealing is the fact that in 1966-67, approximately 95% of all educational institutions were in rural areas, but only about 70% of the school enrollment was there. An even smaller percentage -- about 62% of the teachers were in these rural areas, at least indicating a worse student to teacher ratio in rural schools (BC Restricted Educational Profile of India). With the nationwide teacher to student ratio 1 to 39, this means that it is 1 to 31 in urban areas, but 1 to 44 in rural areas. Additionally, in

the least densely populated state, Nagaland, approximately 71% of the teachers are untrained while in Delhi, only .01% are untrained.

The areas of the country with the highest literacy rates, Chandigarh (61.56%), Kerala (60.42%), Delhi (56.61%), and Pondicherry (46.02%) are also four of the areas with the greatest concentration of urbancy. Haryana, the state around Delhi has a literacy rate of only 26.89%, and Punjab, the state around Chandigarh, only 33.67%. Generally speaking, the literacy rate and the density of population (and perhaps urbancy) are directly proportional (Area Handbook, 94, 250).

Even where education is available in rural areas, the schools generally teach only fundamental subjects -- reading, writing, and arithmetic, while urban schools may have a full range of courses. The reduced literacy rate is explainable in rural areas by the fact that most students do not complete four years of school, "the minimum for ensuring permanent literacy (Area Handbook, 239)." The disadvantaged education of the rural poor is compounded for rural females since most girls after the age of 10 are needed to help with household tasks. This is further compounded by the lack of women teachers in rural areas, and conservative rural families are reluctant to have their daughters taught by men in a co-educational context (Area Handbook, 234).

The Educational Situation

Throughout the history of India, education has primarily been for the wealthy following an elitist pattern. Early on, the sons of Brahman families were brought to literacy by Brahman gurus, and there were advanced institutions akin to universities. With the Muslim conquest came Muslim education -- also elitist -- in Persian and Arabic. The British colonists brought with them missionary education,

followed by a kind of westernized higher education where universities had academic and literary curricula with English as the medium of instruction. In 1885, education in India received more Indian input with the demands of the Indian National Congress that less traditionally academic programs of instruction be started with more emphasis on technical and vocational subjects. But even today, the entire course of study in Indian education is not directed to the practical, even in certain vocational training institutes (Area Handbook, 251-4).

In the present education system, the Ministry of Education of the Central Government sets national plans, which some describe as suggestions, but the states are constitutionally free to follow their own educational systems. Frequently, the allocation of funds is to states which conform to the national plan (BC Restricted Educational Profile, 1975). The most widely followed schemes are shown in Figure 2 (Area Handbook, 237), which shows a general scheme of 12 years of public education with two to five years of elementary school, two to four years of middle school, followed by two to five years of secondary education. Two of the states, Assam and Nagaland, have proposed preprimary school enrolling 327,300 in 1971. Other Indian children who go to preprimary school are almost exclusively from the urban wealthy population.

On a national basis, educational data is as hard to gather as the figures on school children receiving education by areas. The following information is an example of the inconsistency of information,

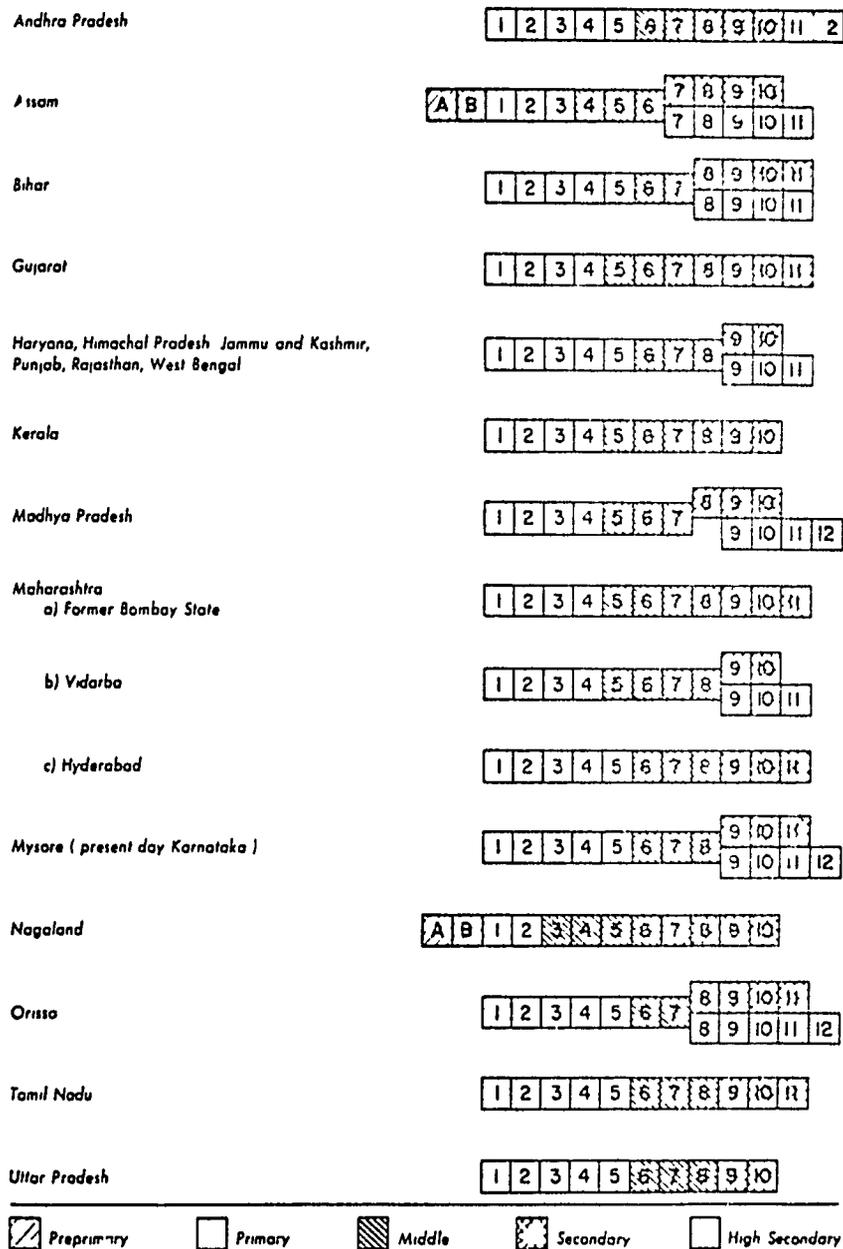


Figure 2. Pattern of Education in Selected Major States, 1970-71.
 (Source: Adapted from A. Biswas and J.C. Aggarwal, Education in India, New Delhi, 1971, pp. 157-158; and India, Ministry of Education, Report of the Education Commission, 1964-1966. Education and National Development, New Delhi, 1966, p. 26.)

most of it coming from the British Council sources, although the information for 1973 is from the Area Handbook (viii) and that for 1975 from the United Nations Educational Statistics except where

	<u>1971</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
<u>Preprimary</u>				
enrolled	327,800		445,165*	
<u>Primary</u>				
total enrolled	72,651,000	87,000,000	99,600,000	66,000,000
female enrolled	26,313,000			
(dropout estimated at 62%)				
# of schools	493,000			
teachers	1,723,000			2,560,000
female teachers	409,000			
trained staff	83.3%			
<u>Secondary</u>				
enrolled		10,000,000		24,900,000
(dropout estimated at 56%)				
<u>Higher Education</u>				
enrolled		4,000,000		2,230,225

*United Nations! Educational Statistics

Clearly, there is an inconsistency in the 1975 primary enrollment figure.

Nationwide, the British Council estimates that 1% of preprimary-age children (5 years old) are in school, that 83.9% of grades one to five (6-11 years old) are in school, 35.6% of grades six to eight (11-14 years old), and 22% of grades nine to eleven (14-17 years old), with 4.4% of appropriately aged students in higher education. The 1968-69

breakdown by sexes of those enrolled 6-11 year-olds is 93% of the boys but only 57% of the girls.

Although the Constitution demands free and compulsory education for all children aged 6-14, and the early target date for achieving this was 1960, universal education for 6-10 year olds was moved up to 1976 and for 11-14 year olds to 1981. It is unlikely that the 1976 target was reached. In spite of a large percentage of children age 6 to 14 starting school, the dropout and repeat rate is high (Area Handbook, 233). Various estimates of the dropout rate range from 60% by fifth grade, to 75% by eighth grade, to 92% by tenth grade.

In rural elementary schools, the pattern is frequently all grade levels being taught by one teacher since most villages of 300-400 people have but a single teacher (BC, Restricted Education Profile, 1975), and the curriculum is limited to reading, writing, and arithmetic. In the urban schools, there is a full program of study "including science, geography, history, physical education, hygiene, arts, and crafts (Area Handbook, 239)."

Secondary education follows a number of different models according to the state as does elementary education. However, secondary education has almost exclusively been directed to the needs of the upper classes and castes. In 1970, only 20.4% of the potential students 14 to 18 were enrolled in secondary schools. Secondary schools require the payment of fees, and the quality of secondary education is frequently substandard. Although there is vocational training in the secondary schools, most students are directed to preparation for universities or colleges.

University and college educations are seen as an element of social mobility, but low passes on final examinations often lead nowhere, and there is a great deal of unemployment among university educated students who achieve only a low pass. Generally, there is a three-year degree program.

Although the Constitution guarantees free, mother tongue medium of instruction for all Indians aged 6 to 14 this is hardly practical in a country of such linguistic diversity. There are, however, special sections in schools at the primary and secondary levels in which content subjects (e.g. science and math) are taught through the mother tongue of the minority students (e.g. Telugu, Tamil, Hindi, Urdu in Karnataka or Bengali, Hindi, Gujarati or a Dravidian language in Bombay) (Braj Kachru, pc). Nevertheless, bilingual education in India is found principally in only urban, marginal, and elite settings. Like bilingual education, bilingualism in India is found mainly in these same settings.

Cities are often linguistically complex. Minority groups may have part of their education in their own and part in the regional language. Teachers are available who can teach in English, or in Hindi where this is not the language of the state. Numerous patterns of multilingualism in a school program may be found, with little consistency in a single city, less in the whole state.

Small groups essentially outside the dominant social system learn the languages of their more powerfully situated neighbors. Tribal groups in marginal positions have, to some extent, been the

beneficiaries of bilingual education provided by Christian missionaries in English and a local language.

A form of elite bilingual education in Hindi and English exists in special schools provided for children of civil servants who may be posted to districts remote from their home areas.

Most rural education is monolingual in the prescribed language of the state. There are many groups for which a form of transitional bilingual education would seem to be an asset before becoming immersed in the required medium of the local school system, but measures to provide for them do not seem yet to be contemplated. Perhaps the survival of the Sanskritic tradition in which one first memorized a text and then began to learn what it meant may make embarking on the educational process in a strange medium seem more natural in India than in many other countries.

Presently the national guideline regarding language and education is characterized as the Three Language Formula. Initial schooling is to be in the predominant regional languages for the first three grades, then phasing into Hindi, or learning a second Indian language in Hindi-speaking areas, for the next three or four years. English language instruction begins around the sixth or seventh grades, and is the language of the elite secondary educational system. English is also the language for most modern subjects in higher education. In those schools where Hindi is not the medium of instruction, the second Indian language normally would be Hindi. In Hindi-medium states, containing 45% of the population, a Dravidian language would be expected

to be offered. Since education is a state matter, the details are to be worked out at the state level, but this formula, especially in the non-Hindi states, has not met with an enthusiastic response (Braj Kachru, pc).

In India, multilingual education entails a multiplicity of graphemic systems, very much complicating the entire question of mother tongue education and literacy instruction. The typical situation finds a person forced to learn three or four writing systems: Devanagari for Hindi or other Indo-Aryan languages, Perso-Arabic for Urdu, a different script for a Dravidian language, and the Roman alphabet for English. In planning literacy, the questions of scripts raises several problems which are related to the concepts of role and function with dual dimensions to the problem, pedagogical and attitudinal (Kachru, pc).

The most obvious sectors of the population which do not fully participate in government sponsored education are the scheduled castes and tribes. In the 1971 census (Hiro, 1975. 15), out of a total population of 548,000,000, there were 80,000,000 members of scheduled castes, the Harijans or untouchables, and 38,000,000 were members of 592 tribes (Ishwaran, 1969. 146), still living tribal lives. Reasons for non-attendance in schools among the scheduled castes tend to be expressed in economic terms, i.e., the lack of money for supplies and proper school clothes, and the fact that the child of eight can begin to earn money to help the family (Hiro, 1975. 11). The scheduled tribes which have had access to any education at all, have been educated

largely by missionaries who have taught them to read and write their own languages in Roman script.

It is interesting that in a number of instances, the regional language medium of instruction is not the mother tongue of the majority of students in a particular school. For example, in Kashmir, where Urdu is the state language, there were only 12,617 mother tongue Urdu speakers or .35% of the state population with the figure growing to only 12,740 or .28% of the state population in 1971. Notwithstanding this fact, the State Ministry of Education has a bilingual Urdu-English program of instruction because there is a strong "urge for identification with an external (non-Kashmiri) Urdu-speaking speech community" and because of "the negative attitude of Kashmiris toward their own language and cultural traditions (Braj B. Kachru, 1977. "Linguistic Schizophrenia and Language Census: A Note on the Indian Situation," Linguistics 186, pp. 17-32. Mouton Publishers)."

In spite of the central government policy stated in the Three Language Formula, the execution of the policy is ultimately determined by India's elite, who tend to overlook undesirable aspects of the formula since "the training of an educated class in regional languages has the effect of limiting their physical and vocational mobility," preferring instead to generally be educated in English and Hindi. (Area Handbook, 142).

Generally, poverty, poor attendance, crowding in the schools, inadequate texts and equipment, compounded by teaching techniques which depend on rote memory, work together to augment the dropout rate, as well as the failure and repeater rate. Innovation in education is

slowed because there is little cross-fertilization by innovators in different states. The low quality of teaching is reinforced by low pay, low status for teachers, training which is academic rather than pedagogic, and a system which rewards seniority but not merit. The curriculum of the schools is not attractive to most students since little attention is given to developmental needs which students recognize. The absence of any student-centered teaching concern and the rigid exam system which encourages cramming but not attendance are additional elements of non-productive education for most students.

Educational Research and Innovation

Considerable work has been done on multilingual education in India, especially at the Central Institute of Indian Languages since its inception in 1969. The Vedchi Ashram in the Surat District, Gujarat, a Gandhian basic school, has been doing interesting work among tribal people for the last 50 years (Ishwaran, 1969. 146). The National Council of Educational Research and Training, New Delhi, sponsored Nawal Kishore Ambast's A Critical Study of Tribal Education (with Special Reference to Ranchi District) which was published in 1970.

Other reports concerning different elements of education are:

- (a) Dr. L. R. N. Srivastava's Identification of Educational Problems of the Saora of Orissa (1971).
- (b) J. P. Naik, Elementary Education in India (1975).
- (c) P. R. G. Nair, "Effective Cost of Primary Education in India" (1976).
- (d) S. Saxena, Sociological Perspectives in Indian Education (1975).

- (e) Sharma and Serpra, Wastage and Stagnation in Primary and Middle Schools in India (1969).
- (f) P. D. Shukla, Changing Facts of Indian Education (1973).
- (g) The Report of "The National Conference on Action Programmes for Reducing Wastage and Stagnation at the Primary Level" (1970).
- (h) The Report on "The National Seminar on Wastage and Stagnation" (1968).

However, the most productive studies of the educational system in India with respect to impact on the system began with comprehensive reviews by the University Education Commission in 1947, the Secondary Education Commission in 1954, and the Indian Education Commission in 1964. (Naik, Dr. Chitra. Educational Innovation in India, Paris, the Unesco Press, 1974). These studies suggested that the major needs of the system were: (a) effective universal elementary education for children 6 to 14, (b) improvement of standards, (c) curricula changes to point the education system beyond elitist goals, and (d) improved educational administration and planning. These needs are characterized as the motivation behind most educational innovation through the 1970s. Naik (1974, 5-42) has described eight relevant innovations which follow.

The School Improvement Movement in Tamil Nadu initially addressed the problem that most of the rural children in India suffer chronic hunger. In 1956 a candidate for locally supplied lunches or snacks at school was found for a pilot project, the state joined the community effort in 1957 with the contribution of additional food, and the project was launched in 1958 in the National Extension Service Block of Kadam-battur. Following 1958, additional community donated services came to the educational program in the form of elementary school buildings, painted blackboards, libraries in each school, sanitary facilities, and a pure supply of drinking water. Increasingly there was the

donation of land, buildings, equipment, and uniforms (especially for the girl students). These facilities increased enrollment, attendance, and the quality of education. From the pilot project, the plan spread through the state, and the community element was generally boosted by public acknowledgement of donations and the competition between donors that this sparked. The next step incorporated a system of free textbooks and a textbook "bank" which became popular. The quality of teaching was improved initially by the added feeling of job satisfaction the teachers received in teaching in an environment where enrollment and attendance improved. Meals ultimately came from the community, the state, and CARE establishing a model for utilizing funds from local, state and outside sources.

More and better low-cost school buildings are a major need in Indian education, and the Ministry of Education with the Central Building Research Institute (CBRI) in Roorkee established a National School Building Development Group to address the problems of funding, finding appropriate building materials, and designing educationally functional and community acceptable school buildings within the limits of available materials. Initial construction in the Goa, Punjab, Kerala and Tamil Nadu have led to an overall space economy of 12 to 20%, but there is some community resistance to some of the designs. In 1974, Uttar Pradesh gave CBRI 50,000,000 Rupees for school construction.

The Gram Shikshan Mohim (village education movement) undertook a major literacy education project in Maharashtra state with volunteer teachers (products of the course) doing

most of the instruction in a project where "the real cost per adult literate works out to more than 2 Rupees."

Inexpensive preschool centers have been formed since 1971 to address several of the problems of rural education. The major areas where these are operating are Maharashtra and Tamil Nadu where the emphasis has been on local effort and low cost. The preprimary program is designed to prepare the four and five year olds for elementary education, to show them that school is a positive supportive environment, and to supply the children with a mid-day meal.

A Staff College has been founded to improve the quality of administration and planning.

The Central Institute of Indian Languages was founded in 1969, following the Government's 1968 Resolution on Language Policy to bring life into Indian language teaching and to provide reforms and assure their implementation in this area. To implement the Three Language Formula, the Institute conducts four regional centers, providing 10-month intensive training in the regional languages to teachers. The Institute also has responsibilities in the area of material preparation as well as teacher training and research.

The Indian Council of Social Science Research became an autonomous body in 1969 supporting research undertaken in universities and directing consumers to the knowledge gained in these studies.

Since 1962, with assistance from USAID, there has been an increased concern for individualized instruction as a partial answer to the problems of educating the rural poor. Maharashtra has been interested in this work since 1964, with Poona and Bombay being centers for material development work and pilot projects.

The Ministry of Education and Social Welfare's 1974 Main schemes of nonformal education in the Fifth Five-Year Plan details plans for nonformal education for nonschool-going children in the 6-14 age group, nonformal education for youth in the 15-25 age group, and functional literacy linked with development schemes. The major features of the plan for the 6 to 14 age group were part-time instruction for the children who could not attend school full-time, multiple entry into elementary school for older children, and remedial programs for dropouts.

Resources

The ideal person to coordinate any in-country study in India would be Dr. D. P. Pattanayak (an Oriya speaker), Director of the Central Institute of Indian Languages (CIIL) in Mysore. His Center has done excellent work and he maintains excellent relations with the Ministry of Education in New Delhi. In addition to his educational qualifications, a doctorate in linguistics, his major interests are mother tongue education. Dr. E. Annamalai (Tamil), Assistant Director of CIIL, has a doctorate in linguistics and his interests are mother tongue education and reading. W. W. S. Bhasker (Kannada), of the Department of English, Bangalore

University, holds an M.A. degree and is interested in curriculum design, teaching methodology, and materials development. Dr. H. S. Gill (Punjabi), Head of the Department of Anthropological Linguistics, Punjabi University, Patiala, has a Ph.D. and is interested in language and culture as well as mother tongue education. Dr. Ashok Kalkar (Marathi), Professor, Deccan College, Poona-6, works primarily in applied linguistics and Marathi linguistics. Dr. Bh. Krishnamurti (Telugu), Head of the Department of Linguistics, Osmania University, Hyderabad, has a doctorate in linguistics and expertise in mother tongue education. K. V. Narayana (Kannada), Department of Kannada, Bangalore University holds the M.A. degree in language and literature. Dr. H. Nayak (Kannada), Director of the Institute for Kannada Studies, Mysore, has a Ph.D. in Kannada language and linguistics. Dr. Gopal Sharma (Hindi), Director of the Central Institute of Hindi, Agra, is concerned with the teaching of Hindi and multilingualism. Dr. R. N. Srivastava (Hindi), Head of the Department of Linguistics, University of Delhi, is primarily interested in multilingualism and stylistics. Vanamala Viswanath (Kannada), Foreign Languages Unit, Indian Institute of Science, Bangalore, has an M.A. and extensive experience in the production of televised language teaching material, especially for teaching Kannada as a first language. Dr. L. R. N. Shrivastava, Field Advisor, Department of School

Education, National Council for Education, Research and Training, has exceptional knowledge of classified tribes.

Working in concert with these Indian authorities, Mr. Richard H. Herr, AID Affairs Officer and Mr. Balakrishnan, also of AID, are potential sources of support in the U.S. Embassy in New Delhi. Dr. Thomas Vrobalovich, Embassy Counselor for Scientific and Technological Affairs, is doubtful that the Indian Government would allow an internationally focused evaluation of multilingual education in India, but his doubts should be balanced against the assurances of interest coming from individuals such as Dr. Braj Kachru, Head of the Department of Linguistics, University of Illinois, an Indian native whose concerns encompass all areas of sociolinguistics in South Asia, bilingualism, and English in South Asia. S. N. Sridhar, presently a Ph.D. candidate in the Department of Linguistics, University of Illinois, has done much work in the area of language textbook preparation and psycholinguistics related to education in India.

The major institutional resources for conducting studies in India are the following. CIIL, directed by Dr. Pattanayak, is the main center for research on Indian languages except Hindi, and it has produced over 175 studies on various aspects of Indian languages. The Central Institute of Hindi, Agra, directed by Dr. Gopal Sharma, assisted by Dr. R. N. Sahai and Dr. Suresh Kumar focuses on the teaching

materials for this activity. The K. M. Munshi Hindi Institute, Agra, directed by Dr. V. N. Mishra, works on instructional materials and research in Hindi. The Department of Linguistics, Osmania University, Hyderabad, directed by Dr. Bh. Krishnamurti, assisted by Dr. Rama Rao, is primarily a teaching unit, but it is also seriously interested in the use of Telegu in Andhra Pradesh schools and the implications of this choice of language of instruction. The State Bureau of Textbooks, Department of Public Instruction, Karnataka State, Bangalore, does excellent work. The Language Development Project, Gilder Tank Municipal Building, Grant Road, Bombay, directed by Dr. R. S. Saraf, is supported by the Ford Foundation and primarily works with a Bombay focus. The Literacy Center, Lucknow, headed by Dr. Fisher, has done pioneering work in the introduction of literacy in India. The Institute for Kannada Studies, Mysore University Campus, directed by Dr. H. M. Nayak, does good work, as does the Institute for Kannada Studies, Bangalore University, headed by Dr. G. S. Shivarupdrappa.

Mr. Sethi, Deputy Secretary, and Dr. Ghadtachary, Assistant Educational Advisor, of the Ministry of Education have indicated in interest in helping facilitate cooperation in an international evaluation of multilingual education. All of the individuals listed from India are interested within the limits of their professional concern.

The National Council of Educational Research and Teaching, New Delhi, CIIL, Mysore, and the Literacy House, Lucknow, all are interested in the evaluation or education for the rural poor. USAID and the Ford Foundation already have heavy commitments in education in India and may be reluctant to be of added assistance, and the Wantamal Foundation as well as UNESCO are agencies which should be examined. Outside support would probably only be necessary for the international aspects of the study. The Indian government should be able to finance all local expenses. Interest on the part of the Indian government is prompted largely from the relatively large numbers of marginal peoples, in the classified tribes for example, who are not taught in their own primary language in school but who are not individually motivated to receive education in the regional language as the Kashmiri population is.

PHILIPPINES

Estimated Population 1977: 44,300,000

General Overview of the Language Situation

The Republic of the Philippines consists of about 700 inhabited islands lying between the South China Sea and the Pacific Ocean. The two largest islands, Luzon in the north and Mindanao in the south, make up 65 percent of the land surface of the country.

In many ways, the heartland of the country is the Central Luzon Plain extending northward 100 miles from Manila Bay. This is a low-lying region of wet-rice agriculture and the home of the Tagalog people. Even before the Spanish conquest the Manila area was a center for Chinese and Japanese trade with the Philippine and Indonesian archipelagos, and the only locale in the northern two-thirds of the country where political organization above the village level had started to emerge. Since the Spanish domain, the Manila region continues to be the economic center of the country.

West of the plain are the Zambales Mountains, just to the east of which live the Pampangans (among which live the Sambales). To the south-east, Luzon stretches out into the convoluted volcanic Bikol Peninsula, which divides the Tagalog- and Bikol-speaking populations.

Northern Luzon is divided into four main ecological zones. The western coastal strip is the Ilokano-region with Pangasinan at its southern end. The Cordillera was never subjugated by the Spanish, but continued to be a refuge for paganism (and headhunting). It is also the location of a very ancient terraced-rice-field agriculture. Many of the population, known mainly as Igorot, became converts to Christianity

(non-Roman Catholic) during the American period. Next, to the east, is the Cagayan Valley in which the Ibanag are the principal element in the population. The Sierra Madre along the eastern coast is a sparsely-inhabited and still rather wild region with a partly hunting-and-gathering population

The coast of the island of Mindanao, south of Luzon, has become largely a Tagalog area. The interior is inhabited by people who live on a technologically more primitive level.

The Visayas are a group of seven large, and numerous small, islands in the central part of the Philippines, containing about 30 percent of the people in the country. These islands make up 19 percent of the country's land surface. All have hilly interiors and some very fertile lowland areas. The groups here are all culturally similar and speak a set of closely related languages. The major ones are Waray to the east, Cebuano in the center, and Hiligaynon to the west. Intermediate-sized are Aklanon, Kinyarayan (Hantikón), and Masbate, and there are several smaller ones. The Visayas are involved in a great deal of inter-island shipping.

The large southern island, Mindanao, has an extremely complex topography. It was long isolated from the islands further to the north. For most of the colonial period Spain controlled only the northern coast. The Davao area was subjugated in 1847. The southwest was nominally annexed in 1878 but never under real control. For a long time the aboriginal peoples of the interior remained largely undisturbed. Later, considerable expansions of coastal populations occurred. The two largest Muslim groups, the Maranao and Magindanao, occupy largely areas that

were not theirs at the time of early European contacts. During the Spanish period, speakers of Cebuano already had migrated to the north coast. With American pacification their settlements extended to eastern, southeastern, and northwestern coastal regions so that they have become by far the most numerous ethnic group of the island today. Migrants from Cebu and many other areas of the country come to Mindanao today to take up the relatively available agricultural land of the Agusan valley.

The Sulu archipelago lies between Borneo and Mindanao. On Basilan, Jolo, Tawitawi, and the smaller islands, fishing and agriculture support the local population. This was the core area of the Sultanate of Sulu established around 1500, with the Tausog of Jolo as its dominant element. It included also the Zamboanga Peninsula of Mindanao and the northeastern coast of Borneo that faces towards the Philippines. At times it claimed to control most of the southern two-thirds of Mindanao. Until 1848 it was a rival to the Spanish government of the Philippines. In the 1600-1700s, it was probably more prosperous than the Manila government, because of its lucrative Chinese trade which supplied many sought-after commodities.

The 275-mile-long island of Palawan is considered the frontier area of the Philippines. It is sparsely populated with commercially-imported forests. The population includes coastal settlements comprised of people from the northern Philippines and Muslim areas as well as interior tribes that live on a primitive form of shifting agriculture.

The Republic of the Philippines has three official languages, English, Spanish, and Pilipino (which the variety of Tagalog used for official purposes has been called since 1959). Of these, English serves

for most government functions. Public documents are generally translated into Pilipino. Spanish is valued for the maintenance of the nation's cultural heritage.

The indigenous languages of the Philippines all belong to the Malayo-Polynesian family, and most are closely related and have numerous structural similarities. Approximately 70-100 distinct languages may exist in the country, although in a large number of cases, certain varieties may be close enough to be considered dialects of one language.

The first eight languages listed in Table I have long been known as the major languages of the Philippines. Among the eight, Cebuano and Ilocano, in addition to Tagalog, clearly have a preeminent place in that they are used considerably more than others in a written form and on the radio (Cebuano began to be used on television soon after the introduction of that medium to the country.)

The Philippines is one of the few countries with a long history of data-gathering on second-language capabilities. We may put reasonable confidence in data that indicate bilingual capacities in the population:

	<u>Percentage</u>
English	39.0
Tagalog/Pilipino	23.4
Spanish	3.2
Ilocano	1.8

While Arabic is studied among the 4.5 percent of the population in the South which is Muslim, most observers report that students seldom advance beyond rote learning, and very few gain a real command of the language.

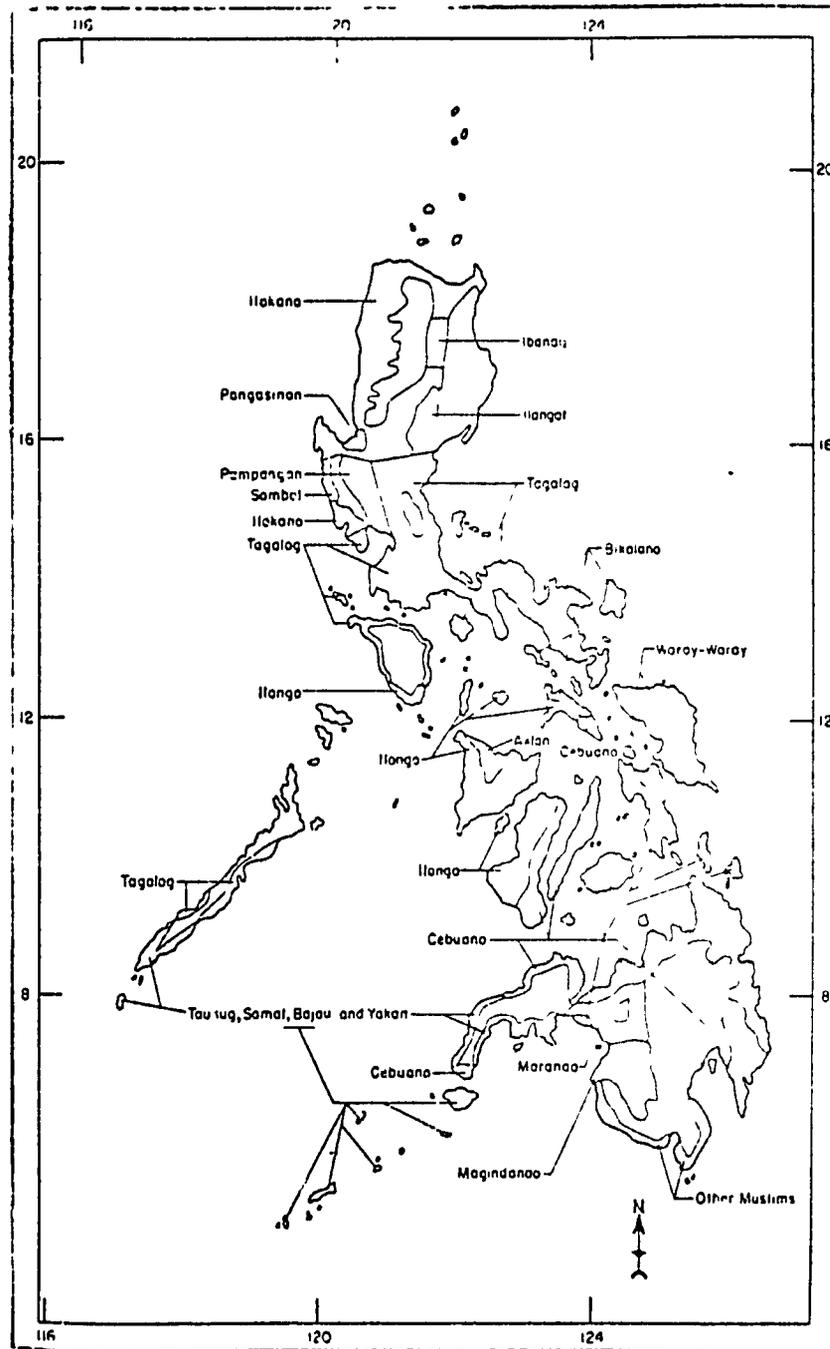


Figure 1 - Philippines, Cultural-Linguistic Map

Spanish is a legally required subject at the college level; the books studied include the writings of earlier Filipino leaders who wrote mainly in that language.

Table I

PRINCIPAL LANGUAGES OF THE PHILIPPINES
(First-Language Speakers)

<u>Language</u>	<u>Number</u>	<u>Percent</u>
Cebuano	10,700,000	24.1
Tagalog	9,300,000	21.0
Ilocano	5,200,000	11.7
Hiligaynon (Ilongo)	5,030,000	11.4
Bikol	3,460,000	7.8
Waray	2,440,000	5.5
Pampango	1,420,000	3.2
Pangasinan	1,110,000	2.5
Maranao	680,000	1.5
Magindanao	570,000	1.3
Sulu (Tausog)	500,000	1.1
Aklanon	475,000	1.1
Ibanag	290,000	.7

Patterns in Urban-Rural School Populations

The urban population of the Philippines is estimated at approximately 32 percent of the total. Metropolitan Manila accounted for about one-third of the urban dwellers.

The better schooling available in urban areas has been one form of

pressure leading to migration to cities and large towns. Until recently many rural communities have had only four-year primary schools, and still lack opportunities for further education (N. Vreeland 1976,157).

Primary education has become virtually universal in the Philippines. In 1965 school enrollees amounted to 97 percent of the primary school-age population. Literacy has reached over 80 percent and a fifth-grade education has been the median attainment of the younger part of the population for some years. Enrollment at the second level has now risen to 71 percent of the appropriate age group.

There are rural packets with continuing high illiteracy rates, but this is almost entirely due to the older generation not having received any formal schooling.

The Educational Situation

In the Philippines, the normal school-entering age is seven. The basic plan for public schools starts with six years of elementary school -- in some schools, seven. Grades five and six (and seven) are sometimes referred to as intermediate. Secondary education covers four years, normally ending at age 17. The ordinary college courses also take four years

The National Board of Education, which determines educational directions for the country, enunciated in 1973 a policy for the use of Pilipino along with English as the medium of instruction in the school system. The guidelines for implementing this policy were contained in a June 19, 1974 order of the Department of Education and Culture, directing that "the separate use of Pilipino and English as media of instruction in definite subject areas, provided that, additionally, Arabic shall be

used in the areas where it is necessary."

The new strategy for bilingual education in the Philippines is to divide the subject matter between the two media, using English for mathematics and science and Pilipino in more socially-oriented areas: social studies, character education, health education, physical education. The retention of English as a joint medium may be expected to reap at least some of the benefits for learning a foreign language that experience has shown to stem from studying other subject matter through it. The choice of subjects to be studied in English reflects, among other considerations, the difficulties of designing science textbooks in languages without a tradition for discussing the topics treated, and the need in today's world for using a world language for ready access to higher levels of scientific and technical information in all fields.

A massive textbook development program has been undertaken to provide appropriate, up-to-date textbooks in both Pilipino and English for the subjects for which they are respectively designed, in a ratio of one book for every two pupils. The project, undertaken in 1975, is scheduled to produce 109 English language titles over the eight years of the project. Present plans call for text revision every five years, although this is considered by some an unrealistic goal. All texts are planned to have a three-year development phase with the first involving planning and writing, the second field testing, and the third distribution. One center for text development is devoted to English language materials and there are three devoted to Pilipino text development: the Language Center, the Social Science Center, and the Practical Arts Center (for the production of texts related to fishing, forestry, etc.).

The five year text production plan has as its goal the production of 60,000,000 books.

A four-year transition period was provided for non-Tagalog areas. During that time, in grades one and two, the use of the locally-dominant language as a medium of instruction was to gradually give way to the new bilingual scheme. By this coming fall (1978), the home language is to be limited to use as an "auxiliary medium of instruction," to explain points not clearly grasped when presented in the official media.

There has, however, been a feeling that the transition period has been too short -- that the lack of textbooks and other teaching materials, and the lack of teachers fully proficient in Filipino and trained to use the texts that have been distributed, will require continuing the use of the local language as a medium of instruction in at least some areas. This might be made an official decision, or matters might be left to take their own course.

The development of the type of dual-medium education being inaugurated in the Philippines is of wide interest because it represents an option towards which a number of countries seem to be moving.

In the first phase of formal education in the Philippines, 1569-1898, the Spanish colonial period, the only general education consisted of simple religious training in the language of each area with students perceived as being the brightest transferred to Spanish language medium education for advanced studies. The second phase, during the period of United States colonial administration, saw English being used as the medium of instruction almost universally. In the intermediate period from 1940-1957, after the production of Tagalog grammars and dictionaries and the initial acceptance of Tagalog as a national language, some in-

struction began. It became a subject at first only in the fourth year of high school; it was soon extended to the third year as well.

With independence, Tagalog was mandated as a subject of study throughout the school system. This change came without any preparation, and it has been alleged that thereby Tagalog "made millions of enemies overnight in 1946 by being imposed on the pupils all over the country without warning" (Ramos: 1967, 16). Nevertheless, in time, the widespread teaching did help to greatly extend the knowledge of the national language in areas where it is not native to the population.

From 1957-1973, the official education policy was that the language of instruction should be the locally-dominant language during the first two grades with textbooks for classroom instruction being produced for 11 of the languages, including the eight major languages, Tausog, Ibanag, and Sambal (approximately 120,000 speakers). English was continued as the medium of instruction for third grade and higher education. The following table, reproduced from Sibayan (1971, 1044) shows the different use of languages in schools.

LANGUAGES USED IN SCHOOLS

	Primary				Inter- mediate		Second- ary				College					Grad.	
	1	2	3	4	5	6	1	2	3	4	1	2	3	4	(5)*		
Vernacular	m	m	a	a													
Pilipino	s	s	s	s	sa	sa	s	s	s	s	s	s	s	s			
English	s	s	ms	ms	ms	ms	ms	ms	ms	ms	ms	ms	ms	ms	m		m
Spanish							p	p	p	p	s	s	s	s			
French																	f
German																	f

* A number of college degrees require 5 years of instruction. Legend: m - medium of instruction; s - required as a subject; p - optional or possible as a subject; a - auxiliary medium of instruction; f - foreign language requirement in some graduate courses.

In some communities speaking minor languages, the local idiom has been used in the schools, but in many places a regional lingua franca has been the initial medium instead. Numerous local languages were introduced for which no textbooks were published, and instruction had to proceed on an ad hoc basis.

As another phase of the Revised Phillipine Educational Program of 1957, the teaching of English began to be generally conducted with the realization that it was a foreign language. For the first half century of English education in the country, schoolroom practice was modeled on the way natively English-speaking children were taught in the United States.

A significant development in education in the rural Philippines has been the growth of community-oriented secondary education in the "barrio high schools." These have been instituted in localities without previous formal secondary-education facilities, using elementary school buildings. The focus of the programs has been on agricultural practices, public health and sanitation, and some cottage industry. All students set to work on projects that will yield them at least some income. Parental involvement has been stressed. Good results were shown in traditional academic areas -- reading, arithmetic, and general science -- as well as in the dissemination of information related to community development (Orata: 1966, 475-8).

Education Research and Innovation

Philippine education in general has been referred to as "one of the most surveyed systems in the world" (N. Vreeland: 1976, 157), and the Philippines are probably unique in the extent to which research has been

conducted that bears on the role of language in education. As in most educational experiments, the results have been somewhat equivocal.

The first large-scale investigation took place in Iloilo Province from 1948 to 1954. This province covers the southeastern coast of the triangular island of Panay, and its capital, Iloilo City, is the metropolis of the Hiligaynon (Ilongo) areas of the Visayan Islands. In what is now known as the First Iloilo Experiment, a comparison was made between seven elementary schools using the all-English curriculums (then standard in the country) and seven comparable schools provided with Hiligaynon translations of the first and second grade materials. The Hiligaynon-instructed pupils achieved more in the first two years, were behind in language ability in grade three where the switch to English medium was made, and significantly behind at the end of grade four; in other subjects the two groups were close. In the fifth grade the experimental students pulled ahead of the all-English controls in arithmetic, reading, and social studies. At the end of elementary school, the only statistically significant difference was in social studies, where those with the local-language background were superior. The general trend seemed to be that these students were also somewhat better prepared in other subject matter areas and that the all-English group were better on language tests.

The experiment provided the model for the new language policy for education introduced in 1957 and was tremendously influential on a worldwide basis in arguments for local-language education. It did demonstrate that such programs were feasible and not necessarily inferior to education in foreign languages. Beyond that, it has been discounted according to educators' other notions.

After the local-language initial stage had become general, some surveys investigated the literacy rates obtained. (Most proved disappointing.) The 1963 survey of sixth-grade students showed remarkable divergences in different language areas:

Tagalog	88%
Cebuano	82%
Pampango	75%
Bikol	69%
Ilocano	62%
Waray	59%
Pangasinan	53%
Hiligaynon	50%

The first suspicion is that these results had no relation at all to the language curriculum, but only reflected the general quality of the schools in different areas and the average frequency of pupil attendance. Particularly puzzling from a linguistic point of view is the low position of Hiligaynon relative to Cebuano, since these are closely-related languages. Perhaps relevant is an observation about Hiligaynon teaching in Iloilo province at about this time: "The teachers taught in this first language in grades one and two as they had been doing for years, using the same materials much of which had deteriorated physically" (Aguilar: 1967,58). The literacy tests were at a sufficiently elementary level so that only dyslexics should really be expected not to pass them if previous instruction had been at all adequate. The leading position of Tagalog is, of course, what would be expected on linguistic grounds, since the initial two years in Tagalog medium and the later teach-

ing of Pilipino as a subject should both contribute directly to the result.

A 1961-3 experiment by the Bureau of Public Schools used Pilipino as the medium of instruction in the first and second grades in six non-Tagalog provinces (speaking Cebuano, Ilocano, Hiligaynon, Bikol, and Pampango). The only criterion measured was the degree of literacy in the local language at the end of the second grade. In all provinces the experimental classes conducted in Pilipino did better at reading the regional language than did those which had had two years of reading instruction in it. These results have been widely discounted as reflecting the lack of good programs for teaching the local languages. Even when the local languages were officially used as the medium of instruction in grades one and two, government support in terms of actual funding was negligible. Most of the financial support came from the teachers and some from the local community, except for the cooperative venture of the Philippine government and USAID in the late 1950s and early 1960s in printing books in 11 local languages (Sibayan, pc).

Under the 1957-74 policy, in non-Tagalog areas, both English and Pilipino were introduced as subjects from the beginning of the first grade. The Second Iloilo Experiment (1961-64) tried variations on this plan, starting English in grade one and Pilipino in grade two, and vice versa, as well as both together in grade one. (Much anecdotal and some experimental evidence suggested that young scholars suddenly exposed to two non-vernacular languages became confused thereby and developed learning problems.) Controls studied each new language half an hour a school day for two years. Experimental classes studied the first introduced language half an hour a day, and the one started in the second

grade a full hour a day. Thus all total exposure times were equated. The only statistically significant results on language tests showed better performance in both English and Pilipino for those who started both early. In general studies, the only strongly-supported result was some deficiency in arithmetic for those who started Pilipino in grade one and English in grade two. The results were used to justify continuing the established policy for the next 10 years.

Two experiments were conducted in Rizal province, a Tagalog-speaking region adjacent to the Manila area. Rizal Experiment Part 1 (1960-63) contrasted the introduction of English reading in grade one with its introduction in grade two after a year of oral English and Tagalog reading practice. Tests of English ability were given at the end of grade three. When this was the only variable, reading comprehension in English was better among those who started it in the second grade. Students who, as a factor in Part 2 of the experiment, had continued in Tagalog medium in grade three did better in listening comprehension if they started reading in grade one. No other significant results showed up. Educators concluded that the time at which English reading was introduced could be left to be decided on the basis of other considerations.

Rizal Experiment Part 2 (1960-66) varied the level at which English became the medium of instruction. Some classes were all-English; some started in Tagalog and switched to English in grade three as the Revised Philippine Educational Program provided; yet others persevered in Tagalog as the medium until the end of grade four. The English-medium classes performed best in subject-matter tests at the end of grade six, whether tested in English or Tagalog. English proficiency depended directly on

the number of years it had been used as a medium. Tagalog literacy was on a par in all groups. The tests at the end of grade four did not show the sharp content-test difference of the grade six level. In grades five and six all students were studying English-language materials, and presumably only those pupils with the higher English reading comprehension were able to utilize their textbooks adequately.

The fact that in the First Iloilo Experiment sixth-graders who had started in the vernacular did better in social studies tests, and that in the Rizal Experiment Part 2 such sixth-graders did worse, suggests that more differences are involved than meet the eye. Presumably the Rizal Experiment Part 2 did weigh in the later decision to convert from other local languages to Pilipino for grades one and two, since no necessary educational benefits of schooling in the native language were discovered in this study.

The other major classroom study conducted in the Philippines was the experimental use of teaching on alternate days in English and Pilipino at the Laboratory School of the Philippine Normal College in 1968-72. Those instructed by this method tested as well as classes taught in either language alone, except in English reading, where monolingual English instructions proved superior as might be expected, and in mathematics (Tucker *et al.*: 1970, 292). Later results showed social studies and science being learned somewhat better in Pilipino (Sibayan: 1975, 131).

A 1968 survey of a quite different sort measured language attitudes of Filipinos. This questionnaire survey, conducted by the Language Study Center of the Philippine Normal College, covered 254 communities in 21 regions of the country. The respondents were asked, among other matters, what language they preferred to see a medium of instruction in the school.

A majority indicated a leaning towards English at all levels. They were also asked which two school subjects could best be taught in English, in Pilipino, and in the local language. Arithmetic and science led the list for English; good manners and health education for Pilipino; good manners and work education in the local language.

Householders asked why their children should study English believed that they would learn more rapidly, communicate more effectively, seem educated, and get good jobs. The values they saw for the learning of Pilipino were patriotism and understanding their heritage. (This distributes the world language to instrumental goals and the national language to identificational ones in a pattern demonstrated in numerous other countries.) They judged that occupational success in any field requiring a formal education demanded trilingual command of English, Pilipino, and the locally-dominant language (except, of course, in Tagalog-speaking areas).

The distribution of subjects between English and Pilipino in the current educational policy is in accord with the findings of the survey that science and mathematics are the areas for which English is viewed as particularly significant.

The extensive textbook development currently underway at four centers was mentioned previously.

Local Resources and Interest

The principal investigator spoke with many scholars and administrators working in the area of language and education from the Philippines during the April 18, 1977 RELC seminar on "Language Education in Multi-

lingual Societies: Its Challenges and Potentials," and staff members at the Center for Applied Linguistics have enjoyed long-term relationships with many of the most important individuals from the Philippines in this area. Certainly, the most interested and relevant individual there is Dr. Bonifacio P. Sibayan, President of Philippine Normal College (PNC) in Manila who has been responsible for much of the work in this area through the modern history of the Republic. He has an overwhelming concern that the 1957-74 era of multilingual education in the Philippines be studied before all traces of its effects are lost. He also is convinced that there is a very large number of young scholars to be the "soldiers" in any kind of survey work (although he laments that the economic expectations of some may price them out of this particular labor market) (Sibayan, pc). Dr. Sibayan is a Ph.D. in linguistics and his experience is in all areas of applied and sociolinguistic research. Dr. Fe T. Otañes, also at PNC, has expressed similar interest, and her training and experience are in fields similar to Dr. Sibayan's. Dr. Edilberto P. Dagot and Mrs. Lorna Z. Segovia (also of PNC) have doctoral and master's degrees, respectively, in education, and both of them have had considerable experience in designing research projects.

Bro. Andrew Gonzalez, FSC, Academic Vice President of De la Salle University in Manila, is a Ph.D. in linguistics with experience in both theoretical and applied linguistics. He is qualified to and interested in directing large-scale research projects.

Ponciano B.P. Pinada, an M.A. in linguistics at the Institute of National Language, can field some of his subordinates in any study mounted, and his personal area of concern is very much in the area of translation. Dr. Eliza Grino, a linguistics Ph.D. at Philippine Central

University in Iloilo City, does not have the same high level of interest, but would be of assistance in any studies in the Central Philippines. Dr. Emy M. Pascasio, at Anteneo de Manila University, Quezon City, has a doctorate in education and linguistics and would assist in gathering data and project design. Dr. Ma Lourdes Bautista, De la Salle University, with a doctorate in linguistics and experience in bilingual education research would help in designing projects and in accumulating data. Dr. Minda C. Sutaria, of the Bureau of Elementary Education of the Department of Education and Culture, has training in education and previous research experience in surveys on the results of specific language teaching activities. Finally, Ernesto Constantino, of the Department of Linguistics of the University of the Philippines, with a linguistic doctoral degree, would assist as a consultant on Philippine languages.

In the Philippines, a fortuitous combination of academic interest and political interest have converged to make the Philippines an excellent site for participation in an international bilingual education evaluation project. Excellent relations exist between the universities and the Ministry of Education.

The primary institutions which might participate in any study would be the Philippine Normal College, Manila, which is staffed by many distinguished individuals. The PNC has undertaken a number of studies of an experimental as well as of a survey type. Many of these have been done in cooperation with the Department of Education and Culture, EDPITAF, and other organizations.

The Educational Development Project Implementation Task Force (EDPITAF), Manila, is another sound organization to participate in any study. Individuals in the EDPITAF to work through would be the

the Director, Dr. Walda Perfecto; the Assistant Director, Dr. Augusto Tenmatay; and the Program Director of the Basic Education Unit, Annie Martin. EDPITAF, for the last five years, has been instrumental in several large-scale government and foreign-bank-supported educational projects.

De la Salle University, with Bro. Gabriel Connors, FSC, President, and Bro. Gonzalez, FSC, would be a useful contributor, having been actively engaged in curriculum material development and in educational surveys, many of them self-sponsored.

The Department of Education and Culture, especially the Bureau of Elementary Education, under the direction of Secretary Juan L. Manuel and Dr. C. Sutaria, is a natural participant in any survey, since the Bureau with EDPITAF carried out a study of the outcome of elementary education.

The Institute of National Language, with Director Pinada, has done most of the work completed on promoting Pilipino and translation of various literatures, especially into the local languages for agriculture.

The Institute of Foreign Language Teaching of the University of the Philippines is directed by Dr. Nalia Casambre and has done most of the training of language teachers.

The Language Center of Ateneo de Manila University is directed by Dr. Pascosio, and it has worked in concert in the past with PNC.

The Department of Linguistics at the University of the Philippines is directed by Dr. Constantino and has the most extensive data (outside of SIL) on Philippine languages extant.

The Summer Institute of Linguistics, under Mr. Daniel Weaver, has studied more than 40 Philippine languages, generally minor ones, and has been involved in many literacy activities in these languages.

The Institute of Philippine Culture, directed by Dr. M. Hollerstein, has done many studies in sociology connected with language.

Although scholars and non-funding agencies in the Philippines have a great interest in evaluating local-language medium education, especially in the areas of the effects of the 17-year (1957-1974) effort in local language education and in the attitudes of pupils and the government towards local-language medium education, the picture for internal funding is not too good since very high priority presently has been given to the development of curriculum material.

Some small funding may be available from the government for an evaluation from the Department of Education and Culture, but this would be slight. The National Science Development Board has recently awarded a U.S. \$10,000 grant for the study of the use of Pilipino in science, even though this is not the government's policy. There might be interest there. The Fund for Assistance to Private Education is seen as a highly unlikely source of aid in evaluating mother-language medium instruction. If the Philippine Social Science Council could be persuaded to see the evaluation as a linguistics activity, then funding might be possible on a small scale. The Asia Foundation is seen as quite likely, but sources in the Philippines consider both the Ford Foundation and the Summer Institute of Linguistics as most unlikely funding sources in this area.

MEXICO

Estimated Population 1977: 64,400,000

General Overview of the Language Situation

Based on the 1970 census, the estimated population in 1977 is 64,400,000. In 1970, the census figures accounted for 48,381,547 Mexicans. Of these 65-75 percent were listed as mestizo (Indian and European descent), 15-25 percent Indian, 10 percent Caucasian. There is a small but significant population of Negroes accounting for one percent of the population*.

The population is unevenly spread throughout the country. Between the two ranges of mountains is the Mexican plateau which contains the largest concentration of the population. The Northern Pacific Region (containing the states of Baja California Norte, Baja California Sur, Sonora, Sinaloa and Nayarit) comprises 21 percent of the land area of the country, but only contains about six percent of its population. The Northern Region (Chihuahua, Coahuila, Nuevo Leon, Tamaulipas, Durango, Zacatecas, and San Luis Potosí) includes 40 percent of the land and about 20 percent of the population. The Gulf Coast and Yucatan Region (Veracruz, Tabasco, Campeche, Yucatán, Quintana Roo) includes 12 percent of the land area and 12 percent of the population. The South Pacific Region (Guerrero, Oaxaca, Chiapas, and Colima) is also 12 percent of the land and 14 percent of the population, most of whom live in Oaxaca. The Central Region (Aguascalientes, Jalisco, Guanajuato, Querétaro, Hidalgo, Michoacán, México, Distrito Federal, Morelos, Tlaxcala, and Puebla) includes only 14 percent of the land and nearly 50 percent of the population (Ryan, 1970).

*This population lives in the urban barrios and is to be found in larger concentrations in Veracruz.

Despite the steady migration to the cities, the major demographic increase of urban areas has been the population explosion which has grown at the rate of five percent a year. By the mid-70s it was estimated that over 63 percent of the population of Mexico would be urban.* The rural population has increased at a slower rate. The patterns established many centuries ago have persisted in the rural areas. The terrain, particularly in the isolated North and South, and the strong winds of national consciousness and change, have not reached the inhabitants with any great force. The coast still contains primitive villages of fishermen and gatherers. In the mountains of the Northwest and the highlands of Chiapas, the way of life is still to hunt, gather and practice slash-and-burn shifting agriculture. In the North and the Central Mesa, village-centered agriculture is still the established economic pattern.

In general, the population of Mexico is youthful. In 1968, it was estimated that more than half the population was under 20 and over 80 percent was less than 40. Over 40 percent of the under-20 group was under 14, over one-third of those being in the five-nine age group.

The question of who is an Indian in Mexico is not one of race. The overwhelmingly large group of mestizos has, in effect, done away with that issue. However, being a mestizo or an Indian is still important, and the varying numbers given for the Indian population of Mexico seem to stem from the confusion of identifying this population. It was said earlier that 15-25 percent of the population was Indian. Other figures are 12 percent, and elsewhere 10 percent. The Mexican government defines Indians "as those speaking an indigenous language and who continue to practice

*Cities of over 100,000 are Mexico City, Guadalajara, Monterrey, Puebla de Zaragoza, Juárez, León, Torreón, Mexicali, Mérida, San Luis Potosí, Tijuana, Chihuahua, Veracruz, Aguascalientes, Tampico, Villa de Guadalupe Hidalgo, and Morelia.

traditional Indian cultural patterns and live, for the most part, in traditional communal villages" (Ryan, p. 101).

The areas of distinction between the mestizo majority and members of Indian ethnic groups are:

1. Locality of birth or residence; generally urban for mestizos and rural for Indians.
2. Language spoken, Spanish for mestizos and indigenous for Indians.
3. Literacy rates, lower among Indians.
4. Surname, whether Spanish or Indian. The adoption of a Spanish surname is common among mestizos.
5. Costumes.
6. Customs and beliefs.

In many cases modernization has blurred the above distinctions, hence often the most useful means of identification is whether the individual thinks of himself as an Indian and whether he lives in a community generally accepted and regarded as Indian (Ryan, 103).

Language Situation

Mexico is a dominantly Spanish-speaking country. Within its borders are the largest number of first-language Spanish speakers anywhere in the world. Also in Mexico are to be found the largest number of American Indian languages other than in Peru. The 1970 census figures show that of the 48,381,547 Mexicans accounted for, 3,111,415 (or 7.7 percent) above the age of five were Indian by language. Of these 3.5 percent, or 1,544,904, were monolingual (Nahmad, 1975).

There are believed to be about 70 Indian languages still spoken in Mexico, although there are varying opinions regarding the actual numbers. In 1973 the Director of Secondary Indigenous Extracurricular Education

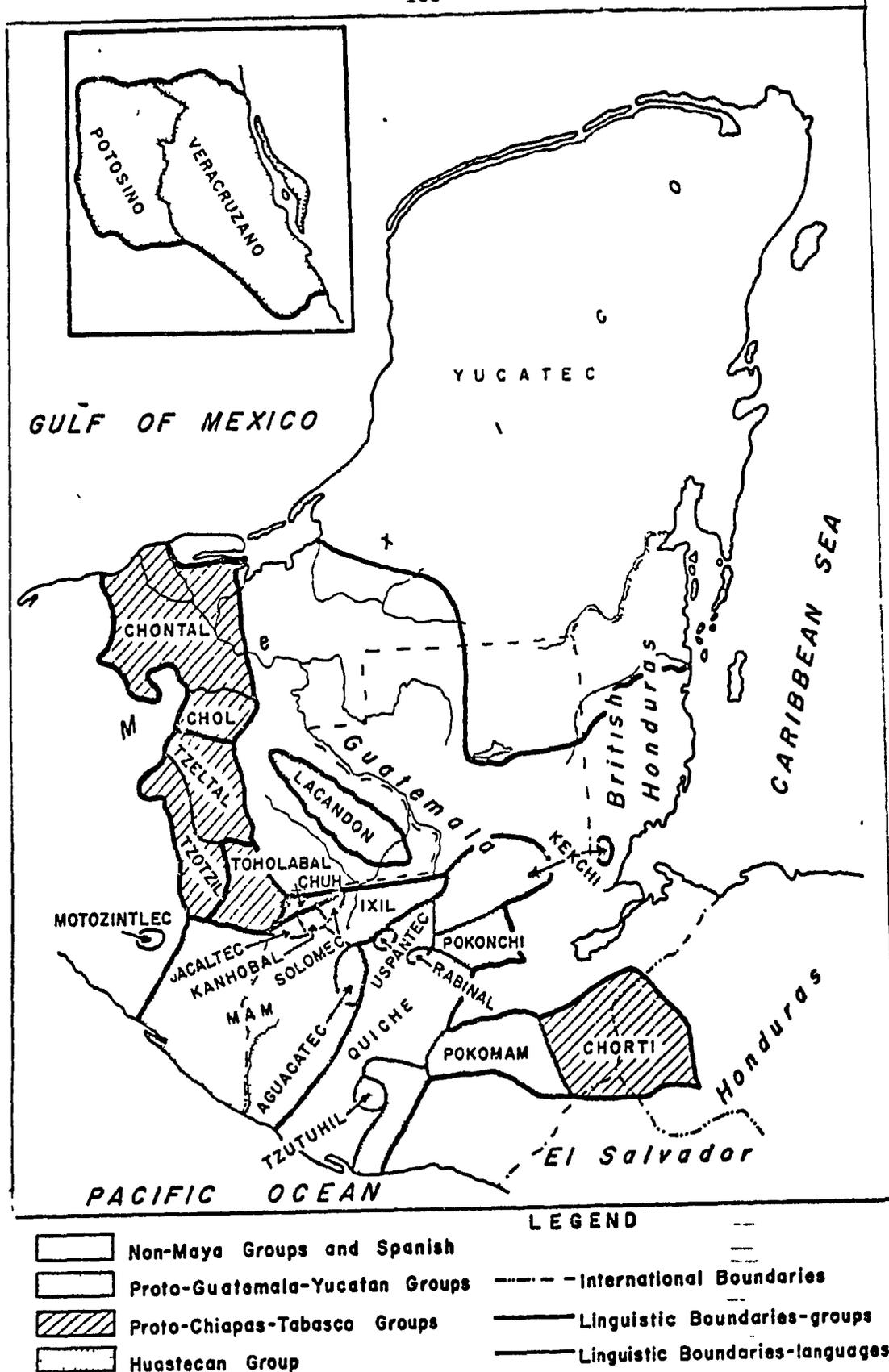


Figure 1 - Schematic Map of Distribution of Maya-Speaking Indians
 (From Morley, 1956, pl. 7.)

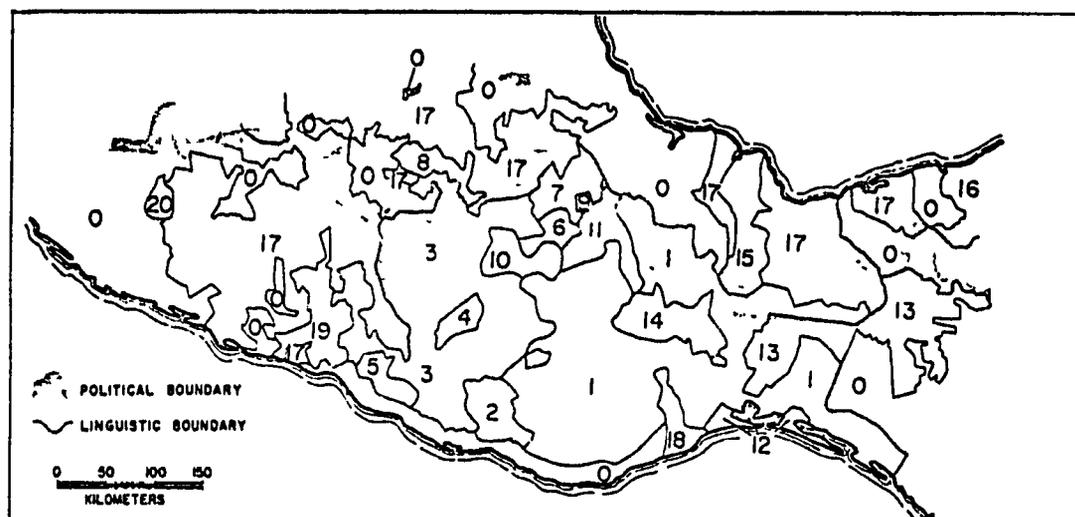


FIG. 2—MODERN LINGUISTIC DISTRIBUTION IN SOUTHERN MEXICAN HIGHLANDS AND ADJACENT REGIONS (Distribution modified from Mendizabal and Jiménez Moreno, 1936, and Instituto Nacional Indigenista, 1950, population figures according to 1950 census from Vivó, 1958) Key to languages appearing on the map.

0. Spanish (less than 1 per cent of the population speaking an Indian language)

Macro-Mixtecan

1 Zapotec	250,000
2 Chatino	15,000
3 Mixtec	200,000
4 Trique	3,000
5 Amuzgo	8,000
6 Cuicatec	10,000
7 Mazatec	45,000
8 Popoloco	17,000
9 Izcatec	700
10 Chocho	3,000
11 Chinantec	2,500
12 Huave	4,000

Macro-Mayanca

13 Zoque	20,000
14 Mixe	32,000
15 Popoluca	25,000
16 Chontal	16,000

Macro-Nahuan

17. Nahua	...
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Macro-Yuman

18. Chontal de Oaxaca	9,000
19. Tlapanec	16,000

Unclassified

20. Cuitlatec	200
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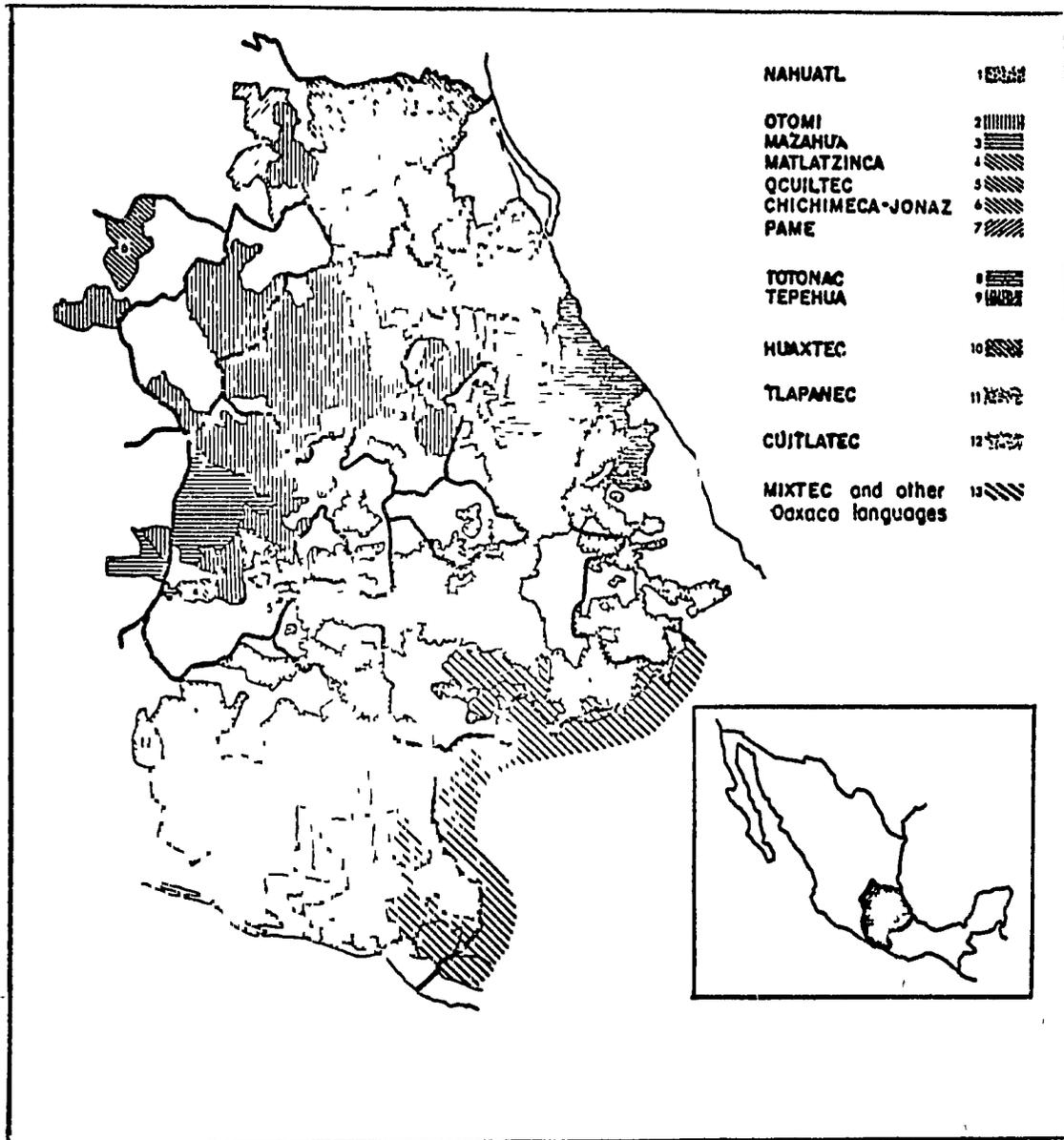


Figure 3 - Distribution of Indian Languages in Central Mexico
(Drawn by E. Hatch from Mendizábel, 1946b)

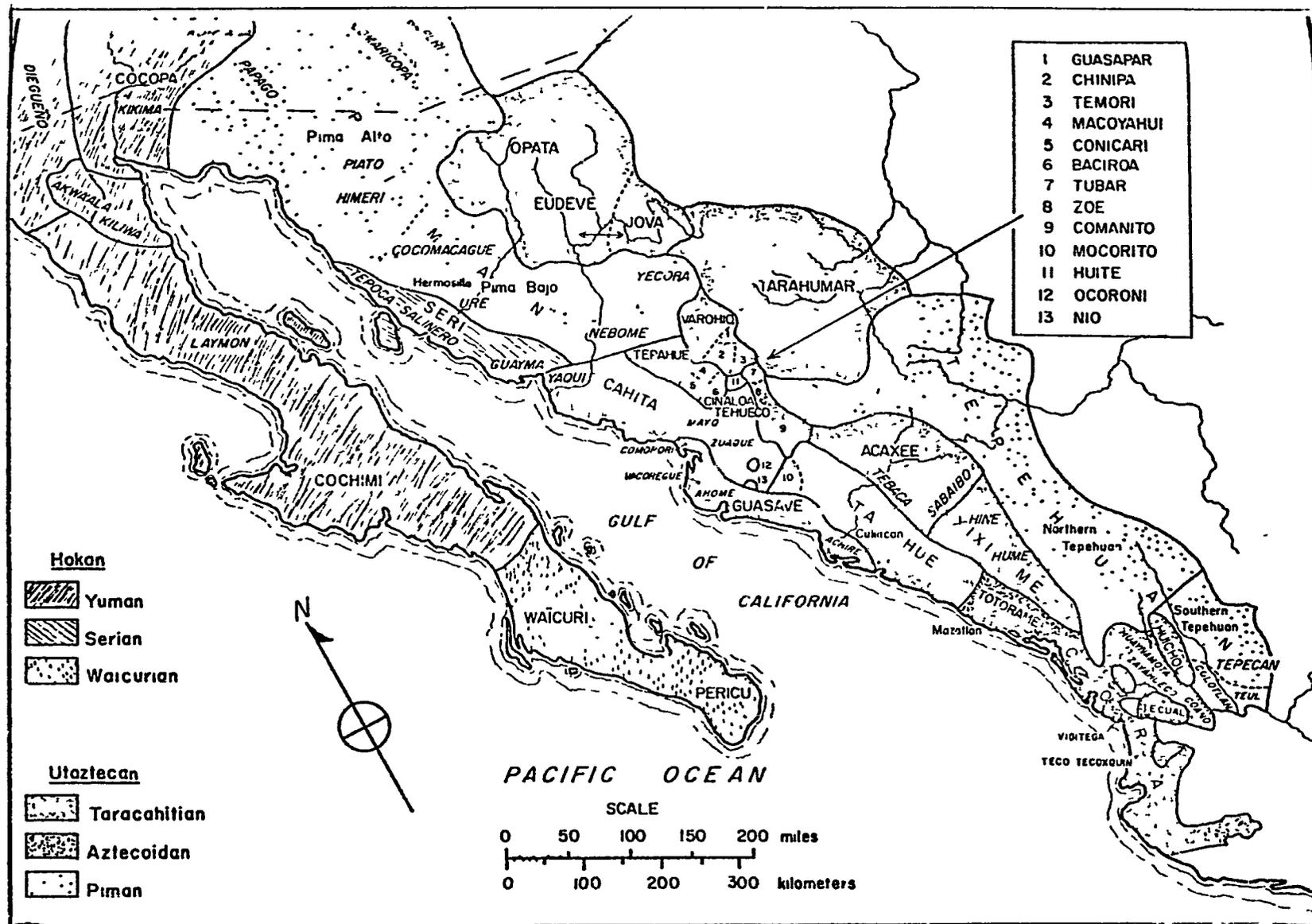


Figure 4 - The Aboriginal Distribution of Tribes in Northwest Mexico. (Apted from F. Johnson, 1940.)

referred to 52 languages (*América Indígena* '33:4). At the other end of the spectrum the Summer Institute of Linguistics and the Instituto Indigenista Interamericano agree that there are 150 languages and dialects.* The major confusion seems to lie in the large population of Indians who are generally bilingual and can "pass" in both cultures. They have shifted over to Spanish for most public purposes. Since access to the national culture and its institutions is through the use of Spanish, it could be assumed that a large portion of these bilinguals have no wish to be identified with an Indian background. As far as can be determined no adequate data exists on this section of the population--perhaps for good reason. The push for linguistic unification is an overriding and deeply rooted policy. No matter what decisions are made regarding education, underlying them all is the policy of Castilianization.

In a country where the demographic rate is increasing faster than any other country in the world other than Libya, the 1970 census seemed to indicate that the rate increase was mostly among Spanish speakers. The overall indigenous-language numbers have only been holding their own or increasing slightly. For example, the indigenous-language population of Puebla increased 18 percent between the 1960 and 1970 census, the result being it grew only five/eighths as fast as the monolingual Spanish component of that state. Extrapolation from census figures gives the result that the present percentage speaking Indian languages (six percent) is only two-fifths of the 1940 percentage (nearly 15 percent),

There have been strong suspicions that the Mexican census will tend to underestimate drastically the bilingual speakers of Indian languages.

*Ethnologue (1974) lists 204 languages of Mexican languages. However, not all are spoken in Mexico. Estimated 197 within the borders.

If one considers the following figures on bilinguals from three census years in the states of Chiapas and Guerrero:

	<u>1950</u>	<u>1960</u>	<u>1970</u>
Chiapas	93,843	225,913	140,116
Guerrero	65,542	100,378	75,091

From 1960-1970 the numbers of monolinguals also show a slight decrease. While monolingualism is more prevalent in the older population, it would be expected that the missing 1960 monolinguals would have succumbed to bilingualism, making the shortfall in the trend for bilinguals even larger than the figures show. However, there is little reason to suspect that during the 1960-70 period bilinguals suffered peculiarly elevated mortality rates in southern Mexico! It is possible that many of them migrated to central Mexico. A preferable hypothesis is that in 1960 more respondents were willing to admit to an Indian-language past than in either 1950 or 1970, and that indepth local surveys today would reveal something closer to the 1960 report than the 1970 one.* Considerations such as these have led to guesses that the actual number in present-day Mexico with knowledge of some indigenous language might be 6,000,000 rather than 4,000,000.

There are no states or territories in the country where speakers of Indian languages cannot be found. The geographical centers of Indian language use survive as a series of isolated "islands." These are most common in the eastern portion of the Central Highlands, on the Northern and Southern Gulf Coasts and in the Yucatán. A few places do have Indian populations over 60 percent.

*There may also be a historical reason why the figures of bilinguals in these states are probably more reflective of reality. The late 50s were the beginning of the Instituto Nacional Indigenista (INI) centers throughout the regions. There was a much more positive attitude towards bilingualism being promoted (Heath, 1972).

Only the state of Yucatán, together with the adjacent sparsely-settled territory of Quintana Roo, present a different picture. There, a Yucatec-speaking majority is still to be found, and a rate of general population increase well below the Mexican average means that the number of Spanish speakers will not rapidly swamp the Indian communities. The proportions indicated by the 1970 census for Yucatán are as follows:

Monolingual Spanish	44.5
Monolingual Yucatec	8.8
Bilingual	46.7

Even though Yucatán's ratio of monolingual to bilingual speakers is, and for many years has been, about half that recorded for Indian languages in Mexico as a whole, reports indicate that the Yucatec language tends to be dominant in bilinguals and continues very much alive. There is some indication that Spanish is used in this region in ways more complementary to than replacive of the indigenous tongue.

Added to the confusion of this picture is that fact that mutual intelligibility is not high among the dialects of Indian languages, and Indians of different language backgrounds are likely to use Spanish to communicate rather than the dominant Indian language of the area.

In the countries with strong national policies, such as Mexico, the tendency to bypass the realities of incorporating minority groups into the mainstream of the socio-political life is a temptation easily succumbed to. Thus figures and estimates of bilingualism and monolingualism are bound to reflect inaccuracies. In the case of Mexico any figures would have to be very carefully checked.

The languages of major importance are listed below:

<u>Language</u>	<u>State of greatest concentration</u>	<u>Number</u>
Nahuatl	Puebla	1,300,000
Yucatec	Yucatán	600,000
Otomí	Hidalgo	300,000
Totonac	Puebla	265,000
Mixtec	Oaxaca	250,000
Mazahua	México	135,000
Tzotzil	Chiapas	102,000
Mazatec	Oaxaca	100,000
Tzeltal	Chiapas	98,000
Isthmus Zapotec	Oaxaca	90,000
Chol	Chiapas	88,000
Huastec	San Luis Potosí	65,000
Tarascan	Michoacán	65,000
Mixe	Oaxaca	60,000

The languages with largest number of monolingual speakers are:

Nahuatl
 Mixtec
 Yucatec
 Zapotec
 Otomí
 Totonac
 Mazatec
 Tzotzil
 Mazahua
 Tzeltal
 Mixe
 Huastec
 Chinantec
 Tarascan

Nahuatl, the descendant of the language of the Aztecs, is the indigenous language most spoken in seven states--San Luis Potosí, Hidalgo, Tlaxcala, Puebla, Veracruz, Morelos, Guerrero, and the Federal District. Of all the Indian languages it has had the strongest lexical and phonetic influence on Spanish, with the exception of the Spanish spoken in Mexico City (Heath, p. 195).

Nahuatl, Yucatec, Otomi and Tarascan have long been considered the most important autochthonous groups in Mexico. This regard for them was shown, for instance, in the creation in 1933 of the academies for the study of these languages (in affiliation with the National University) and in the initial development of primers for these four at the time of the literacy campaign of 1946-48. (Totonac was later added and Nahuatl materials were produced distinct from Nahuatl.)

The history of official language policy in Mexico is a fascinating account of the successes and failures of intentional linguistic unification in the interests of creating a nation. Official Spanish attitudes towards the indigenous languages have ranged from praise to considering them downright evil.* Today the attitude towards the Indian is that he/she should be incorporated into Mexican life. "Through an integral bilingual and bicultural program, the Indian [is] to develop self-respect, to see himself as a worthwhile citizen of his own community and region; gradually he [is] to meet national heroes in his bilingual readers and appreciate the uniqueness of Mexico's history (Heath, p. 196)." Furthermore, "the program of acceptance for the Spanish language is now based on the assumption that when the Indian is secure in his own tongue and in his evolving socioeconomic community, he will learn Spanish for its value as a code to bring him in touch with the increasingly attractive aspects of national life (Heath, p. 197)." In effect, it appears the attitude towards the indigenous population is not negative. However, their languages stand in the way of national unity. If they have to become bilingual it must be regarded as a step towards castilianization. Bilingualism basically is regarded as a semi-permanent linguistic state.

*Shirley Brice Heath's book, Telling Tongues, is a fascinating history of language planning and attitudes in Mexico. She traces the records from the Spanish Crown to the late 1960s.

Indian language speakers' attitudes towards Spanish vary. In the areas close to Mexico City, many of the younger generation no longer learn Nahuatl (Lastra, GURT 1978). The Otomí, on the other hand, resist Spanish because they regard it as an invasion of a larger group. In the Isthmus of Tehuantepec, the Zapotecs maintain their language for reasons of national identity and pride. It could safely be assumed that despite the immense strides made towards national unity, life to most rural Mexicans extends beyond their village or town only through the assigned men and women who do the trading and buying for the community.

English, as a second language, has had a tremendous impact on Mexico. It is studied as a subject throughout secondary schools. It is used for business contracts and for the tourist industry. Many Mexican families now have close relatives living in the United States. It is estimated that it is a familiar language to a few million Mexicans, but a close estimate is hard to come by.

Patterns in Urban-Rural School Populations

The figures on the school-age population in Mexico are inadequate and intermittent. From the available data, however, the picture looks encouraging, yet at the same time these same figures point out the desperate needs of rural school-age children.

Education work in rural areas has been going on since the 1920s, based on the philosophy that the indigenous linguistic minorities needed to be assimilated. A system of federal schools had been set up in which the teaching was to be done through the indigenous language although ultimately resulting in the teaching of Spanish. The 1930 census further confirmed the necessity of some sort of bilingual education in rural areas.

The figures revealed that the only Indians who had a lower rate of illiteracy were the Maya where there were Mayan formal schools.

Despite the immense strides made by compulsory free education, in 1958 three million children were out of school, and it was estimated that three out of four children lived in a rural environment. In 1959 the government instituted an Eleven-Year Plan. Its principal objective was the extensive expansion for opportunities for primary education. One of its features was the free distribution of textbooks.

By 1965 there were over 39,000 primary schools built, three-fourths of them in rural regions. Presumably the construction of classrooms has continued at a fairly accelerated rate to meet the needs of the high percentages of children who have to be absorbed into the school system every year. By 1970, 26,000 schools in rural areas and 10,000 in urban areas were added (Ryan, p. 157-166). There are reasonably good figures which say that the absorption rate of primary schools is about 80 percent. Unfortunately they only cover about 71.1 percent of the potential enrollment. About 25 percent of the school-age population is not getting any instruction at all (Perissinotto, 1977).

Even more discouraging is the rate of attrition. In 1970, 54 percent of graduates from primary schools were urban, and only nine percent of rural children attained functional literacy (i.e., completed four years of schooling). The dropout rate between the primary and secondary levels was about 70 percent. Considering that 17.7 percent of all the rural schools had all six grades, against 90.3 percent of the city schools (Review, Banco Nacional de México, Nos. 560, 245) means that almost the entire rate of attrition took place in the rural areas.

The rates of desertion are about 8.6 percent and failure 12.6 percent. There are no precise figures on repetition rates, or on the proportion of schoolchildren who leave school after the second or third grades. The reasons for attrition and low attendance are suspicion on the part of Indian rural communities of the motives of an imposed education system, poverty (children are needed to supplement the family income), the inadequacy of schools, unrealistic curricula, and inadequate pay for teachers. One would venture to guess that the shortage of bilingual teachers is also a large factor contributing to the bleak picture in rural schools. Also that the largest percentage of school failures, desertion, and non-attendance is among the linguistic minority poor.*

The following tables showing the figures for enrollment and absorption seem to indicate that educational wastage is high in Mexico.

*One observer who visited rural schools reported that the same teacher has to teach in two schools often more than an hour away in distance from each other. He also reports that the visual in the lesson on water and sewage systems in a village was a suburban bungalow! (deKadt, 1977)

TABLE I
Enrollment (in thousands)

Level	70-71	75-76	Increase
Preschool	422.7	538.0	115.3
Elementary	9,248.3	12,066.0	2,817.7
Lower Secondary	1,219.8	2,094.0	874.2
Upper Secondary	308.1	652.6	344.5
Teacher Education	53.0	86.8	33.8
Higher Education	255.5	490.0	234.1
TOTAL	11,507.4	15,927.4	4,419.6

TABLE II
Indicators of Educational Absorption (in thousands)

	1975	1970
Total Population	60,400.0	50,670.0
Total Enrollment	15,913.9	11,507.8
ABSORPTION	26.3%	22.7%
6-12 Age Group	12,134.0	10,246.7
Enrolled in Elementary School	12,066.0	9,248.3
ABSORPTION	98.0%	90.0%
Elementary School Graduates	1,106.0	850.7
ABSORPTION to Secondary Level	82.0%	72.0%

(Perissinotto in Current History, March 1977.)

The Educational Situation

The Constitution of 1917 provided for free compulsory education for all Mexican citizens. Mass education programs went into effect in the 1920s and the decades following have seen a refining of a centralized educational system.

Education in Mexico is not a post-19th century phenomenon. The official missionaries of the Castilian Crown had already, over a period of 300 years, managed to reach the remotest areas of their colony. These friars and priests had established schools, albeit not many by today's standards, to spread Castilian culture and the Roman Catholic religion.

Policy and the educational system have undergone a series of changes every six years with each administration. The main policy has been to "Mexicanize" the population, thus cutting into regional loyalties. At the same time there has always been an awareness of meeting the needs of individual regions, in principle, anyway.

All aspects of the educational system today fall under the direct control of the Ministry of Education (MOE).^{*} The exceptions are universities, state institutions, and professional schools. The MOE is composed of 30 subdivisions and departments whose function is supervisory. States and municipalities take the responsibility for the day-to-day operations of the schools. In general, they run and share some of the cost of operating primary, secondary, and teacher-training schools. Table III is a diagram of the present system.

A few of the characteristics of the educational system are:

1. The program for all primary schools is divided into three cycles of two years each. The cycles attempt to give every child as much knowledge

^{*}The summary of the educational system is drawn from John Ryan, Area Handbook for Mexico, 1970, "Education" chapter.

TABLE III

		<u>Student's Age</u>				<u>Grade</u>
Educación Prescolar		2	Nursery			
		3				
		4	Kindergarten			
		5				
		6	(Escuela Primaria) Primary Schools			1
		7				
	8					
	9					
	10					
	11					
	12				6	
Escuela Secundaria	13	Secondary School, First Cycle	Preparatory Schools (Escuela Preparatoria)	Normal School	Vocational and Technical Schools	7
	14					
	15					
	16	10				
	17	11				
	18	University	Higher Vocational and Technical Schools	Higher Normal School		12
	19					
	20					
	21					
	22					
23	17					

(Ryan, p. 175)

as possible during the first two years, since the majority of students never reach the upper cycle.

2. The secondary schools last three years. Students may then receive a terminal certificate or go on for two years.

3. The preparatory schools last five years, and are administered by universities. At the end of this cycle students receive a bachelor's degree.

In order to get teacher training, students must have completed primary school and have taken aptitude tests and passed an interview. They then enter a rural or urban normal school, both of which are six years and are in three cycles. The distinction between urban and rural schools is mainly one of orientation towards the needs of either city or country children. Graduates from urban normal schools may teach anywhere, but the reverse does not hold true unless the teachers get more training (Ryan, 180-181).

In the 1950s, Regional Coordinating Centers were established, intended to reach the Indian populations for purposes in integrating them into the Mexican national life. Cultural promoters were sent out to supplement the work of rural teachers. Although literacy programs were the means used, the different departments of the government eventually set up the Centros de Integración Social. Graduates of these centers and those from the secondary agricultural schools are often hired as promoters (Rodríguez, 1973, 1021). In exchange for their service, the promoters receive positions as Maestros Normalistas when they have completed a six-year course as a teacher "without title."

Educational Research and Innovation

There are two theories regarding language education which have been operative in Mexico: (a) forced assimilation into Spanish through education

conducted solely in that language and (b) a bilingual system in which indigenous populations were instructed in their own languages, with the subsequent teaching of Spanish. Despite the efforts of official and voluntary organizations, education in practice is still conducted along the lines of the first theory.

The last 60 years have seen the mother-tongue education programs come and go in Mexico. In the 1960s, bilingual education began to take hold in official circles. But implementation is slow. Currently there are "no programs in full-fledged bilingual education (Lastra de Suárez, 1978)." What does exist is limited and of an experimental nature, and geared to primary school students and literacy programs. There is no provision made in secondary education (Fishman, 1975). Oral Spanish is taught through the native language in the first year of primary school.

Some government institutions do, however, take interest in the non-Spanish speaking populations. Presently two institutions which administer regional programs for indigenous populations are: (a) The Instituto Nacional Indigenista (INI) which coordinates the activities of different state organizations that work with indigenous populations. This organization was instituted in 1948. Its activities are carried out through the Centros Coordinadores. Its School of Regional Development trains promotores and technical personnel at the secondary and college level in communal and regional development. (b) The Public Education Office, which, through the General Director of Extra-School Education for Indigenous Groups (DGEEMI)* is in charge of bilingual and bicultural education.

The DGEEMI is responsible for the reasonably well-supported literacy programs in Mexico. Through the Centers for Social Integration, materials

*Dirección General de Educación Extraescolar en el Medio Indígena.

are being developed which are based on the individual needs of students, and are geared to the social, cultural, and economic conditions of the indigenous regions.

The INI and the DGEEMI cooperate quite closely.* By the end of 1974 they had trained 8,179 bilingual promotores and teachers who were involved in, and teaching in, 2,221 primary schools. Also in operation were about 240 boarding schools to which children who lived long distances were brought for a period of time. It is estimated that about 180,000 children from 38 different Indian groups were reached.

At the state level there exists only one institution in the state of Oaxaca. The Instituto de Investigación e Integración Social del Estado de Oaxaca (IIISEO). Established in 1969, it is a highly regarded organization, committed to the investigation of methods of castilianization, and to the training of young Indian men and women in bilingual methodology. These people also become the promotores and teachers for primary schools. The models being developed under this program are intended to be used on a wider scale than just the state of Oaxaca.

In 1973-74 the IIISEO did two studies on the effectiveness of the methods and materials developed by the Oaxaca program, and on the communicative competence in Spanish of children who had attended one year of the castilianization program. The results should be made available in the near future.

In addition to the official government projects, work in bilingual education has been done in the Chiapas Highlands (Tzeltal and Tzotzil language groups) by Nancy Modiano in cooperation with the INI. The work done in this area is a good example of how language skills suitable to

*Trained personnel constitute the National Service of Cultural Promoters and Bilingual Teachers (Servicio Nacional de Promotores Culturales Bilingües).

indigenous groups and the national language can be acquired and maintained (Modiano in Proceedings, 1975).

The Summer Institute of Linguistics has done extensive work in the analysis of Indian languages, and the preparation of primers and supplementary materials since 1936. They are not, however, directly involved in bilingual programs at present.

Some mention should be made of a project of the 1930s, the Tarascan project. This was a reasonably successful bilingual literacy program, and many of the principles developed then are used today by the IIISEO. The linguist in charge of this program was Mauricio Swadesh. He later helped develop materials for and train bilingual teachers for Yucatec (Maya), Otomí of Hidalgo and two dialects of Nahuatl. These did not meet with much success.

The impact of the groups and individuals who, from colonial times, advocated some form of mother tongue education is unique in Mexico. Language planning has been a live debate in the country for a long time. The changes in the 20th century in the direction of bilingual education were due to the political activity of social scientists who at various times developed some power. Ministers of Education and Presidents have pushed different programs. Certainly such successful programs as the Tarascan one, and the results of the 1930 literacy question in Mayan territory were strong supportive statements towards a viable bilingual education program. Each of the groups has had some impact in furthering the cause of bilingual education. For example, in states where the Regional Coordinating Centers have been most active, the number of bilinguals has increased, at the same time increasing those maintaining their mother tongue (Heath, 171-2).

Another factor in increasing the positive effects of mother tongue education has been the reduction of the indigenous languages to writing.

Swadesh, Townsend, Kenneth Pike and their subsequent followers are the master architects in helping change the entrenched negative attitudes towards the viability of these languages.

It is also maintained by some that the special UNESCO meeting in Paris in 1951 on the use of vernacular languages was a real beginning (albeit timid) in the adoption of bilingual education by the INI (Heath). In 1963, further impetus was given this same organization when the decision was made at the Sixth National Assembly of Education in Mexico to use bilingual promotores and teachers in rural areas where large concentrations of Indians lived (Nahmad, in Proceedings, 1975).

Government policy is one of assimilation. However, the methods of reaching a permanent state of bilingualism among the indigenous population is also a strong and viable option. Implementation of the policy still has a long way to go.

Resources

Among the professionals who gave valuable input into the feasibility of involving Mexico in an international evaluation project was Professor Solomon Nahmad, the Director Adjunto of the Instituto Nacional Indígenista. He proposed that the INI and the Public Education Office do a project jointly and indicated that the first phase of the project could be done with local funds. Professor Raul Rodríguez Ramos of the same institution; Professor Mario Aquilera Dorantes, General Coordinator of the Extra-curricular Education Department of the Secretaría de Educación; Dr. Gloria Bravo Adhujá, Director of the Instituto de Investigación e Integración Social; Dr. Jorge Suárez; Dr. Yolanda Lastra de Suárez, and Professor Fernando Horcasitas, all from the Anthropological Investigation Institute of the National University, and Professor Angelina Arana Vda. de Swadesh, of the

Museo de Antropología. Suárez and Lastra de Suárez said they would be available to help with the project design as applicable to Mexico. There was considerable interest shown in a collaboration between the Instituto Nacional Indigenista and the Secretary of Education, focusing on the many vernacular language programs taught by some 15,000 bilingual teacher aides (promotores). Besides the many high-skilled personnel that might be available to this project including Dr. Nancy Modiano, a number of institutions offer a considerable amount of expertise, especially the INI and the Secretary of Education, but also including the National University and the Summer Institute of Linguistics.

PERU

Estimated Population: 16,600,000

General Overview of the Language Situation

The chain of Andean mountain ranges running the length of Peru divides the country into three ecological zones, the arid coastal strip (costa), the Andean highlands (sierra), and the eastern mountain slopes (selva) which extend down into the jungles of the Amazon basin.

Based on the 1972 census, the total population of Peru is presently estimated at 16,600,000. The coastal region is densely populated. The metropolitan area of Lima-Callao accounts for 30 percent of the total urban population and about 20 percent of the country's entire population. The eastern lowlands are still sparsely populated -- this 63 percent of the area of Peru contains only 11 percent of its people.

Peruvians represent a variety of ethnic, social and linguistic backgrounds, and, based largely on lifestyle and language, are generally divided into three major categories: Indian (now referred to as campesino), mestizo (descendants of Spaniards and Indians), and blanco (principally descendants of the Spanish colonists). Mestizos account for half the population.

Peru is divided into departments for policy purposes but it is the three ecological zones that have played the major roles in creating quite different linguistic histories. Although a multilingual country, Spanish is the dominant language of the country, and until May 1975, when by decree (Decreto Ley 21156) Quechua was declared an official language also,

it was the only official language. It is estimated that over 65 percent* of the population are Spanish mother tongue speakers, the remaining 35 percent being speakers of indigenous Indian languages. The total number of Indian languages spoken in Peru is not clear; figures given vary from several dozen to 200. (Work has been done through the University of San Marcos, and more correct numbers will probably become available.) Among Indian languages, Quechua speakers constitute some 89 percent of the speakers of all Indian languages, with Aymara being next in importance with about eight percent.

The predominantly Quechua region of Peru extends for some 750 miles along the sierra. A considerable degree of diversity exists within this expanse, and only in the past 10-15 years has enough information on various dialects been available to form a coherent picture of the situation. The fundamental division is between two groups of dialects, most frequently called Quechua A and Quechua B. These differ enough that it is probably best to think of them as separate languages.

Quechua A of the sierra departments south of Junín is divided between two major varieties: the Ayacucho type in Huancavelica, Ayacucho and western Apurímac, and the Cuzco type in Cuzco, eastern Apurímac, Arequipa and Puno. This latter is what has most often been thought of as Quechua; it represents a modern descendant of the Quechua that was the official language of the Inca empire.

Quechua B covers the dialects of the departments of Ancash, Huánuco, Pasco, and Junín, and a good deal of the inland edge of the department of Lima. The Quechua B dialects are quite divergent among themselves, showing

*1972 Census figures estimate that 69% claim to be monolingual Spanish speakers.

complex patterns of interrelationships suggesting the diffusion of influences on that language from different centers at different times. The dialect situation is not thoroughly understood and the areas within Quechua B where communication among speakers is easy cannot at present be delineated.

Near the Bolivian border, on the altiplano (high plain) in the area of Lake Titicaca, is the home of the other major Andean language, Aymara. Its speakers are found primarily in the department of Puno in three provinces near the lake.

The indigenous languages of the selva are extremely diverse. Many languages are spoken by very small groups and some are gradually dying out. The numbers of speakers are difficult to estimate, as these Indians largely practice shifting agriculture based on root crops and supplement by hunting and gathering. Many of them try to avoid contacts with outsiders. The jungle languages which number over 4,000 speakers are: Aguaruna, Amhuesa, Campa, Chayahuita, Cocoma, Harakmbet (Mashco), Huambisa, Machiguenga and Shipibo. Of these language groups the largest is Campa, whose speakers number approximately 35,000.

Spanish constitutes the major lingua franca of Peru. It is also the language aspired to be learned and used. It is estimated that about half the Indian population has some command of Spanish (obviously with great individual variation), and 20 percent of the total population above five years of age is said to be bilingual in Quechua and Spanish. This bilingualism is more prevalent in urban areas than rural.

Wolfgang Wölck estimates that there are three times as many bilinguals in urban areas as in rural areas. The department of Ayacucho has 95 percent Quechua mother tongue speakers and only 5 percent Spanish speakers. Among

Figure I Major Andean Languages of Peru

IR9D 11467
JAN 1976



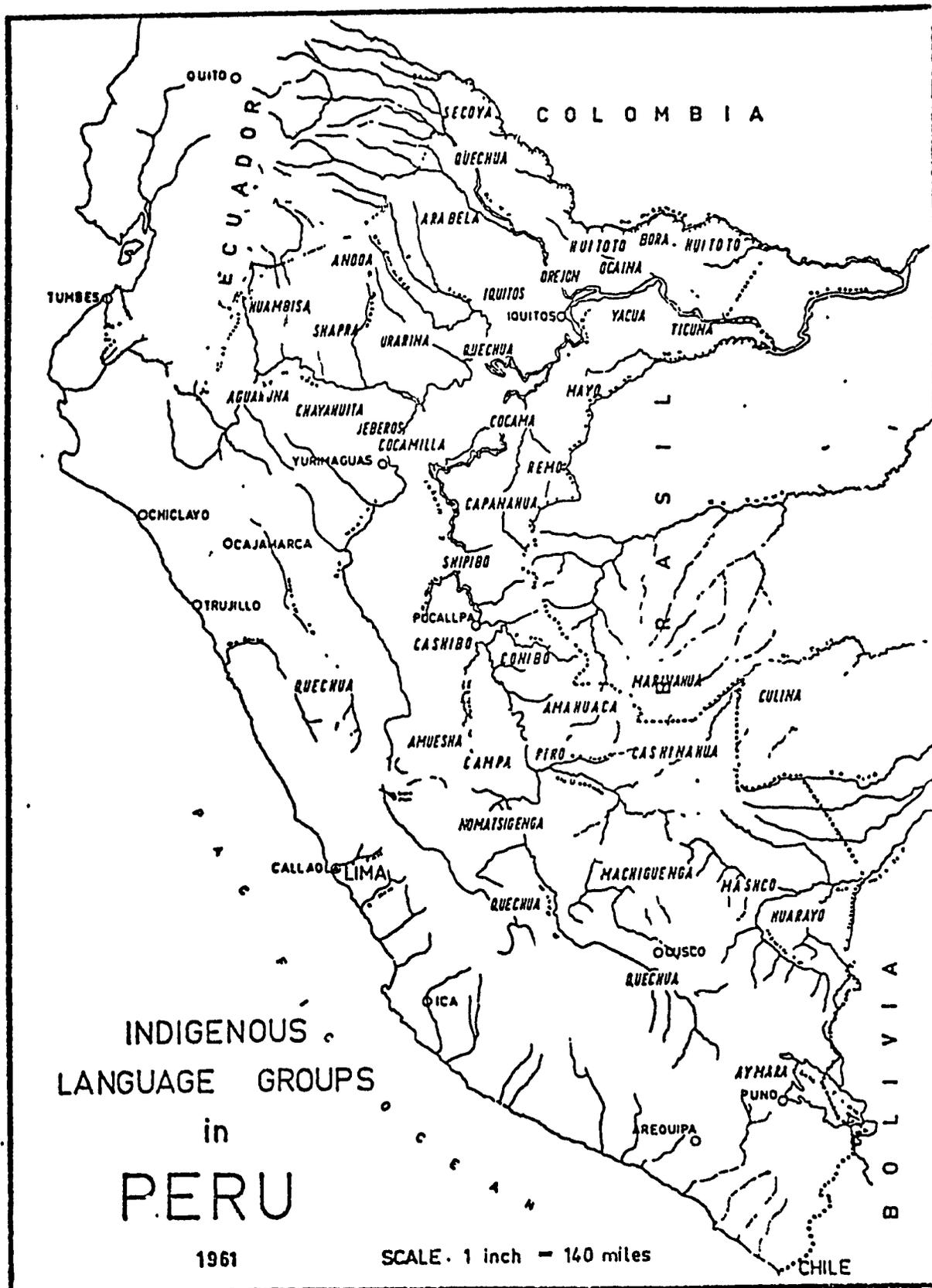


Figure 2

the Aymara and Campa are found the largest number of bilinguals in indigenous languages, with Quechua their second language. Trilingualism is quite frequent among speakers of Aymara and Campa with the addition of Spanish.

Despite the two decrees regarding language education, language attitudes do not change easily. Language is an important index to socio-economic position, and in Peru the monolingual speakers of Spanish of European descent form the apex of the social pyramid. At the base are the monolingual speakers of Indian languages and a large proportion of Mestizos. Above them is a rising middle class (mestizos and whites) which claims to speak only Spanish, but many members actually have varying degrees of proficiency in Quechua. Castilianization (shift to Spanish) is a primary force. Teachers sent to the Indian departments (la manche indigena) ignore the Indian languages, and if they know the language, as a mestizo, they use it only in their personal relationships (Matos Mar, 1970; Informe finale, 1975). In urban areas speakers of the highland languages who have settled there tend to use Spanish increasingly with their children growing up largely as mother-tongue speakers of Spanish.

There is a need in Peru for more complete statistics regarding matriculation by grade levels and institution types, geographic areas and level of studies; regarding the number of deserters, repeaters, regarding the total number of professors, type of institution and level; regarding the total annual expenditures by level and by type of instruction (Shell, 1971, 43).

Table I
MONOLINGUAL VERNACULAR-SPEAKING POPULATION
5 YEARS AND OVER

National Census 1972

<u>LANGUAGE</u>	<u>NUMBER</u>	<u>PERCENTAGE</u>
<u>Total Population 5 Years and Over:</u>	<u>11,790,150</u>	<u>100%</u>
Quechua	1,311,062	11.12%
Aymara	149,664	1.27%
Others	<u>140,000</u>	<u>1.18%</u>
TOTAL	1,600,726	13.57%

BILINGUAL VERNACULAR SPANISH-SPEAKING POPULATION
5 YEARS AND OVER

Quechua - Spanish	1,715,004	14.55%
Aymara - Spanish	182,241	1.55%
Others - Spanish	<u>110,000</u>	<u>1.07%</u>
	<u>2,007,245</u>	<u>17.17%</u>

MONOLINGUAL AND BILINGUAL EDUCATION

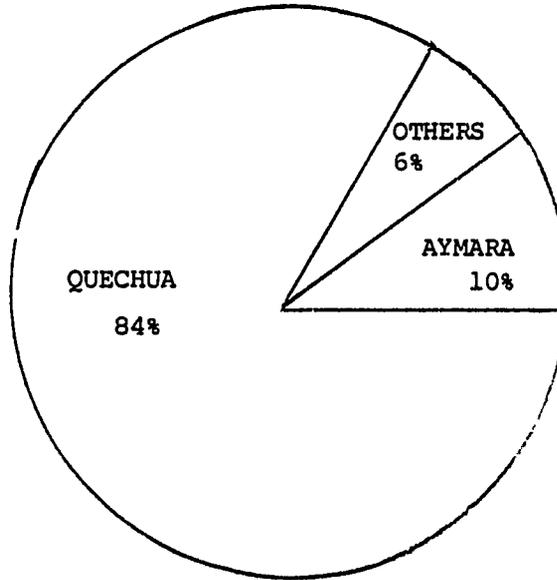
Quechua	3,026,066	14.55%
Aymara	331,905	2.82%
Others	<u>250,000</u>	<u>1.07%</u>
	<u>3,607,971</u>	<u>30.74%</u>

SUMMARY OF PERCENTAGES

Monolingual Spanish Speakers	69%
Vernacular Speakers	31%
Monolingual Vernacular	14%
Bilingual Quechua-Spanish	17%
Quechua Speakers	84%
Aymara Speakers	10%
Other Languages	6%

(Escobar, 1975)

NATIONAL POPULATION USING VERNACULAR LANGUAGES
5 YEARS AND OVER
(3,607,971, 1972 Census)



NATIONAL POPULATION OF 5 AND OVER
CLASSIFIED BY LANGUAGES
(11,790,150, 1972 Census)

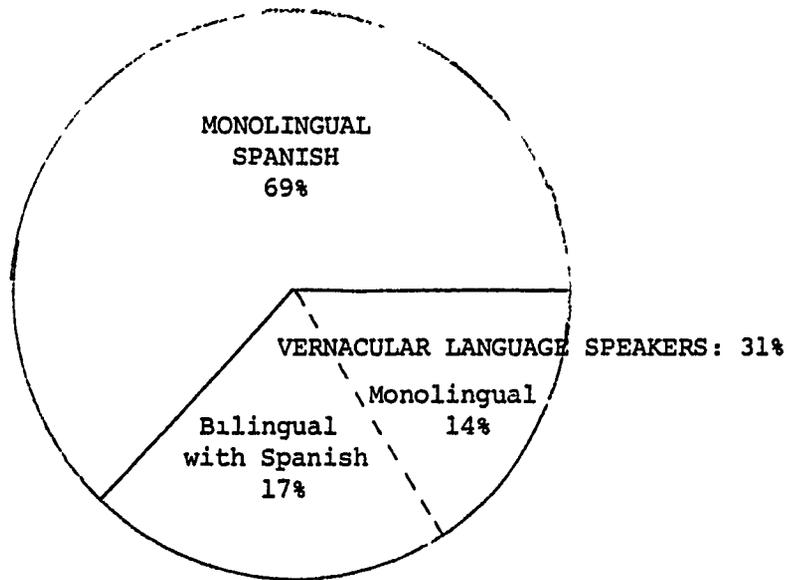


Figure 3

Table II

BILINGUAL AND MONOLINGUAL PERCENTAGES
IN SOME PERUVIAN COMMUNITIES

<u>COMMUNITY</u>	<u>PERCENT BILINGUAL</u>	<u>PERCENT MONOLINGUAL</u>
Langui	76.95	23.05
Ahanabamba	75.00	25.00
Urquillos	67.65	32.35
Chorqa	29.40	70.60
Pampaqalasays	27.88	72.12
Lcopia	20.00	80.00
K'allarrayan	17.25	82.75
Pataqocha	16.18	83.82
Umasbamba	15.75	84.25
Saqlaya	13.64	86.36

(Informe final, 1975, 39)

Table III

BILINGUAL INDIAN POPULATION
OVER 4 YEARS OF AGE

1972 Figures

<u>LANGUAGE</u>	<u>TOTAL</u>	<u>SPANISH- SPEAKING</u>	<u>NON-SPANISH- SPEAKING</u>
ANCASH	270,452	115,624	154,828
HUANOCO	174,446	99,007	75,439
AYACUCHO	237,234	34,576	202,658
APURIMAC	168,813	17,932	150,881

(Escobar, 1975, 36)

Table IV

THE RATE OF ATTENDANCE FOR TOTAL SCHOOL POPULATION
ACCORDING TO AGE FOR 1965 AND 1970:

<u>AGE</u>	<u>YEAR</u>	<u>PERCENT</u>	<u>YEAR</u>	<u>PERCENT</u>
5-9	1965	51.83%	1970	60.76%
10-14	1965	72.34%	1970	84.37%

(Uzategui Irigoyen, 1974, 62)

In 1960, 70 percent of the elementary school-age population attended school (Arevalo, 1966, Table 3, 131).

Table V

REASONS FOR PRIMARY SCHOOL DROPOUT RATES
1963

Causas del Retiro	Primaria Rural Diurna				Primaria Urbana Diurna				TOTAL			
	Prim.Part. Diurna Rural	%	Prim.Ofic. y Fiscal Diur.Rural	%	Prim.Part. Diurna Urbana	%	Prim.Ofic. y Fiscal Diur.Urb.	%	Prim. Rural Diur.	Prim. Urb. Diur.	Total Generl.	%
Tiene que trabajar	137	11.0	8,488	15.8	133	2.2	3,642	8.1	8,625	3,775	12,400	11
Problemas económicos	94	7.6	767	1.4	267	4.3	284	0.1	861	551	1,412	1
Problemas familiares	54	4.3	848	1.6	274	4.4	343	0.8	902	617	1,519	1
Muerte	15	1.2	858	1.6	44	0.7	433	1.0	873	477	1,350	1
Enfermedad	314	25.2	9,050	16.9	1,562	25.2	5,615	12.6	9,364	7,177	16,541	15
Límite de Asistencia	338	27.2	23,806	42.9	1,398	22.6	22,761	50.9	23,344	24,159	47,503	44
Traslado de Matrícula	76	6.3	3,239	6.0	748	12.1	5,594	12.5	3,317	6,342	9,059	9
Cambio de Domicilio	147	11.8	6,518	12.1	1,234	19.9	5,975	11.4	6,665	6,309	12,974	12
Otros	68	5.5	916	1.7	532	8.6	969	2.2	984	1,501	2,485	2
Total	1,245	100.0	53,690	100.0	6,192	100.0	44,716	100.0	54,935	50,908	105,543	100.0

Source: Ministerio de Educacion "Estadística Educativa" 1962-1963.

Patterns in Urban-Rural School Populations

Figures on school attendance are sparse. In 1970 it was estimated that 60.96 percent of the five to nine school-age population attended school. The Indian participation in education is minimal. Despite greater attention to their needs, the dropout rate is about 60 percent in the first grade. In some isolated highland areas as many as 50 percent of children are reported not to start school at all.

The reasons for such high rates of attrition and non-attendance are many, one being simply because facilities are inadequate. Other reasons are ones reported which deal with the attitudes of teachers sent to rural areas which have been mentioned before. However, James M. Wallace (1974) indicates that though peasants often are anxious to have a school in their community as a symbol of "progress" and will work towards establishing one, they are not as concerned with sending their children there. He argues that the peasants' "cultural isolation from the outside world is a strategy that has helped them to survive many periods of intense exploitation. The school is potentially one of the greatest rivals to their cultural isolation, through the inculcation of national norms and ideals transmitted in the classroom (p. 3)." This statement is corroborated by Donald H. Burns in his Final Report on the Five Year Bilingual Education Experiment in Ayacucho.

The Educational Situation

Peruvian education, although in principle structured, is in a state of transition. The government in its extensive reforms has addressed itself to some major problems in the present system. These include:

(a) centralization of the administration in Lima, (b) a generally rigid, academically-oriented curriculum, (c) lack of flexibility in types of education offered and high dropout and repeater rates (with average students in many classes), and (d) shortage of qualified personnel, including teachers. Reform activity seems to be in (a) decentralizing the power from Lima, and (b) creating more nuclear units (nucleos educativos comunales -- NECs). These would be set up progressively in every region and zone of Peru. It is estimated that by 1980 there will be 880 NECs covering the entire country (Bizot, p. 30). Also planned were the creation of new institutions (such as the Instituto Nacional de Investigación y Desarrollo de la Educación-- INIDE) to facilitate the education renewal process.

The present structure of education consists of (a) pre-primary education, (b) six years of primary education (grades 1-6) and (c) five years of secondary education (grades 7-11). This latter includes vocational education with sections for agricultural, industrial and commercial education which are offered mostly in grades 10-11. Higher education, or fourth level, consists of grades 12-15 and above, and is offered in universities, teacher training and technical institutes. Private education (about 15 percent of primary and 20 percent secondary enrollments) plays an important role in Peru.

The reformed structure of education provides a more flexible system. Its major aspects are: (a) reforms in pre-primary education, or the "first level," (b) two types of basic education, comprising the "second level" (grades 1-9), one being "regular" and the other, labor-oriented; (c) higher education, comprising the "third level" (grades 10-19) leading

to post-graduate work. This again is divided into two major types. The first is formal education intended for the preparation of professionals. The second, divided into two major types are non-formal schemes mainly for the preparation of people for skilled and unskilled jobs. These, in effect, fall outside the formal educational system, and offer opportunities for adults and school leavers. The two schemes are known as SENATI (Servicio Nacional de Aprendizaje y Trabajo Industrial) and CECAPE (Centro de Capacitación Profesional Extraordinaria), and have systematically structured programs to offer on-the-job training. The first has had programs since 1963. CECAPE is financed by the government.

Formal education at the third level (designed for the preparation of professionals in the various occupations) has two stages. The first, known as ESEP (Escuelas Superiores de Educación Profesional) is a common, upper secondary level which has both academic and practical components and is intended to be flexible enough to adjust to local needs.* Academic courses form about 40 percent of the program, but there are no purely academic or purely practical streams. After a certificate at the end of grade 12, students go on to polytechnic institutions or to universities and other institutions of higher learning. Figure 4 shows a chart of the reformed structure.

Peru has witnessed both an increase of population and school enrollment. In the early 1970s 46.2 percent of the population was in the 5-25 year age group. Enrollments in public and private schools in Peru (actual 1965-71, and projected up to 1980) are shown in Table VI. The average educational attainment for the entire country is three years, but it is nearly five years in Lima, and only about two years in rural localities.

*Teachers for this level, including 4,000 practical subject teachers will continue to be trained in three universities and in some selected polytechnic institutes.

PERU
REFORMED STRUCTURE OF THE EDUCATION SYSTEM
1972

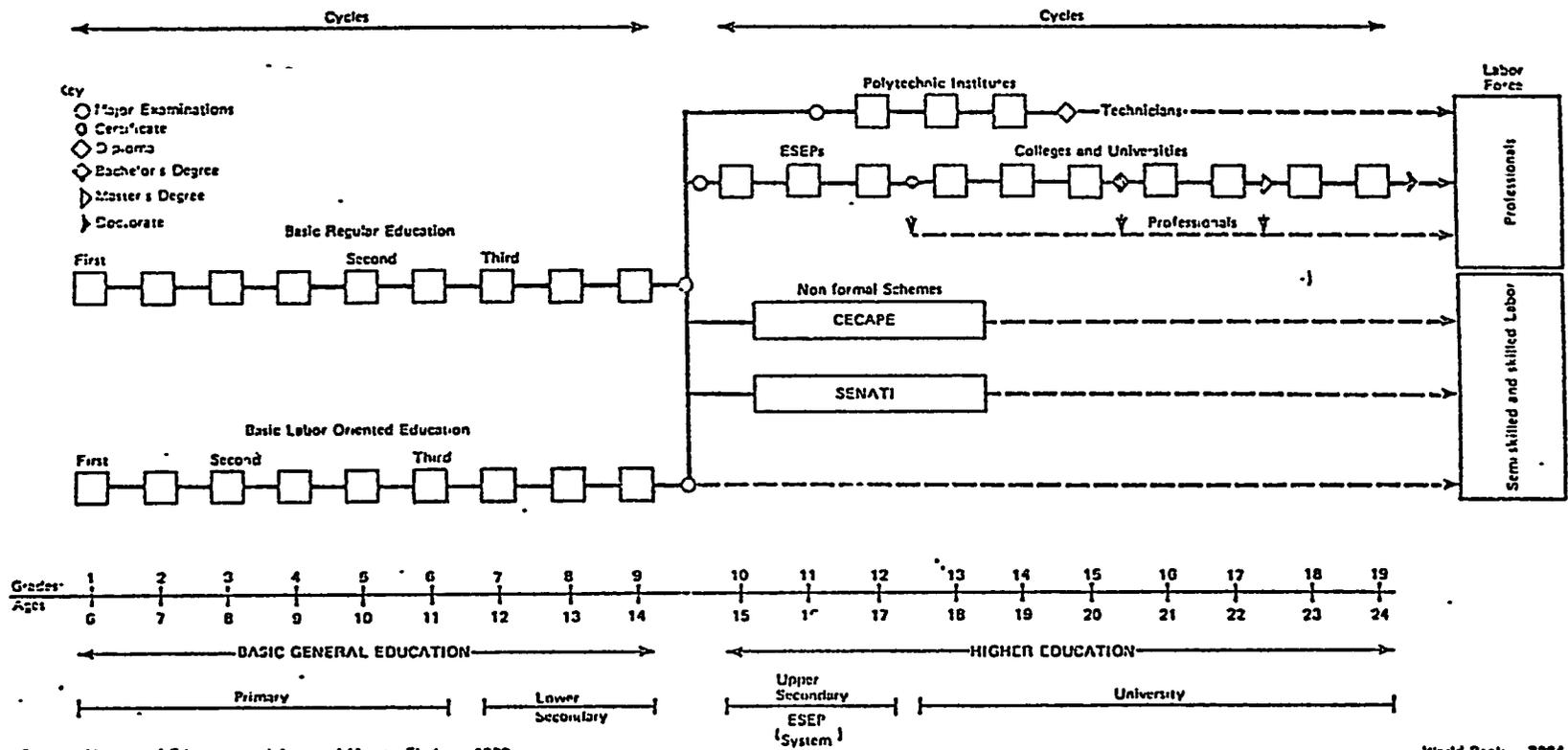


FIGURE 4

Source: Ministry of Education and Appraisal Mission Findings, 1972

World Bank - 7284

Table VI

Actual and Projected Enrollment in Public and Private Schools in Peru
(in 000s)

	ACTUAL ¹		PROJECTED ⁴		ANNUAL PERCENTAGE INCREASE		
	1965	1971	1975	1980	1965-71	1971-75, 1975-80	
Pre-School	49.4	80.9	190.0	280.0	8.5	24.0	8.0
Elementary ²	2,004.0	2,401.8	2,800.0	3,270.0	3.0	4.0	2.5
Lower Secondary ²	246.0	429.1	500.0	620.0	2.7	4.0	4.0
Upper Secondary ³	79.1	163.6	250.0	370.0	12.9	11.0	8.0
Higher	79.9	140.3	160.0	190.0	9.8	3.4	3.5
Grand Total (all levels)	2,458.4	3,215.7	3,900.0	4,730.0	4.6	5.0	4.0

¹/ It does not include non-formal education schemes at all levels estimated at about 430,000 in 1971.

²/ These two levels constitute the Basic Regular Education Program.

³/ It is the ESEP school system which in the reform is called the first cycle of higher education.

⁴/ All rounded figures.

Based on: Ministry of Education data and projections.
November, 1972.

Educational Research and Innovation

The Ley General (1973) which recognized officially the need for bilingual programs, and its corollary Decreto Ley 21156 (May 25, 1975), which elevated Quechua to official language status have given genuine impetus to mother tongue education in Peru. The law of 1975 in particular allows clear delineation of the administration and training techniques of the Regional and National Bilingual Education programs.

Bilingual education programs predate 1972. The first program was initiated as early as 1952 in the selva by the Summer Institute of Linguistics (SIL). In this program 240 Indian employees of the Ministry of Public Education (MPE), representing some 20 different Indian languages, successfully taught their people to read and write in their own mother tongue and then in Spanish (Wise, 1969). The program has continued, and there has developed an SIL-Ministry of Education jungle bilingual school program together with a teacher training system. All instruction is bilingual, that is, students are first made literate in their tribal language and only gradually work more and more in Spanish. It is not until the fourth year that Spanish becomes the sole medium of instruction.

A similar program was instituted on an experimental basis in the Quechua-speaking Andean highlands in 1965 by SIL, again in cooperation with the MPE. The program initially involved 700 monolingual Quechua speakers in three provinces of the Ayacucho district but was expanded during its five years of operation. The project was designed to bridge the gap between a monolingual Quechua community and the Spanish speaking school system. Materials for Quechua and Spanish were prepared and revised over the years. The important feature of this program was the

training of non-professional and rural-oriented people for work in the bilingual program.

Since 1964 the University of San Marcos has maintained an experimental program in bilingual education in the Nuclear School District of Quinua in the province of Huamanga, Department of Ayacucho. The results have been modest but respectable.

Much linguistic activity is centered around the University of San Marcos, in its Centro de Investigación de Lingüística Aplicada (CILA). Many of the key people who have had direct influence on government policy have had some relationship with that institution.

It should be mentioned that there were other activities at the University and larger community levels which contributed much needed information to the direction and substance of bilingual education programs, such as the one supported by the Ford Foundation (since 1964) at the University of San Marcos. One of the goals of the project is to make recommendations for governmental reforms. The Quinua experimental program is also part of this project.

The other Peruvian institutions of note which might conduct research are the University of Huamanga and the University of Trujillo. The latter has been involved in basic applied language activity.

The Centro de Idiomas of the Pontífica Universidad Católica in Lima is also involved in initiating training and research on the cultural and social issues created by a national policy of bilingual education.

As a result of the 1972 legislation, a few bilingual projects utilizing local varieties of Quechua were instituted in Peru. Donald H. Burns of SIL worked very closely with Peruvian linguists and the

national commission of bilingual education on a national scale.

In 1974 USAID approved a bilingual education program in Peru with cooperation from Cornell University. The goals included providing the rural population with greater opportunities to participate in the economic and social life of the nation. The program includes an evaluation design that would indicate whether the number of dropouts and repeaters was being reduced as a result of the bilingual approach.

All of the above-mentioned groups have worked very hard to effect some change in the education of the rural poor linguistic minorities. Government legislation has provided additional impetus to these grossly neglected communities. However, no amount of legislation will increase the pace of bringing the linguistic minorities within the pale of the Peruvian mainstream. The efforts of linguistically-aware institutions are bound to effect change in limited areas. The cost is high and they can only spread themselves so thin. The changes will become most effective when more attention is paid to the key role the nucleos educativos comunales (NEC) play in the rural areas. The envisioned network of centers are probably going to play an important role in changing the attitudes of both the dominant and dominated sectors of Peruvian society. One such effort is in the selva where SIL has been working. Imacita, where centro base of NEC No. 9 is located, is in the heart of Aguaruna territory. There are 45 educational centers attached to this NEC. Whenever possible all instruction is in Aguaruna and Spanish. Many of the bilingual teachers were trained by SIL. The Jesuit school in the area only accepts Aguaruna students, and all efforts are towards training of these students to adapt linguistically and psychologically to the influx

of settlers while maintaining their own cultural identity.

Language planning has not been a primary concern of the Peruvian Revolutionary Government. It became an issue as part of a general intent to reform all aspects of Peruvian society. The work of linguists and concerned educators came to the fore as a result of awareness of the general educational system. They were ready to some degree when questioned about the effects of mother tongue education and their studies previous to 1972 and subsequent activity are bound to have an effect on the language teaching situation and implementation of policy in urban as well as rural areas.

In January of 1972 the Ministry of Education sponsored the Seminario Nacional de Educación Bilingüe. Composed of the country's most prominent social scientists, educators, language teachers and foreign experts working in Peru, it set the direction of bilingual education in a more formal way through recommendations. Subsequent seminars have reinforced the commitment to bilingual education in Peru.

The 1975 decree established that beginning with the 1976 school year the teaching of Quechua would be compulsory at all levels of education including the initial level (up to six years, including parents) and those indicated in the reformed structure of education, up to the bachelor and post-graduate levels. A Commission was set up and given a period of two months to prepare recommendations for the implementation of this.

The integration of Quechua into the educational system is bound to overshadow efforts on other fronts, although it is assumed that the work of organizations such as SIL-MPE on other languages will continue at a slower pace.

There are practical problems associated with implementing bilingual programs in Quechua-speaking areas, which will obviously delay making the 1975 law a quick reality. The government now recognizes that Quechua is not a single language, and that for purposes of bilingual education, at least, several dialects require separate recognition. The situation generally presented by linguists is as follows:

	<u>Dialect</u>	<u>Speakers</u>
A:	Cuzco	1,900,000
	Ayacucho	1,200,000
	Cajamarca	40,000
	San Martin (jungle)	25,000
B:	Ancash	700,000
	Wanka (Southern Junin)	450,000
	Tarma (N. Junin & Pasco)	400,000
	Huanuco	300,000

The use of these varieties as media of instruction must eventually be concerned with their adaptation to meet modern needs. Decisions as to whether they are to be used as media of instruction in exclusively agricultural communities or more widely, will have important implications for each adaptation. Another problem is the scarcity of linguistic information on Quechua. This is gradually being solved by the linguists at CILA who are, in addition to the language, engaged in the production of a dictionary of Quechua which will, presumably, represent dialect variation at least at the lexical level.

Local Resources and Interest

There are a fair number of institutions which could provide leadership and resources into a study of language in education for rural poor linguistic minority groups in Peru. The following are those which CAL's project consultant talked to. The people contacted in those institutions are also provided.

AID: Dr. Barry Heyman, AID in Peru sees bilingual education as a priority. There is an AID-funded project in Cuzco headed by Prof. Donald Sola of Cornell University.

Centro de Investigación de Lingüística Aplicada of the University of San Marcos (CILA): Dr. Rodolfo Cerran-Palomino, Director; Dra. Madeleine Zuñiga, Director of Bilingual Education. CILA would be interested in being involved in any future projects but would need financial assistance.

Instituto Nacional de Investigación y Desarrollo de la Educación (INIDE): General Marco Fernandez Baca, Director; Mr. Luis Negron, Coordinator of Proyecto Bilingüe, and Dr. Jose Aleaga Estrada, Assistant Director of the Evaluation Unit. Interest and cooperation on the part of all these people were evident. They may be interested in funding Phase I, but financial assistance/funding would have to be sought elsewhere after that.

Instituto de Estudios Peruanos: Dr. Alberto Escobar.

Ministry of Education, Bilingual Unit: Prof. Gamaliel Arroyo, Director.

Summer Institute of Linguistics (SIL): Mr. James Wroughton, Director, SIL/Lima; Mr. Eddy Riggle, SIL. There is a large body of data they have which needs to be analyzed.

Other key people who could be of valuable assistance in assessing needs are: Prof. Inez Pozzi-Escott of Lima, Peru; Dr. Mauricio San Martín, ex-rector of the University of San Marcos, and Mary Ruth Wise of SIL.

In the event of further projects in Peru, probably the best institution to take the responsibility for coordinating and working closely with other institutions would be INIDE,

CHAPTER III

KENYA

Estimated Population 1977. 14,400,000

Population

The estimated population for Kenya in 1977 was 14,400,000. The population of Kenya is almost 90 percent rural. Most of the urban population is concentrated in Nairobi and Mombasa. The annual population growth rate is roughly 3.5 percent. Urbanization is increasing at the fairly rapid rate of 7.1 percent annually. The obvious reason is wage-employment. Those moving are generally under thirty, about half are single, and the education level higher than the average for the equivalent age-groups (Kaplan, 1976).

Language Situation

Kenya is at the northeastern corner of the Bantu-language zone of Africa and contains numerous Bantu vernaculars which are spoken by about 65 percent of the population. There are 30 distinct languages and dialects in Kenya. Table I lists Kenyan languages with over 75,000 native speakers. The largest language groups are Kikuyu, Kamba, and Luyia. About 31 percent speak Nilotic and Para-Nilotic languages while three percent speak Cushitic languages. There are large communities of immigrants from the Indian sub-continent, the most important being Gujarati, Punjabi, Urdu, and Hindi. According to the 1969 Kenya census, Kikuyu, Luo, Kamba and Luyia had over 1,000,000 speakers. Just over 88 percent of the population belong to one of the eight major language groups (Gorman in Whiteley, 1974).

Table I

MAJOR LANGUAGES OF KENYA
(First Language Speakers)

<u>Language</u>	<u>Family</u>	<u>Number</u>	<u>%</u>
kiKikuyu	Bantu	3,960,000	27.5
Luo	Nilotic	2,020,000	14.0
luLuhya	Bantu	1,650,000	11.5
kiKamba	Bantu	1,580,000	11.0
Kalenjin	Paranilotic	1,400,000	9.7
ekiGusii	Bantu	1,300,000	9.0
Mijikenda	Bantu	690,000	4.8
(Somali)	Cushitic (Afro- Asiatic)	330,000	2.3
Masai	Paranilotic	290,000	2.0
(Turkana)	Paranilotic	240,000	1.7
Taita	Bantu	143,000	1.0
(Pokot)	Paranilotic	124,000	.9
Teso	Paranilotic	114,000	.8
(Galla) (Oromo)	Cushitic (Afro- Asiatic)	100,000	.7
(Gujerati)	Indo-European	80,000	.6
kiSwahili	Bantu	75,000	.5

Note: kiMeru (spoken by about 750,000) is considered here as a dialect of kiKikuyu. Still, it is sufficiently distinct, supported by a strong sense of tribal identity, and spoken by enough people, that it is maintained as an educational language. luLogoli is considered in this report as an isolated dialect of ekiGusii, but counted in the 1969 census with luLuhya. luBujusu is probably mutually comprehensible with luLuhya. Teso is a small group in Kenya. Most likely it is included in the educational scheme because it is a school language in Uganda.

Swahili has long been the lingua franca of the country. It is estimated that about 75,000 people speak one of its dialects as a first language, and surveys indicate that over 60 percent of the population are reasonably familiar with the language. It was declared the national language in 1970 and since then the government has tried to extend its use in all areas of life.

English is the language used for most official purposes, as well as for advanced education and international communication. Thus for purposes of national unity, English is maintained and Swahili is emphasized in education.

Multilingual Education

Multilingualism, at least within the education system, is a way of life in Kenya. As of 1974, all children are to begin instruction in a vernacular, after which Swahili will be used for the remaining five years of primary education. English is to be introduced as a subject in the first grade and continue as the medium of instruction in secondary and higher education. Oddly, this policy was in force in 1919, although it reached a very small segment of the population. The languages in Table I not in parentheses are the ones designated by the government for use in education.

Education enrollments in Kenya experienced a pronounced upsurge in 1974 when fees for the first four standards were discontinued. This was particularly evident in the areas of population concentration. The outlying pastoral regions saw less participation, partly because of the lower value attached to formal education by parents and partly because of the inaccessibility of schools to the primarily non-sedentary popula-

tion (Kaplan, 153).

Overall there were 1.8 million enrolled in schools in 1973 and 3 million in 1975. High concentrations of population correlate directly with school attendance. In 1973, 98% of school-aged children attended school in the Central Province. This area is predominantly Kikuyu. In the Coast Province, 48% of school-aged children attended school. This area includes a number of groups, the largest of which are the Mijikenda. Some of the dialects of Mijikenda are very close to Swahili. In the Coast Province, a full command of Swahili is virtually universal. In the sparsely populated Northeastern province only nine percent of the children attended school.

The rise in enrollments and the government's policy of providing a place for every applicant in Standard I has created a serious shortage of teachers. In 1974 it was estimated that about one-third of teachers were untrained. The 1974-78 Development Plan calls for producing 6,000 teacher trainers annually.

Educational wastage, as compared to other African countries, is low. The dropout rate before completing the Primary Cycle is about 20 percent. However, about 35 percent fail the Primary, leaving exam for reasons of malnutrition, irregular attendance, and the poor standard of teaching. Table II shows figures for 1971. Figures for 1974-78 have not been made available except in general terms (Table III).

Table II

<u>Standard</u>	<u>Flow</u>	<u>Rate %</u>
I	Promote	77.9
	Repeat	10.0
	Dropout	12.1
II	Promote	80.9
	Repeat	15.3
	Dropout	3.8
III	Promote	79.1
	Repeat	16.4
	Dropout	4.5
IV	Promote	78.5
	Repeat	16.2
	Dropout	5.3
V	Promote	82.0
	Repeat	15.4
	Dropout	2.6
VI	Promote	76.7
	Repeat	15.4
	Dropout	2.3
VII	Promote	26.4 to Secondary

Note: For every 1,000 students entering Standard I, 692 finish.
(British Council Restricted Profile, 1976)

Table III

1973-1974 School Figures

981,000 Entered Primary

227,000 Finished Primary

24,900 Entered Secondary

Ethnicity is important in Kenya but only on a national level. At the local level ethnic homogeneity tends to eradicate tensions. For example, in three of the seven provinces between 88 and 96 percent of the population belongs to a single ethnic group. Only in the Rift Valley and Coast provinces is there lack of uniformity (Kaplan, p. 221). Language has played some role at the national level. The five largest language groups have all, at one time or another, stressed language identity in the course of seeking political ends, and have to some extent considered language development as a political right.

Attitudes towards language even in rural areas seem to take on utilitarian values. In order to be socially mobile one needs to learn English and Swahili, in that order. The Survey of Language Use and Language Teaching in Eastern Africa includes a study on the patterns of language use among rural school children (see Table IV) and their attitudes.

The use of vernacular in the first three years does not seem to be a problem since most teachers speak the language. The problem lies in the teaching of Swahili. Teachers often are unqualified to teach the language and lack interest. Teaching materials and methods lag behind those for other languages, and the variety of Swahili taught is different from that used in and around the schools. In the rural schools, linguistic homogeneity further eliminates the need to speak Swahili, although everyone seems to learn it to some degree of competency. The same problems do not apply in the teaching of English. Teachers stress the development of a good command of English.

At the Secondary level, English is the primary medium of instruction. However, there are some districts where the vernacular is the only

Table IV

LANGUAGE CHOICE 1

Rural	<u>English</u>	<u>Swahili</u>	<u>Mother T.</u>
Kikuyu	59.62	6.31	34.07
Luo	51.94	6.20	41.86
Luyia	54.65	17.44	27.91
Kamba	53.74	10.88	35.37
Meru	65.49	7.08	27.43
Mijikenda	43.31	10.24	46.46
Gusii	51.20	9.60	39.20
Kalenjin	49.58	14.28	36.13

LANGUAGE CHOICE 2

Rural	<u>English</u>	<u>Swahili</u>	<u>Mother T.</u>
Kikuyu	30.60	39.43	29.97
Luo	33.33	43.41	23.26
Luyia	25.58	55.81	18.60
Kamba	25.85	59.86	14.29
Meru	21.24	60.18	18.58
Mijikenda	18.90	57.48	23.62
Gusii	33.60	52.80	13.60
Kalenjin	34.45	47.06	18.49

LANGUAGE CHOICE 3

Rural	<u>English</u>	<u>Swahili</u>	<u>Mother T.</u>
Kikuyu	6.31	49.84	43.85
Luo	10.85	42.64	46.51
Luyia	15.12	22.09	62.79
Kamba	18.37	26.53	55.10
Meru	11.50	32.74	55.75
Mijikenda	27.56	23.62	48.82
Gusii	14.40	34.40	51.20
Kalenjin	10.92	32.77	56.30

medium and, in Swahili-speaking areas, Swahili is often the medium of instruction.

The development of language policy in Kenya goes back to the early part of this century.* After independence until 1974, the officially-favored New Primary Approach used English as the medium of instruction starting in Standard I. However, as schools expanded into rural areas the need for mother tongue education became apparent. The need for qualified teachers of Swahili also emerged. Efforts to meet both needs were undertaken by the Kenya Institute of Education and Kenyatta University College.

In reality, a great deal of variability can be expected for many years to come.

Local Resources

Assessment of local interest and resources was greatly facilitated by Dr. Monammi Abdulaziz, Chairman of the Department of Linguistics and African Languages at the University of Nairobi, and Dr. Edgar Winans of the Ford Foundation. In addition to these people, Dr. Frenise Logan, Cultural Affairs Officer, U.S. Embassy, and Miss Lois Richards, the AID Program Officer in Kenya, provided valuable input.

Dr. Abdulaziz, who maintains close relations with the Ministry of Education, indicated a great deal of interest in his department's participation in the project.

Other resource people are E.N. Wanyoike and M. Karenga, linguists at the University of Nairobi; J. Muthiani, linguist at Kenyatta University College, C.I. Sultan, M. Ireri and A. Claessen of Kenyatta University;

*A good historical description of the commissions and reports regarding language policy is given in Whiteley, W.H., ed. Language in Kenya, by T.P. Colman.

John Shiundu, Kisii Teacher's College; Rachel Angogo-Kanyoro, United Bible Societies; and A.L. Oluoch, language teacher, Msongari Girls School. Institutions which would be capable of collaborating in vernacular education projects are: University of Nairobi, Faculty of Education; Kenyatta University, Faculty of Education and the Department of Languages; and Siriba Teachers College, in Western Kenya.

The Ford Foundation also indicated interest in the project. At the time of the on-site visit, AID did not have plans to fund public education in Kenya or projects that directly related to public education on the primary level.

INDONESIA

Estimated Population 1977: 136,900,000

Population

Based on the 1971 population census, the estimated population for Indonesia in 1977 was 136,900,000. About 65 percent of the population lives in Java, Madura, and parts of Sumatra. Indonesia is generally divided into four main areas: (1) The Greater Sunda Islands, including Sumatra, Java, Borneo and Celebes, (2) The Lesser Sunda Islands, including those extending east from Bali to Timor, (3) the Moluccas, and (4) Indonesian (West) New Guinea, officially known as Irian Jaya.

There are 54 ethnic groups, of which the largest is the Javanese (who constitute about one-half of the population of Indonesia), the Sundanese, the Coastal Malays, the Madurese, the Achinese, the Batak, Balinese, Makassarrese-Buganese and the Menangkabao.

Language Situation

Bahasa Indonesia, the "Indonesian language," is the national language. It has rather successfully been fostered as the national language since independence, with the result that today's typical educated Indonesians operate bilingually in their own indigenous language for everyday communication and in Bahasa Indonesia for academic, political and technical discussions. The government is attempting to develop the use of Indonesian in every aspect of Indonesian life. Eight hundred and twenty-seven other languages and language varieties are spoken in Indonesia (Grimes, 1974, 247).

Linguistically, the languages fall into two main divisions. (1) Malayo-Polynesian, which can be further subdivided into the Moluccan (eastern) and Hesperonesian (western) branches. The Hesperonesian languages form the bulk of the Indonesian languages (94 percent), and (2) Papuan languages, which are the languages of West New Guinea. Speakers of these languages -- there are approximately 200 varieties -- number about one million.

Malay or Indonesian, in one form or another, is the most widespread mother tongue in the country. It dominates the east coast of Sumatra and adjacent islands, coastal Borneo, and the Jakarta area on Java. Malay speakers are found in lesser numbers in North Sulawesi, in Ambon, in scattered groups, often small but locally influential, throughout the northern Moluccas, and even along the northern coast of New Guinea. The ubiquity of Malay traders throughout the archipelago paved the way for the spread of Indonesian as a language of wider communication. Population growth rates have been notably high in several of the areas where some form of Malay is spoken natively, with a resulting recent gain in relative numbers of first-language speakers.

The table on the following page lists the sixteen languages that are estimated to have over 750,000 native speakers. The large numbers who use Bahasa Indonesia as a second language are not included in these figures. At present there are no data indicating the extent to which Indonesian is known as a second language. Various considerations, particularly the extent of education above the third grade, suggest that at least an additional one-third of the population must have a functional command of the language. Estimates, apparently entirely impressionistic, put this figure at nearly two-thirds. Obviously an extremely wide range

of mastery exists in the country.

Of the foreign minorities, the largest group in Indonesia is the Chinese (about three million). Other significant groups are the Arabs (100,000) who are dispersed throughout the islands, and the Eurasians (20,000). Since the expulsion of the Dutch in 1949, the European population has been very small.

LANGUAGES OF INDONESIA WITH 750,000 OR MORE FIRST-LANGUAGE SPEAKERS

<u>Language</u>	<u>Family</u>	<u>Numbers</u>	<u>Percentage</u>
Javanese	Sundic (Malayo-Polynesian)	56,000,000	43.1
Sundanese	Sundic (Malayo-Polynesian)	16,500,000	12.7
Indonesian-Malay	Sundic (Malayo-Polynesian)	15,000,000	11.5
Madurese	Sundic (Malayo-Polynesian)	7,500,000	5.8
Menangkabao	Sundic (Malayo-Polynesian)	4,500,000	3.5
Buginese	Celebes (Malayo-Polynesian)	3,200,000	2.5
Balinese	Sundic (Malayo-Polynesian)	2,500,000	1.9
Achinese	Sundic (Malayo-Polynesian)	2,000,000	1.5
Toba	Batak (Malayo-Polynesian)	1,600,000	1.2
Makassarrese	Celebes (Malayo-Polynesian)	1,600,000	1.2
Amoy	Chinese (Sino-Tibetan)	1,400,000	1.1
Sasak	Sundic (Malayo-Polynesian)	1,400,000	1.1
Rejang	Sundic (Malayo-Polynesian)	920,000	.7
Simalungun	Batak (Malayo-Polynesian)	800,000	.6
Hakka	Chinese (Sino-Tibetan)	780,000	.6
Cantonese	Chinese (Sino-Tibetan)	750,000	<u>.6</u>
			89.6

English became the preferred language of wider communication in Indonesia after independence from the Dutch. It is the principal foreign language studied, a compulsory subject in secondary schools, and has a sort of joint official status in the country. Laws and official government documents are published in English as well as in Indonesian, and many other publications also appear in an English version.

Multilingual Education

The model form of education is bilingual. One of the six major regional languages (Javanese, Sundanese, Makassarese, Batak, Madurese, or Balinese) functions as the medium of instruction in grades one to three in the areas where they are spoken, and Indonesian throughout grades four to twelve. In other areas, Indonesian is used beginning in the first grade. It is not completely clear exactly where the areas using vernacular education are. Whether, for instance, children in Javanese-speaking villages in Sumatra or Southern Kalimantan begin instruction in Javanese. It seems likely that the Buginese of Celebes are included under those using Makassar in the schools, since Buginese and Makassarese, although clearly distinct languages, are often lumped together. If used to the fullest extent, about two-thirds of the student population begins education in one of the six regional languages.

"Bahasa Indonesia is taught as a language and/or literature course all through the twelve grades of primary and secondary school regardless of the linguistic origin of students or their later field of specialization. For the first three years of primary school it is universally taught as a future medium of oral and written instruction, but for children

who already speak Malay/Indonesian natively there is, of course, more emphasis on standardization than on the learning of new subject matter. During the upper half of primary school, the content of the national language courses begins to change from instruction in pure reading, writing, speaking, and comprehension skills to include analytical, literary, and aesthetic components. For non-native speakers the learning process is now reinforced by the use of Bahasa Indonesia, instead of the vernacular, in all non-linguistics subjects." (Noss, 85) Beyond the primary level, textbooks, other than those used for teaching foreign languages, are in Indonesian. Instruction on the language is five hours a week in lower secondary classes and decreases to three hours in the upper secondary levels. Recently (1974), experimental radio broadcasts which include Indonesian lessons have been instituted as a supplemental means of improving elementary language instruction. Although lectures are in Indonesian in higher education, textbooks are generally either in Dutch, English, or German. Students must shift back and forth between languages.

Some problems related to acquisition of Indonesian lie in the way it is taught. Although students receive what appears to be a reasonable introduction to the language, little attempt is made to compensate for those who do not speak it as a mother tongue. The failure of these children to master Indonesian may further account for the large numbers of dropouts in grades four and five. Given the fact that vernaculars are used in the early grades, and that some 36 percent of those enrolled in grade one have dropped out by grade six, it would appear that a great number of Indonesians are becoming educated and literate in the vernacular rather than in Indonesian.

Primary education is not yet universal, however great strides have been made. In the early 1950s only 15 to 20 percent of primary-school-aged children were enrolled as compared to 77 percent in 1971.* In 1971, out of a total of 22.9 million school-aged children, 15.1 million were in school. Enrollments in private schools were higher than in public schools.

Relevant Studies

The final report on the National Assessment of the Quality of Indonesian Education Progress Report on Survey of Achievement in Grade Six by Warwick B. Elley will be published by the Indonesian Office of Ministry Education and Culture in the near future. It will provide information on the languages used in education, literacy rates, achievement, attrition, attendance, school finance and facilities. At present, the information available is inadequate. Amran Halim has edited a two-volume anthology on language policy.

Local Resources

Among those who provided on-site input into the assessment of the feasibility of involving Indonesia in the evaluation project were Dr. Charles B. Green, the AID Education Advisor, and Mr. Menno H. Van Wyk and Dr. Peter D. Welson of the Ford Foundation. Notable among the Indonesian scholars was Dr. Amran Halim, Director of the National Center for Language Development. Indonesian interest in the proposed project centers around questions concerning the efficacy of using vernacular languages in

*Other estimates put the 1971 figure at 66 percent.

helping students achieve literacy in Bahasa Indonesia. Ford Foundation officials referred to relatively large amounts of data collected by the Ministry of Education that would lend themselves to a secondary analysis of the type proposed by this project.

Outside funding would probably be necessary as a catalyst. The Ford Foundation in Jakarta may be interested in assisting with training local professionals in empirical data collection.

BOLIVIA

Estimated Population 1977. 5,900,000

Population

The estimated population of Bolivia in 1977 was 5,900,000. It should be noted that estimates of the total population vary greatly. The figure used here is based on projections from a 1976 study by the International Labour Office.

Language Situation

The official language of Bolivia is Spanish; however, native speakers of Spanish constitute a plurality, not a majority, of the country's population. Including those who have learned it as a second language, Spanish speakers constitute a bare majority. The other major languages of Bolivia are Quechua and Aymara. Estimated numbers of speakers are:

<u>Language</u>	<u>Number of Speakers</u>	<u>Percentage of Population</u>
Spanish	2,300,000	39.00
Quechua	2,030,000	34.40
Aymara	1,485,000	25.20
Other indigenous	72,000	1.25

Of the Spanish-speaking population, roughly half are found in urban areas. The other half are settled in fertile valleys of the northeastward slopes of the Andean mountains and, to a lesser extent, in the sparsely-inhabited Amazon and Paraguay drainage lowlands. The Aymara are concentrated in the departments of La Paz and Oruro. The

majority of the Quechua live in the departments of Potosí and Cochabamba. Quechua are also found in respectable concentrations in other highland areas. The other Indian languages, with one exception, are minorities in the lowland regions, with the greatest number in the department of Santa Cruz. The greatest variety of small groups are found in the department of Beni. Their locations and approximate numbers are shown on the following map. There are also some settlements of Okinawans in the jungle areas.

There is a considerable degree of bilingualism in Bolivia. It is reported that 36 percent of the Spanish speakers in the highlands have some knowledge of Quechua or Aymara. The degree of proficiency, however, is said to be rather limited. This pattern, unique in Latin America, stems from an earlier situation in which Indians were forbidden the use of Spanish. (Vallejo, 1975) Most of the Indians remain monolingual. It has been estimated that nearly one-fifth of the Quechua and one-quarter of the Aymara know Spanish, making contributions of seven and six percent, respectively, to the national hispanophonic total.

The importance of Quechua and Aymara in Bolivia makes the sociolinguistic situation in Bolivia unique among Latin American multilingual countries.

Only about 40 percent of the people of Bolivia are considered literate in Spanish. (It has been said that this figure represents a lax view of what it means to be literate; a literacy rate of one-third more nearly reflects practical reality.) The closeness of the 40 percent literacy rate to the percentage of native speakers of Spanish does not mean that the two groups are identical: some Quechua and Aymara become

literate in Spanish and many Spanish speakers do not.

The government has decreed that all illiterates between the ages of 15 and 50 must attend literacy classes, but this is not believed to have remedied the situation. Nor have the results of the literacy campaign aimed at those under 15 been satisfactory. It is estimated that, in the last ten years, an average of 12,000 persons were taught to read each year -- or about 0.6 percent of the population under 15 years old (Ministerio de Planificación y Coordinación, Estrategía Socio-Económica del Desarrollo Nacional, Tomo II, Bolivia, 1970, 503).

Education

All education in Bolivia has labored under tremendous difficulties. In 1950, only about 30 percent of the children had received any schooling. Not least among the problems has been a dearth of textbooks due to a prohibitive tariff on imported books.

The education system favors urban sectors over rural sectors. In 1971, rural education received 27 percent of the total tax for education, while rural students represent 37 percent of the total school population and 65 percent of the total population is rural. (Albo, 1977, 8) The situation is further exacerbated by irrelevant programs and curricula. Rural teachers and Escuelas Normales view themselves as agents for transmitting foreign values and reinforcing the status quo. Schools are instruments of integration in favor of the dominant Spanish-speaking group. (Jorge Agreda in Dandler, 1969, cited in Albo, 1977, 9)

Despite the negative factors, registration for elementary education in rural and urban areas is increasing at an annual rate of 4.5 percent, which is higher than the increase in population. However, the

educational system has been unable to absorb the total school-age population (Estrategia Socio-Económica del Desarrollo Nacional, Tomo II, Appendix III, 518). This problem is aggravated by dropouts, failures, and repeating of grades. At the national level, an average of one out of every two students entering school will complete the primary level. The majority will drop out in the early school years. Nationwide, less than one third of the registered first grade students reach fourth grade, less than a fifth enter secondary schools, and less than three percent reach the university level. Less than 0.4 percent complete higher education. This means that only one student out of 250 who enter primary school graduates from the university. Including children with no access to the school system, the possibilities are reduced to 1/375. (Estrategia Socio-Económica del Desarrollo Nacional, Tomo II, 503)

Political changes since 1952 have eroded the former exclusion-on-principle of all non-Spanish culture from Bolivian national life. Beginning in 1973, meetings have been held to discuss seriously the use of Indian languages in the schools. The possibility of teaching initial literacy in the indigenous home language is at least entertained, if not considered necessary at official levels, and some reading materials have been developed in Aymara and Quechua.

As yet, most bilingual education projects are experimental. They are conducted with apparently little coordination and little exchange of information. The prevailing view seems to be that, to the extent bilingual education is advisable, it should be transitional, with a shift to Spanish materials as quickly as possible.

The prospects for bilingual education are considerably enhanced by the efforts in recent years of Quechuas and Aymaras to promote the

use of their languages in written form. Writers' clubs have been established in Cochabamba and Orura to promote the production of literature in Quechua.

Relevant Studies

Research and projects on the indigenous languages of Bolivia include Xavier Albo's 1967 dissertation, Social Constraints on Cochabamba Quechua, published by Cornell in 1970, and his study, "Sociolingüística y Educación en Bolivia," presented to the Ministry of Education. Albo's research is massive in detail, with excellent descriptions of techniques, instruments, and methodology of research, particularly data collection. He provides a wealth of ethnographic data and information on dialectical variation within Quechua (Alleyne in Ohannessian, et al., 185).

Also relevant is the report by Pedro Plaza and Juan de D. Yapita, "La Discriminación Lingüística y Social," (INEL, La Paz, 1974). The Centro Pedagógico y Cultural Portales held a Seminar on Education and Native Languages in Cochabamba (1973).

An AID-supported sociolinguistic study of 200 communities was conducted by the Consejo de Racionalización Administrativa. AID has also funded the Proyecto Educativo Rural Number 1, a rural bilingual education project being conducted under the auspices of the Ministry of Education. This project includes technical assistance in Cochabamba by a team from the University of New Mexico. Plans are underway for a second Rural Project, but implementation is behind schedule at present.

In 1977, the World Bank funded a five-year bilingual education project among the Aymara who live in the highlands outside La Paz. It is administered by two separate government agencies. The primary and

community education component includes classroom construction, development of curriculum and learning materials, and in-service training for teachers. This component includes bilingual education radio programs. The other component of the project deals with vocational education, specifically in the fields of construction, mining, and agriculture. All education is to be bilingual.

Local Resources

On-site assessment of the feasibility of involving Bolivia in an international evaluation of vernacular education was greatly aided by Messrs. Robert Johnson, Max Williams and Charles Reid of AID, Prof. Ignacio Paravicini, Director, and Dr. Jaime Bravo, Planner, Proyecto Educación Rural, No. 1, Ministry of Education; Dr. Florian Luque, Coordinator of the Consejo de Racionalización Administrativa's sociolinguistic project; Sr. Mario Salazar, Coordinator of the Ministry's World Bank-funded bilingual education project; Mr. David Farah, Subdirector for Bolivia, and Dr. Donald Burns, of the Summer Institute of Linguistics; Sr. Pedro Plaza Martínez, Director, Instituto Nacional de Estudios Lingüísticos, Dr. Xavier Albo and Sr. Victor Hugo Cardenas of the Centro de Investigación y Promoción del Campesino.

All of the above people were interested in being involved in an international evaluation project.

ECUADOR

Estimated Population 1977 7,500,000

Population

The population of Ecuador was estimated at 7,500,000 in 1977. Approximately 60 percent live in the Andean highlands and 37 percent in the coastal lowlands. Less than three percent live in the eastern half of the country which lies in the Amazon basin.

Language Situation

Ecuador is predominantly Spanish-speaking with a large Quichua-speaking minority. Estimates of the number of Quichua* speakers range from 15 to 50 percent of the total population.

The language situation varies strikingly in the different regions of the country. Spanish prevails in Quito, and Quichua is the dominant language in the rural highlands except in the area surrounding Quito. A large number of bilingual speakers is found in and around the capital city.

The coastal lowlands have long been Spanish territory, however two indigenous lowland languages survive Cayapa with about 3,000 speakers and Colorado with 1,000. Quichua-speakers are present only as they have migrated to find jobs in the port city of Guayaquil.

The largest group in the sparsely populated eastern half of the country are Spanish speakers who have settled there to develop the region's extensive resources, which include oil. There are also groups of jungle

*This spelling reflects the pronunciation in varieties of Quechua spoken in Ecuador.

Indians, the majority Quichua-speaking. Jungle Quichua can be divided into three major varieties, with speakers totaling 25,000. For educational purposes, these varieties should probably be considered separately from those spoken in the highlands.* The other principal jungle language is Shuar or Jivaro, with at least 23,000 speakers. There are half a dozen other, very small, groups. Until the 1967 petroleum find, indigenous jungle groups lived, for all practical purposes, outside of Ecuadorian national economic and social life. Many of the tribes have reacted to the sudden interest in their region by retreating further into the jungle.

The government groups the more than 700 separate Indian groups together for purposes of legislation and aid (Erikson, 1973, 66), but most of Ecuador's indigenous population does not acknowledge a broad ethnic identity. Loyalty and identity are limited to the communal, tribal, or regional group.

One third of the total population neither speaks nor reads Spanish. Literacy in vernacular languages is at about the same level.

Multilingual Education

Although attempts at democratization of education began in the 1930s, the Ecuadorian government has still to recognize the difference between the needs of urban and rural schools and, in the rural areas, between monolingual and bilingual situations (Moya, 1975, 280). Educational curricula do not recognize the differing needs of different regions. "Close understanding and communication between family and the education

*Linguists distinguish between Highland Quichua and Jungle Quichua.

system (are) at best tenuous." (Read, 1975, 187)

Allocation of resources for education is unequal. The ratio of schools to school-age children is far higher in the highlands than in other areas of the country. Efforts to provide education in the eastern half have been minimal.

During the past 15 years, however, the government has taken an interest in developing bilingual education programs. In 1963, the first bilingual schools were opened by the Summer Institute of Linguistics (SIL) under an agreement with the government. By 1976, 60 schools had been established. SIL trains bilingual teachers as part of its program. In 1973, the Ministry of Education opened an experimental program more closely related to the regular school system in the Nuclear School of Quinchuqui.

Encouragement for bilingual education comes from various sources. Scholars, linguists, and educators in the universities and volunteer groups have developed enough prestige and power to begin effecting major changes, and progress is being made toward reaching rural linguistic minorities.

Relevant Studies

Two major reports have been prepared on Ecuador's educational system, one by AID and the other by UNESCO. Although neither focuses on linguistic minorities, these studies provide the basis for further work. Valverde's 1976 study evaluates Highland Quichua bilingual programs, and a study of jungle bilingual programs reportedly exists.

Local Resources

On-site assessment of the feasibility of involving Ecuador in an international evaluation of vernacular education was greatly aided by Dra. Consuelo Yáñez Cosío, Director of the Catholic University's Institute of Languages and Linguistics, Dr. Gustavo Pierro, head of the Linguistics Department, Sra. Peter de Cipro, head of the French Department, and Dr. María Malo, member of the University's Council. The Catholic University has been working on vernacular literacy, and has undertaken a project in Cotacachi province. Interest in the evaluation project was high. Discussions were also held with Mr. Donald Johnson, head of the Summer Institute of Linguistics in Ecuador, and SIL staff members Dr. Glen Turner, Dr. Walter del Aguila, and Mr. David Underwood, and, in the Ministry of Education, with Prof. Ruth Moya, Instituto de Planificación, Sr. Carlos Poveda, head of the Department of Adult Education, Sra. Gladys de Mena, Director of Rural Education, Dr. Manuel Valverde, head of the Evaluation Section, Lic. Hermes Arguello, Coordinator of Provincial Ministeries in developmental planning, Lic. Edison Yépez, a specialist in general planning, Dr. Robert Menard, Coordinator of the Ministry of Education's UNESCO project, and Lic. Augusto Benalcázar, former head of the Bilingual Unit, and with Mr. Harry Ackerman, USAID Mission to Ecuador.

There was universal enthusiasm for participating in an international study of vernacular language education. While some rivalry exists among the various institutions involved, personal friendships often transcend institutional rivalries. The prospect of Ecuadorian funding of the first phase of an international evaluation is excellent through a contract with the Catholic University and the Ministry of Education.

GUATEMALA

Estimated Population 1977: 6,400,000

Population

The estimated population of Guatemala in 1977 was 6,400,000. The vast majority of Guatemalans are rural. Of the 7,000 villages, many have populations of less than 1,000. The 1940 census attempted to classify the population as white and mestizo, but ran into difficulties. In the 1950 census, the categories were changed to ladinos and indigenas. The former speak and dress like Europeans, and the latter speak and dress like Indians. These indigenous peoples live chiefly in the highlands and sparsely-settled northern part of the country.

Language Situation

Spanish is the official and majority language of Guatemala. There are approximately twenty indigenous languages. Except for two small groups, all aboriginal groups speak languages belonging to the Mayan family. Four of these languages are of major significance in the country. Quiché, by far the largest, is the one with the greatest pre-conquest prestige and finds use as a lingua franca by neighboring groups. Numbers of speakers of Guatemalan languages are shown on the following table; their location on the map on the next page.

LANGUAGES OF GUATEMALA

<u>Language</u>	<u>Number</u> (First-Language Speakers)	<u>Percent</u>
Spanish	3,650,000	57.0
Quiché	840,000	13.1
Mam	525,000	8.2
Cakchiquel	480,000	7.5
Kekchi	385,000	6.0
Kanjobal	100,000	1.6
Pocomchí	90,000	1.4
Ixil	75,000	1.2
Achí	65,000	1.0
Tzutujil	50,000	.78
Jacalteco	35,000	.55
Chuj	30,000	.47
Chortí	25,000	.39
Pocomam	15,000	.23
Uspantec	15,000	.23
Aquatec	10,000	.16
Black Carib	5,000	.08
Teco	3,500	.05
Yucatec	3,000	.05
Mopan	2,500	.04
Xinca	200	.04

Guatemala has one of the highest illiteracy rates in Latin America. In the population age 15 and over, it was 62.1 percent in 1964 and 53.9 percent in 1973. In 1964, UNESCO figures indicated that 61 percent of the 15-20 age group had never completed a single year of school. The predominance of illiterates is to be found in the north central areas where estimates have run as high as 90.4 percent (Whetten, 1961).

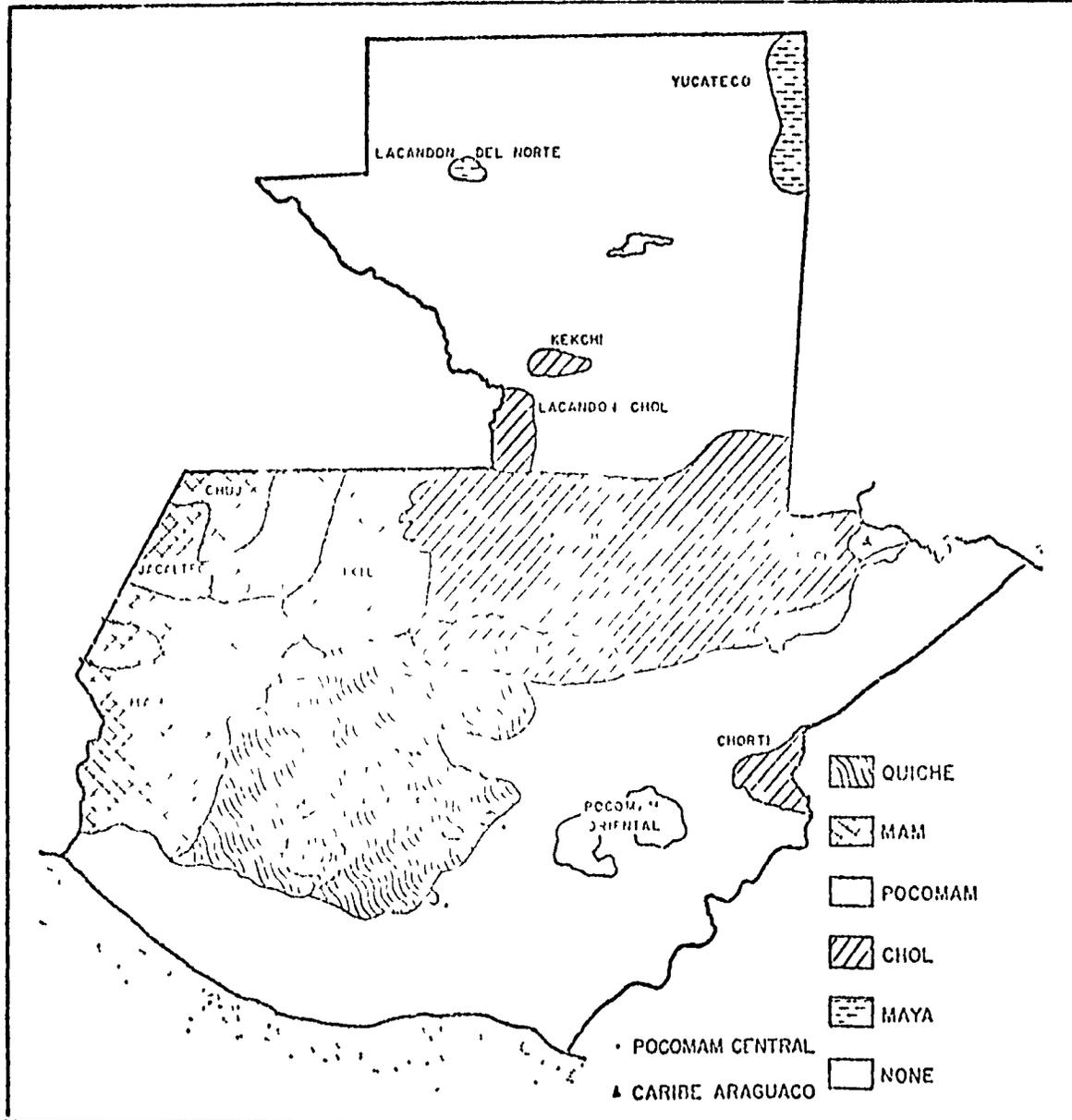


Figure 2 - Present-Day Maya Language Boundaries of Guatemala (From Whetten, 1961).

Multilingual Education

The education system includes six primary grades, three years of intermediate, and three of upper secondary education. Primary level is divided into a basic cycle of three years.

Teachers for primary schools are trained at the upper secondary school level. They receive training for either urban or rural schools. Since the emphasis in Guatemala is on urban schools, often the personnel hired for rural schools lack appropriate professional credentials. As of 1971, only 24 percent of rural teachers had training meant to prepare them for teaching in rural areas (Waggoner, 1971).

Although official policy permits the use of indigenous languages in the educational process, the language of education in both secular and religious schools is normally Spanish. In areas where there are large Indian populations, a year of preparatory classes is provided to teach children oral Spanish. Few indigenous children who enter school complete the full cycle.

The aims of education, as set down in the Constitution, are essentially designed to produce well-rounded and prepared citizens. While language is not mentioned, the stated aims permit bilingual education, particularly in rural areas. Establishment of bilingual programs, however, has been hesitant and erratic. The most successful project has been the Proyecto Lingüístico Francisco Marroquín, which trains Indians in linguistics, bringing them up to the equivalent of the M.A. level. Some 80 Indians have been trained now and many are becoming involved in developing literacy programs. Indigenous language education has been promoted by some of the small Protestant missionary groups in Guatemala.

Relevant Studies

The Informe de la Evaluación del Programa de Castellанизación, an extensive longitudinal evaluation of castilianization programs published by the Ministry of Education in 1975, is both impressive and optimistic.

Pat Engle prepared a report for AID that reviews the state of bilingual education in Guatemala (1975). A later unfunded proposal prepared by Jo Froman (1976) contains a helpful overview of the accomplishments and current needs of vernacular education.

A UNESCO short-term project on bilingual education, under the direction of Dr. Nelson Amaro and Profa. Marta Angélica Letona de García, was carried out in 1977. Results of this project have not yet been made available.

Local Resources

On-site assessment of the feasibility of involving Guatemala in an international evaluation was facilitated by Dr. Carl Koone, Rural Development Officer, Dr. Anthony Lanza, Chief Education and Human Resources Officer, and Mr. George Hill, Program Officer, from the USAID Mission, Mr. Robert MacVean, Vice Rector of the Universidad del Valle de Guatemala, Lic. Beatriz Molina, Director of the School Research Program, and Dr. Alfredo Mendez, a Senior Anthropologist with the Social Science Department; Mr. David Henne who, at the time of the visit, was Acting Director of the Summer Institute of Linguistics in Guatemala; Lic. Arnoldo Escobar, who was Director of the Ministry of Education's Evaluation Department (USIPE), Profa Marta Angélica Letona de García,

who has worked with the Bilingual Unit of USIPE, and Dr. Nelson Amaro, a UNESCO advisor to the Bilingual Unit; Mr. Keith Miller, Director of the American School; Lic. Jose Castaneda, Director of the Instituto Indígenista Nacional, and his assistant, Sr. Francisco Rodríguez; and Ms. Jo Forman and Mr. Tony Jackson of the Proyecto Lingüístico Francisco Marroquín.

Institutional interest was shown in both the Ministry of Education and the Universidad del Valle de Guatemala. The AID mission was interested in an international collaboration of the type proposed. The Mission was in the process of reassessing its priorities in the area of education and, were they to place a high priority on vernacular language education or research attendant on vernacular language education, they would be a likely source of funds for Guatemala's part of the international evaluation.

PARAGUAY

Estimated Population 1977: 2,800,000

Population

The estimated population for Paraguay in 1977 was 2,800,000. Distribution of the population is uneven, with most concentrated within 100 miles of Asunción. The rest of the country (60 percent of the territory) contains only 47 percent of the population.

Essentially the country is divided into distinct regions -- Western Paraguay, also known as the Chaco, and Eastern Paraguay, the latter being the more populated region.

Language Situation

Paraguay is the most bilingual country in the world. It also has the most homogeneous population in Latin America; about 90 percent are mestizo.

Spanish is the official language of Paraguay. It is used for all governmental and most educational and commercial purposes. The general language of the country is Guaraní which was given constitutional recognition as the "national" language in 1968.

The two languages are used in different spheres of life. Essentially Spanish is the language of public domain and Guaraní that of the household and the more personal aspects of life. There are some weekly radio programs in Guaraní. Otherwise, the media and most books are in Spanish.

There is a general assumption that 90 percent of the people understand Guaraní, and statistics indicate that 45 percent are bilingual in

Spanish and Guarani.

Estimates vary considerably, and command of a second language is often difficult to assess, but in general the language situation at present is as follows:

Monolingual Spanish	6% (essentially urban)
Bilingual Spanish-Guaraní	45%
Monolingual Guaraní	47% (mostly rural)
Outside the system	2%

There are no important languages in Paraguay other than Guarani and Spanish. There are altogether perhaps 20,000 speakers of a dozen other indigenous languages, all but one spoken in the Chaco. The number of tribal Indians is larger, but recent research has shown that in several groups the younger generations do not use a tribal language. (Klein and Stark, 1977) There are also around 10,000 speakers of tribal dialects of Guarani. Immigrant groups of non-Spanish-speaking origin make up no more than 1.5 percent of the population of which the largest group are 13,000 Mennonite speakers of a low German dialect.

Although Paraguay stresses its role as a bilingual nation, it is the bilingualism that is stressed. In other words, Guarani and Spanish. Guarani is not thought to have any value by itself (Rubin 1968, 84). The correlation between the amount of schooling and degree of bilingualism in Spanish and Guarani can be seen in Table 1. Table 2 shows the distribution of population by language characteristic according to age.

Table 1

Number of School Years Completed for 817 Itapuami¹
Speakers, Ten Years and Above (In Percentages)
(Rubin 1968:77)

	School Years Passed								
	None	1	2	3	4	5	6	7	Total
Monolingual (Guarani)	17.5	3.3	1.6	0.2					22.6
Incipient ²	5.5	5.4	7.1	2.8	0.2				21.2
Subordinate ³	1.5	1.6	10.5	12.5	5.1	0.2	0.2		31.7
Coordinate ⁴	0.5	0.6	2.3	4.9	6.2	4.7	3.7	1.6	24.5

¹ Itapuami is a small rural community northeast of Asunción.

² An incipient bilingual is a person who, "although unable to produce any utterances in the second language, might still indicate some understanding" (Rubin, 1968:71)

³ A subordinate bilingual is a person who is able to speak a language, but not fluently.

⁴ A coordinate bilingual is one who both speaks and understands well a second language.

Table 2

Distribution of the Population by Language Characteristics
According to Age

Census/Language	Est. Age	Est. Age	Est. Age	Est. Age	Est. Age
	3-4 %	5-15 %	16-44 %	45-64 %	65+ %
Spanish	7.8	4.8	3.8	3.9	3.6
1962 Guaraní	69.5	51.0	37.0	46.3	58.3
Bilingual	22.6	44.2	59.2	49.6	37.9

Source. Bureau of Statistics and Census

It has often been stated that were it not for the learning of Spanish in the schools, Paraguay might easily return to its pre-Hispanic linguistic situation, that of being an almost totally monolingual Guaraní-speaking country.

Education

Education is compulsory between the ages of seven and fourteen for urban children and nine and fourteen for rural children. However, this law is not enforced because of limited facilities (see Table 3). Many schools, especially in the rural areas, do not offer the full six years of schooling. Where more schools have been built, retention rates have risen, and indications are that they will continue to improve. However, the dropout rate is still comparatively high in rural areas. Statistics indicate the 12.7 percent of first graders, 9.8 percent of second graders, 9.0 percent third graders, and 9.1 percent of fourth graders drop out of school (Ministry of Education, 1975). The estimates of repeaters in the rural first grades vary from 26 percent to 53 percent. The probability of a rural first grader finishing the fourth grade is 29 percent and presently a student needs an average of 7.3 school years to complete the fourth grade. The average rural school attendance is only 3.2 years, which is not enough time for many students to successfully complete the second grade. (U.S. Dept. of State, Sector Assessment Supplement, 1977, 9). (See Table 4.)

The difficulties encountered by school children in rural areas are many, not the least being that 90 percent of them speak only Guaraní before starting school. In the classroom they encounter the traditional

aversion to teaching in Guaraní, and in instances where the teacher may use Guaraní for essential communication needs, there are no textbooks or materials in the language.

The Ministry of Education is working on the development of Guaraní/Spanish materials, and a program to train teachers and supervisors in bilingual techniques is being planned. No substantive information on the results of these efforts is available at present.

Table 3

Census and MOE statistics indicate that substantially higher numbers of rural children are not in school in comparison to urban children. The 1972 census, pages 119-120, presents the following for ages 7-14:

	<u>Total</u>	<u>Rural</u>	<u>Urban</u>
In School	450,213	278,141	172,072
Not in School	90,767	73,485	17,282
Total	540,980	351,626	189,354

Table 4

The census also shows that rural people have much lower levels of education attainment than the urban population in terms of numbers of years of school completed. The following is extracted from the 1972 census, pages 137-8, for the population aged 15 years and older

	<u>Rural</u>	<u>Urban</u>
Total Population	760,470	573,629
Never Attended School	151,303 (19.9%)	44,342 (7.7%)
Completed First Year Only	31,166 (4%)	12,495 (2%)
Completed Second Year and Went No Further	157,984 (20.7%)	52,489 (9%)
Completed Third Year and Went No Further	141,245 (18.6%)	59,944 (10%)

Relevant Studies

Despite entrenched negative attitudes towards the use of Guaraní in the education system, the Ministry of Education has been investigating (with OAS funding) the feasibility of bilingual education. In 1976, the level of bilingualism of 1,200 children was tested at the end of their first year in school. The unofficial results indicate that 70 percent of these rural children were incipient bilinguals, 20 percent were subordinate bilinguals, and 10 percent were coordinate bilinguals (see notes, Table 1 for definition). The study also investigated the use of Spanish by teachers (95 percent of the time) in classrooms, and parental attitudes towards bilingual education. The results indicate that parents wanted their children to learn how to read and then speak Spanish. The attitudes seem to be somewhat in favor of the traditional Spanish system.

In the Chaco, bilingualism is not uncommon. The tribes that have moved because of the recent expansion of ranches have become bilingual in their mother tongue and Spanish, or Guaraní. In a recent article, Klein and Stark outline the sociolinguistic situation of each tribe and the needs for bilingual education. Efforts among those tribes are being carried out primarily by the Protestant missions located in the region.

Local Resources

The on-site assessment of the feasibility of involving Paraguay in an international evaluation of vernacular education was greatly aided by Mr. Donald Dillsworth of AID; and Sra. Fulvia Allende de Alfonso, coordinator of the bilingual unit of the Ministry of Education.

In addition, there are individuals who are trying to improve

conditions for the tribal groups: Leon Cadogan and Miguel Chase Sardi from the Revista del Ateneo Paraguayo, and two missionaries, Bartolomeu Melia and Jose Seclwische, O.M.I.

Linguists and educators who would provide valuable input and insight are: Prof. Joan Rubin, California State University at Northridge, who has done the classic work on bilingualism in Paraguay; Dr. Louisa Stark, University of Wisconsin, Madison; and Dr. Lucy T. Briggs, Boston University, Bilingual Resource and Training Center.

CHAPTER IV

RESEARCH DESIGN

The earlier chapters of this report present a detailed account of the language situation in each of seven countries with a special emphasis on the role of language in education in each country. In addition, care has been taken to identify and to describe previous educational research and ongoing investigations, particularly when these have involved an examination or manipulation of language as a major program variable. Thus, we have described work such as the Philippine language-teaching experiments, the Yoruba Six-Year Primary Project, and the work of the Peruvian National Institute for Research and Development in Education. We have also tried, in the earlier chapters, to identify existing resource bases in each country (e.g., the Center for Educational Evaluation at Ibadan, the Institute of African and Asian Studies in Khartoum) as well as to ascertain what data exist in each country---for example, at the Ministries, at universities, at the West African Examination Council---that would be suitable for secondary analysis.

On the basis of our examination of the published and unpublished documentation that we have reviewed, reports from our project consultant who personally visited 13 of the countries, comments from nationals and scholars, and from CAL's Director-Designate who has worked extensively in Africa and Asia, we now wish to suggest a plan of action which differs in several respects from that outlined in the original proposal to AID. For a variety of reasons (e.g., the recent implementation of universal primary education in many of the countries, a widespread lack of contact with the rural areas, the seventeen-year civil war in the south of the Sudan which halted all public primary education), it can be concluded that there

do not now exist reliable, valid, available or useful data bases for secondary statistical analyses which would shed light on the relationship among various approaches to primary education, school achievement, and the critical variables, i.e. the choice, sequencing, and use(s) of mother tongue and national language, number of speakers and prestige of the mother tongue versus the national language, the existence of a literary tradition in the mother tongue, the quality of educational facilities, the types of training programs followed by teachers, and the existence of appropriate curricula, syllabi and textbooks across the intended range of countries. It is important to recognize the fact that there do not exist standardized curricula across the countries identified for this study; the local languages, national languages and European languages of wider communication have different allocated roles and ascribed statuses in the various countries; and that there do not exist standardized testing instruments that have been or that could be appropriately used across all countries. There may well be, however, some type of compromise approach which would permit an analysis of available or easily collectable new data in several of the countries.

Phase One

It is proposed in the first instance to examine the relationship among selected variables, school retention and academic achievement for three countries (Nigeria, Kenya and the Philippines) in which the European LWC is English and for three countries (Mexico, Peru and Paraguay) in which it is Spanish. There has been a long tradition of language-related educational research in each of these countries and there are

Table I

Variables for International Evaluation of Multilingual Education

The following list presents a set of candidate variables which might be included in a study of the effects of language---apart from other elements--- in the education of (rural) poor minority children. Some variables may be relevant at several levels (e.g., national, programmatic), while others might be more salient in one national or local context than another. Participating countries might wish to select some rather than others, and may wish to add further items not included here. A number of these variables include several potential subvariables, which would have to be "unpacked" in a more detailed specification. It should be noted that in addition to the elements listed below, a considerable amount of background information on the country and locality is needed for the proper interpretation of the variables and their significance both within and across studies.

I. Demographic Variables

A. Population

1. Composition of population (nationally, locally, school)
2. Distribution and densities of components
3. Income data
4. Occupational data
5. Educational data
6. Rural/urban distribution

B. Languages

1. Number, distribution, relationships
2. Number of speakers (first language, second language) and distribution (monolinguals vs. bilinguals)
3. Literacy rate
4. Correlation with population variables

C. Education

1. Grade attainment by population/language subgroupings (including at-school/family levels)
2. School attrition by subgroupings
3. Achievement data
4. Attendance data
5. School expenditure data (per-pupil; geographic/demographic distribution; multilingual/other program distribution)

II. Language Variables.

A. Status of language(s) of instruction

1. International, national, local (official, unofficial)
2. Regional/social distribution and status
3. Degree of regional/social differentiation and intelligibility
4. Extent of standardization and development (lexical modernization)
5. Depth of literacy tradition
6. Extent of use and functional (domain) allocation, spoken, written
7. Utilization in mass media

B. Attitudes towards language

1. Towards own language (nationally, locally, in-family)
2. Towards other language(s) (by subgroupings, e.g., age, social class)
3. Towards own/other regional/social varieties
4. Towards bilingualism/multilingualism
5. Valuation of educational, economic, social salience of own/other languages (e.g., perception of job-relevance)
6. Motivations for literacy

III. School and Program Variables

- A. Language use, status within school (language of administration, instruction, peer informal interaction where pertinent)
- B. Distribution of languages within curriculum
- C. Program organization and structure
- D. Extent and type of bilingual language use in specific instructional contexts
- E. Language of initial literacy and point of introduction
- F. Methods of instruction in reading, in second language, in other subjects

- G. Nature and availability of texts and other materials
- H. Relation of school to community; source of students; composition of school (sex, age, class, size)
- I. Community/parent participation in curriculum
- J. Provision for teacher training and supervision
- K. Teacher-student ratio; presence of assistants

IV. Teacher Variables

- A. Personal characteristics (scaled)
- B. Origin, ethnic identity, native language, other language(s)
- C. Proficiency in native language of students and other language(s) of instruction, if any
- D. Level of education, professional training (content, time, source)
- E. Extent of training in native language/bilingual instruction (content, time, source, location)
- F. Attitudes towards different ethnic, social, or linguistic groups, if any, in classes
- G. Attitudes towards different languages in school setting, and in society
- H. Extent of use of various languages, by domain
- I. Extent of use of different languages in teaching
- J. Extent of exposure to media, by languages
- K. Availability of teachers' guides, other professional materials

V. Student Variables

- A. Input variables
 - 1. Age, sex
 - 2. Native language, ethnic group, social class
 - 3. Proficiency in language(s) of instruction
 - 4. Extent of exposure to different languages, varieties in school & outside
 - 5. Attitude towards learning and use of native language, other languages in school, and other domains
 - 6. Cultural expectations towards role, responsibilities of children in family, society (by age, sex, class, ethnic group)

B. Outcome variables

1. Growth in reading and mathematics skills, measured by (standardized) tests in native language, and second/national language (relation to school, regional, national norms)
2. Attendance rates
3. Attrition rates
4. Grade retention (repetition)
5. Parent satisfaction (including choice of school, if choice possible)
6. Student interest, satisfaction, personal/group valuation
7. Effect on mobility (out-migration)
8. Job placement

well-placed nationals and local scholars in each setting ready to assist in such an undertaking. Specifically, we propose to identify a realistic list of potentially important predictor variables (see Table I) from among the many suggested in the Outline of Descriptive Background Data (see Appendix I) and to examine, using multivariate data analyses, the relationship among these predictor variables and selected criterion variables under the intervening influence of three different educational methodologies.

For example, in the Philippines we will identify school districts in which there are large numbers of rural, poor, linguistic minority students. Such a study might be carried out with Ibanag-speaking children from the Mountain Province, with Manobo-speaking children from Bukidnon, or with Taosug-speaking children from Jolo. In each setting we would need to identify children from linguistic minority backgrounds who had participated in a transitional type of bilingual program in which their language had been used as the initial medium of instruction with the gradual introduction of schooling via Pilipino. Other groups of children of similar backgrounds who had for one reason or another entered a public school program in which all instruction had been conducted in Pilipino would be included in the study. (This analogy can easily be extended for Luo- or Kikuyu-speaking children in Kenya who receive initial training in their mother tongue before bridging into Swahili versus those who attend school where all training is provided in Swahili, etc.) The initial language or dialect of instruction thus becomes an important intervening variable.

As candidates for predictor variables in each of the settings, we suggest the following based on our review of the literature and our personal experience in a variety of the target countries: (1) the number of native speakers of the mother tongue, (2) literacy rate in the mother

tongue, (3) relative ascribed status of the mother tongue versus the national language as perceived by a sample of teachers in the selected schools, (4) the use of the mother tongue in the mass media, (5) the availability of materials in the mother tongue, (6) the existence and quality of the physical facilities used to provide education, (7) the proportion of participating teachers who have completed teacher training programs for mother tongue and/or national language education, (8) the average perceived target language competence of the participating teachers, (9) the proportion of the educational budget in that district specifically devoted to the encouragement of bilingual education programs, (10) the accessibility of the schools to the participating children (e.g., the average number of km each child must travel to reach school), (11) the average days of school attendance by participating children in the school year and (12) the average years of schooling completed by parents of participating children. (See Table II.)

Criterion variables would be chosen at two levels: within each of the countries and a common core across countries. Within-country variables would be: (1) average score per class on the primary school certificate or the promotion examinations for each subject where data were available and (2) average retention rate per class over the primary school period. Across countries, two tests would be administered to participating pupils at the end of the primary school program. Pupils, depending on whether they were tested in English-speaking or Spanish-speaking countries would be given: (1) two cloze tests in the appropriate language (one using a multiple choice format; the other, not) and (2) a mathematics test measuring the pupils' ability to carry out basic mathematical computations -- this would be designed in such a way that it rep-

Table II
SCHEMATIC SUMMARY

Predictive or
Independent Variables

1. # native speakers of mother tongue
2. literacy rate
3. relative ascribed status of lang.
4. use of mother tongue in mass media
5. availability of materials in mother tongue
6. physical facilities
7. proportion of trained teachers
8. average target language competence of teachers
9. bilingual ed. budget proportions
10. accessibility of schools
11. attendance rates
12. education levels of parents

Modulating (program)
Variables

1. Monolingual program
2. Bilingual program
3. Multilingual program

Criterion or
Dependent Variables

- within country:.
1. Promotion exams by subject
 2. Class retention to Primary 6

- across countries:
- Separately for English vs. Spanish LWC
1. Cloze tests
 2. Class retention to Primary 6

In each setting:

- select 10 rural school districts (i.e., different mother tongues) with classes offered in mono- or bilingual
- select, if possible, 5-10 classes--mono/bilingual-- for each of the 10 districts
- entries, then, represent averages across pupils, within particular treatment condition in particular school district

ANALYSIS:

Regression analyses with dummy variables to examine interaction between predictor and criteria variables

Multivariate analysis to examine overall interaction of predictor variables and criteria variables

resented common curriculum content and was insofar as is feasible, nonverbal. In addition, average retention rates per class would be calculated. A series of regression analyses would then be calculated both within and across countries (separately, however, for the English- and the Spanish-speaking samples) to examine the constellation of factors associated with scholastic success and retention, and more importantly to examine whether the profile of factors associated with success was similar for children who have participated in bilingual or in monolingual programs within their respective school districts. Thus, it would be possible to obtain relatively rapidly and relatively inexpensively information about the power of a number of specific variables in predicting academic achievement and school retention for samples of rural, poor, linguistic minority group students from a variety of developing countries and to estimate with some confidence whether the existence of a bilingual education alternative in the country differentially affects the students' chances for educational success.

Phase Two

In addition, it would, of course, be desirable to plan and to implement a longitudinal, empirical evaluation to examine the relationship among academic achievement, school retention, and selected variables for rural, poor, minority language children in selected developing countries. As researchers have noted previously (Bilingual Education: Current Perspectives: CAL, 1977), there exists a dearth of carefully conducted, critical, longitudinal evaluations of the effects of various types of bilingual education programs on the school achievement of pupils from various settings. Part of the problem is that such evaluations are notoriously difficult to con-

duct for several reasons: (1) the vagaries of funding agencies who are unwilling to make initial multi-year commitments, (2) the transience of researchers, and (3) the difficulties of coordinating research efforts among a number of developing countries. Nevertheless, based on our experiences in conducting research in the Philippines, Haiti, and Nigeria, we can at least begin to outline some of the requirements for an appropriate research design. (See Table III)

In the example to follow, reference will be made to a hypothetical research project to be conducted in the Sudan. This example, is for illustrative purposes and the same model could be implemented in Indonesia, Ghana, Peru, etc. It is assumed that the basic question is to investigate the relationship between method of instruction* and scholastic achievement and school retention for groups of rural, poor, linguistic minority groups of students from a variety of developing countries in Africa, Asia, and Latin America.

The following steps must be undertaken to implement such a study. First, a target testing site must be identified. Let us assume that such a project might be carried out in the southern Sudan. Select a provincial capital (e.g., Wau) in a relatively isolated rural, poor and linguistically heterogeneous area of the country. Villages with schools would be selected for participation in the study which were situated approximately 25km and 125km to the North, East, South and West of the capital. To the North and South in each of the villages located 25km from the capital, traditional, monolingual control classes would be located. Trad-

*Monolingual in the national language, bilingual in the mother tongue -- bridging into the national language with initial literacy training provided in the mother tongue, and bilingual in the mother tongue bridging rapidly into the national language with no literacy training in the mother tongue.

TABLE III

PHASE II-RESEARCH DESIGNProvincial Capital

<u>NORTH</u>	<u>EAST</u>	<u>SOUTH</u>	<u>WEST</u>
25km Traditional Control	Bilingual (lit)	Traditional Control	Bilingual (oral)
125km Bilingual (oral)	Traditional Control	Bilingual (lit)	Traditional Control

Covariates:

SES
aspirations
IQ

Predictive or Independent Variables

1. # native speakers of mother tongue
2. literacy rate
3. relative ascribed status of language
4. use of mother tongue in mass media
5. availability of materials in mother tongue
6. physical facilities
7. proportion of trained teachers
8. average target language competence of teachers
9. bilingual ed. budget proportions
10. accessibility of schools
11. attendance rates
12. education level of parents.

Criterion or Dependent Variables

1. national language ability:
 - receptive
 - productive
2. mathematics:
 - computation
 - problem-solving
3. science concepts
4. reading ability in:
 - mother tongue
 - national language
5. retention rate/attrition

ditional control classes would also be located to the East and the West in each of the villages at the 125km mark. Bilingual experimental classes which made use of an oral-only approach would be located in the village 125km to the North and 25km to the West while bilingual experimental programs which incorporated literacy training in the mother tongue would be located in the village 25km to the East and 125km to the South. In each town several classes would be selected for study within each school.

Thus, it would be possible to construct a longitudinal study to examine the effects of a variety of educational approaches: (1) monolingual versus bilingual, (2) oral versus literacy training in the mother tongue, (3) the effects of distance from an urban center (and presumably wider use of the national language), and (4) the effects of teacher characteristics on the pupils' achievement on selected achievement measures.

In the first phase of the study, detailed sociolinguistic surveys would have to be undertaken in each of the target communities to investigate the functional allocation of languages in that community, attitudes of parents, government officials, teachers and others towards education in general, vernacular-language education, the aspirations of the parents for their children concerning their educational or occupational futures, etc. The proposed experiments would be spread over a minimum of four school years. The participating children would be selected--randomly if possible--and would remain together as a group during the first three primary years. Two groups of children beginning school in successive years would be pretested to determine their baseline or entry level skills and then followed through to the end of primary three, where they would be retested. The initial equating measures would be some type of

nonverbal IQ measure such as the Raven Progressive Matrices, as well as measures of their receptive skills in the national language of their country.

The following criteria would have to be satisfied in each of these settings: (1) the existence of national curricula and syllabi, (2) the existence of books in the mother tongue and the national language and their distribution in sufficient quantity for participating pupils, (3) adequate school facilities, (4) trained teachers who were native or fluent speakers of the language in which they were to provide instruction, and (5) ancillary aides as may be required for the successful implementation of the program.

In Phase Two of the study, the following would have to be undertaken: the development of appropriate testing instruments, workshops for both preservice and in-service training for all teachers in both the control and the experimental programs; the development of protocols for the systematic collection of classroom data during the course of the experiment to document that the participating teachers have followed the prescribed methods.

The children in the participating classes would be monitored over the course of the first three years of the primary cycle. At the conclusion of the third year, they would be tested: one half of the pupils in each groups would be randomly selected and tested in the mother tongue, and the other half in the national language. They would also be tested in the following areas: national language receptive and productive language development; arithmetic computation and problem-solving skills, basic science concepts and reading in their respective mother tongues. The data would be processed using an analysis of covariance with the

initial entry level scores serving as the covariates. In addition, multivariate and regression analysis would be conducted to assess the effects of the variables on the outcome measures and to examine the data for possible trends from which to draw our conclusions about the effectiveness of the different educational methodologies.

Conclusion

(1) The originally-conceived experimental study of the relative effectiveness of two models of vernacular education compared to monolingual education in an "official" language is not presently feasible on an international scale that includes both developed and lesser-developed nations.

(2) There is widespread interest among the countries included in this feasibility study to participate in a more broadly-conceived international assessment of a range of variables that probably affect scholastic achievement of rural linguistic "minorities."

This section described an evaluation design that holds the potential for uncovering valuable information with implications that are clearly perceived by each of the countries to have practical application for policy makers concerned with educating the rural poor.

Sept Oct Nov Dec Jan Feb Mar April May June July Aug Sept Oct Nov Dec Jan

Tasks

Site selection	XXXXXXXXXXXXX																			
Identify students		XXXXXXXXXX																		
Develop and prepare tests			XXXXXXXXXXXXX																	
Ship materials to sites				XXXXXX																
Conduct prelim testing					XXXXXXXXXXXXX															
Coding & scoring prelim testing								XXXXXX												
Collect school yr. educator treatment data					XXXXXXXXXXXXXXXXXXXXXXXXXXXX															
Develop and prepare tests for final phase						XXXXXXXXXXXXX														
Ship materials to sites								XXXXXX												
Conduct final testing									XXXXXXXXXXXXX											
Coding & scoring final testing										XXXXXX										
Develop analysis plan				XXXXXX																
Prepare report & submit draft to Advisory Group																		XXXXXXXXXXXXXXXXXX		
Write final report & submit to AID																				XXXXXXXXXXXXX

Note: This timeline is based on a normal school year of 120 days, beginning in September. This will have to be modified to accommodate the specific in country school schedules.

TIME LINE FOR RESEARCH DESIGN

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APPENDICES

APPENDIX I

NATIONAL PARAMETERS OF MULTILINGUAL EDUCATION

- I. What is the History of Linguistic Policy in Education?

- II. What is the Linguistic Configuration of the Country?
 - A. How many different languages used? Mother tongues? Official?
 1. Linguistic similarities and differences?
 2. Orthographic differences?
 3. Numbers of speakers of each language, mother tongue and official?
 4. Common patterns of multilingualism, particularly reciprocal bilingualism?
 5. Literacy rate broken down into languages?
 6. Who is educated in their mother tongue?

 - B. What is the pattern of linguistic interaction?
 1. One strong minority?
 2. Two evenly-balanced groups?
 3. Several minorities?
 4. Many groups, none clearly dominant?
 5. Other?

 - C. What is the prestige of the different languages?
 1. Oral? Many dialects?
 2. Written? Standardized orthography?
 3. Literature?
 4. Vocabulary for modern concepts and technology?
 5. Use in mass media?
 6. "Schoolworthiness"?

 - D. Why was (were) language(s) X chosen to be language of instruction?

 - E. Is there a recognized need for multilingual administrators, teachers, politicians, etc.?

III. How Does Multilingual Education Relate to National System of Education?

- A. Where are decisions made regarding multilingual education? By whom? Why?
- B. What are the national objectives for multilingual education?
1. Official policy statements
 - a. decrees, laws, etc.
 - b. project proposals
 - c. evaluations
 - d. descriptions by government officials responsible for bilingual programs
 - e. prescribed role of institutions to carry out policy
 - f. prescribed curriculum objectives
 - g. teacher-training objectives for multilingual education classes
 - h. perceived future of children attending school
 - i. programs seen as successful by government vs. those seen by community as successful
 2. Unofficial policy manifestations
 - a. descriptions in interviews, written evaluations, etc., by local officials, administrators, teachers, and community members
 - b. actual futures of children attending schools
 - c. actual enrollment figures
 - d. actual promotion of students
 - e. wastage and attrition
 - f. selection of teachers
 - g. choice of texts
 - h. availability of materials
 - i. quality of facilities
 - j. provision of time in school day
 - k. promotion of teacher training for multilingual education
 - l. program evaluation
 - m. curriculum development
 - n. % GNP on education

- o. % education budget on multilingual education
- p. cost per pupil (regular and/or national language deprived vs. multilingual student)
- q. actual influence and effect of government institutions
- r. other sources of funding for multilingual education (i.e. foreign aid, missionary activities, private funds)
- s. who is multilingual (and in which languages) in the administration and implementation of multilingual programs? national administrators? local supervisors? teachers? students?

C. Is multilingual education spreading?

- 1. On vernacularization front?
 - a. number of programs?
 - b. money spent?
- 2. On internationalization front?
 - a. number of programs?
 - b. money spent?

IV. Multilingual Programs

A. What is the extent of multilingual education?

- 1. Percent and number of groups being served?
- 2. Literacy rate in vernacular of students?
- 3. Literacy rate in second language?
- 4. Achievement levels?
- 5. Incidence of repeating grades?
- 6. Attrition rates?
- 7. To what factors is attrition attributed?
- 8. Supply of jobs for graduates of multilingual programs?
 - a. effect of class?
 - b. effect of geography?
- 9. Supply of teachers for each language group, particularly number of teachers from each language group?
- 10. Number of schools to train teachers for each language group?
- 11. How is teacher competence assessed?
- 12. What are the characteristics of bi- or multi- vs. monolingual teachers?

- B. What are the most frequent program models?
1. Which program serves the largest number of students and/or is considered the most successful program? Critical differences from those not so identified?
 2. Languages involved?
 3. Hetero- or homogeneous classrooms?
 4. Aims?
 - a. acculturation/integration/assimilation?
 - b. transitional/maintenance?
 5. Vernacular?
 - a. oral only
 - b. initial literacy
 6. Immersion?
 7. When are different languages introduced?
 8. Time spent per day?
 9. Where do curriculum materials come from?
- C. Which language groups not served by multilingual education?
1. Political reasons?
 - a. free vs. private education
 - b. compulsory vs. non-compulsory education
 - c. geographic distribution of population
 - d. lack accessibility to multilingual education program
 - e. lack of enforcement
 2. Social reasons?
 - a. language(s) used in multilingual education program do not serve to integrate language group into national life
 - b. perceived as having negative value for social milieu (tribe, religious affiliation, etc.)
 - c. exodus of educated community to centers of employment
 - d. enforced apartheid, oppression, segregation
- V. How Many Conditions are Present Favoring Feasibility of Conducting an Evaluation?
- A. Previous studies of multilingual education? Inside and outside ministry of education?

- B. Other projects currently underway (adult literacy, non-formal education, model projects, etc.), including personnel involved?
- C. Availability of evaluation instruments? Openness to evaluation methods?
- D. Availability of policy documents at national, regional, and local levels?
- E. Resources in ministry of education?
 - 1. Research and evaluation divisions?
 - 2. Curriculum development?
 - a. how?
 - b. where?
 - c. by whom?
 - 3. Personnel resources: who are effective policy decision makers and who might take leadership in the project?
 - a. names
 - b. positions
 - c. training
 - d. political status
- F. Other internal institutional resources (see E above)?
- G. Statistical data: availability and reliability
 - 1. Language. degree of mono-, bi-, and multilingualism in which languages nationally, regionally, individually?
 - 2. Literacy rates in official languages and vernaculars?
 - 3. Achievement data by group related to language proficiency classification?
 - 4. Attrition data?
 - 5. Attendance data?
 - 6. School finance data?
 - 7. School facilities data?
- H. Data processing capability? Where? What type of network?
- I. Internal sources of funding?
- J. Interest of relevant external agencies?
 - 1. AID
 - 2. Ford Foundation
 - 3. British Council
 - 4. Other foreign institutions (SIL, etc.)
- K. What classrooms might be included in longitudinal evaluation, under whose supervision?
- L. What research designs might be appropriate (multivariate, comparison, etc.)?

APPENDIX II

ASSESSMENT OF LOCAL RESOURCES, INTEREST, AND PROBLEMS IN COUNTRIES PROPOSED FOR PARTICIPATION

A summary of the principal investigator's assessment of local resources, interest, etc., based on his judgments after completing on-site visits to each country save one (extensive talks with a number of Philippine linguists and educators took place in Singapore), is presented in the accompanying Table.

Several generalizations can be made from the Table:

- (a) In all of the countries there are sizeable populations of rural poor who do not speak the official language(s),
- (b) All countries practice some form of vernacular education someplace within their boundaries,
- (c) All countries have some interest in participating in an international study, and nine of the countries exhibited considerable interest,
- (d) All countries have at least one institutional base with sufficient expertise to effectively coordinate an in-country study, and some countries have many such institutions. (All countries would, however, need guidance in order to manage a coordinated international study and to produce comparable data.),
- (e) The institutional and/or individual collaboration necessary to an international study has been identified in all countries, although there are four countries where this report does not recommend a choice among a number of competing institutions;
- (f) The six Latin American countries have a uniformly high interest in participating in an international assessment of vernacular education, and have the willingness to fund the

ASSESSMENT OF LOCAL INTEREST IN
PARTICIPATING IN INTERNATIONAL STUDY

+ Interested - Not Interested # Probable Interest	Presence of Linguistic "minorities"	Presence of Vocacular Education in Some Form	Local Inter. University	Local Interest Ministry of Education	Other Agencies	Priority Rating (0-4) for this project by country	Local Expertise	Local Co Coordinators Tentatively Identified	Local Funds for Phase I	Local Funds for Phase II	Local Funds for Phase III	International Coordinator
	+	+	r	-	AID -	2	+	+	-	-	-	-
	+	+	+	#	Ford+	3	+	+				-
	+	+	-			2	+					-
	+	+	+	*	SIL +	3	+	+	-			-
	+	+	+	+	AID +	3	+	+	+	+		-
	+	+	r	#	Ford+	1	+	+	-			-
	+	+	+	#		3	+	+	-	-		-
	+	+		+	SIL + AID +	3	+		+	+		-
	+	+	+	+	SIL +	3	+		+			-
	+	+	+	+		3	+		+	-		-
	+	+		+	INI + Ford -	3	+	+	+	+		-
	+	+	+	+	AID +	3	+	+				-
	+	+	+	+	SIL + Ford +	3	+	+	+	-		-

* Northern Territory
Darwin and Canberra

initial stage themselves (although their efforts need to be coordinated through outside funding).

Local priorities and understandings vary considerably with regard to rural, poor, linguistic minorities. For example, Ghanaian officials displayed a lack of interest in evaluating the relative effectiveness of vernacular language education compared to official language instruction because they have accepted the superiority of vernacular education a priori. Indonesian officials, on the other hand, indicated disinterest in assessing the same comparison for quite a different reason: they have accepted a priori the wisdom of educating through the official language rather than through the vernacular.

Semantic pitfalls await the international investigator at every turn. The word "bilingual" is largely inappropriate in "multilingual" countries. "Linguistic minorities" often comprise the regional or national majority. "Home language" or "L₁" indicates one of four officially recognized "languages of school instruction" (English, Mandarin, Malay, Tamil) rather than language spoken at home in Singapore.

Conceptual and semantic difficulties of the type illustrated in the previous two paragraphs diminish the feasibility of implementing the type of study described in the CAL proposal (Nov. 1976) to AID, namely the comparative effectiveness of three models of education in which: (1) the vernacular is used orally to aid comprehension, but literacy is accomplished through the official (i.e., non vernacular language); (2) the vernacular is used both orally and literately, and (3) the official language is used exclusively with vernacular speaking children.

Other difficulties militate against the feasibility of the originally conceived experiment at this time. There was some concern shown by a number of country representatives that sites selected on the basis of an international criterion to compare different models of education would lack the external validity necessary to draw conclusions of greater national interest. Officials in some countries were greatly interested in variables other than the ones originally identified. In many cases these were non linguistic variables. Further, the identification and in many cases, the development of the necessary instruments in the requisite language could not be accomplished within the time constraints of the original design.

APPENDIX III

Field Investigations

Africa/Asia (march 19-31, 1977)

Following consultation with the British Council and African International Institute in London, the field investigator visited: Accra, Lagos, Nairobi, Bombay, New Delhi, Bangkok, Darwin, Jakarta, Singapore and Manila.

Latin America (July 1-26, 1977)

The field investigator visited. Quito, Lima, La Paz, Asunción, Guatemala City and Mexico City.