SOUTH AFRICA: PRIMARY EDUCATION SECTOR ASSESSMENT

Produced for the U.S. Agency for International Development
Under the Auspices of the

Academy for Educational Development

Gary Theisen, Team Leader
James Cobbe
Heather Jacklin
Beverly Lindsay
David Plank
Ray San Giovanni
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Education Indefinite Quantity Contract
AID-PDC-5832-I-00-0081-00

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The evaluation team owes a deep expression of gratitude to the many South Africans who spoke frankly with us about the country's education problems and successes, and about their aspirations for the restructuring of society into a post-apartheid social system. A list of the individuals who so kindly gave up valuable time to meet with us is provided in Annex A.

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To the extent that what is reported in this document makes a contribution to improving access to and the quality of primary education in South Africa, our many colleagues who participated in this assessment deserve the credit. The authors alone are responsible for errors of omission and commission.

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ACRONYMS

ANC	African National Congress
APEX	Assessing Policies for Educational Excellence
CHED	Committee of Heads of Education Departments
CPI	Consumer Print Index
CSS	Central Statistical Service
DBSA	Development Bank of South Africa
DEC (HoA)	Department of Education and Culture (House of Assembly) - White
DEC (HoD)	Department of Education and Culture (House of Delegates) - Indian
DEC (HoR)	Department of Education and Culture (House of Representatives) - Coloured
DET	Department of Education and Training
DNE	Department of National Education
ELET	English Language for English Teaching
ELTIC	English Language Teaching Information Center
EMIS	Education Management Information Service
ERC	Education Resource Center
ERM	Education Resource Model
ERS	Education Renewal Strategy
ESF	Economic Support Funds
FDE	Further Diplomas in Education
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GNP	Gross National Product
GST	General Sales Tax
HSRC	Human Sciences Research Council
IDT	Independent Development Trust
IMF	International Monetary Fund
ITEC	Independent Teachers' Enrichment Center
JSC	Joint Syllabus Committee
LEU	Local Education Unit
NATED	Department of National Education
NEPI	National Education Policy Initiative
NGO	Nongovernmental Organization
NTB	National Training Board
PESA	Primary Education Sector Assessment
PEUP	Primary Education Upgrading Project
PREP	Primary Education Project
PTA	Parent Teacher Association
PTC	Program for Technical Careers
PTSA	Parent Teacher Student Association
PVO	Private Voluntary Organization
PWV	Pretoria Witwatersrand Verenigen
READ	Read, Educate and Develop
RESA	Regional Education Service Area
RIEP	Research Institute for Education Planning
RSA	Republic of South Africa
RTI	Research Triangle Institute

SADTU	South African Democratic Teachers Union
SAG	South African Government
SAIRR	South African Institute for Race Relations
SANIE	South Africa National Institute of Education
SECC	Soweto Education Coordinating Committee
SGT	Self-Governing Territory
SSA	Sub-Standard A
SSB	Sub-Standard B
Std	Standard
TAUP	Teachers' Academic Upgrading Program
TBVC	Transkei, Bophutatswana, Venda, Ciskei
TOPS	Teacher Opportunity Programs
TTC	Teacher Training College
UCT	University of Cape Town
UNISA	University of South Africa
USAID	United States Agency for International Development
WCEFA	World Congress on Education for All

EXECUTIVE SUMMARY

In October and November of 1992, a six-person team consisting of South Africans and expatriate technical experts spent seven weeks reviewing documents and interviewing South Africans about the status of primary education in the country. The purpose of the assessment was to document the status of accomplishments within the sub-sector, to identify barriers to increased access and quality for all groups of people, and to formulate recommendations for interventions that might ameliorate those barriers. Interviews and advice were sought from as wide a cross-spectrum of society as possible. Early in the data collection process it became apparent that in South Africa the process of designing intervention strategies is as important as the content of those strategies.

General Observations

It is unlikely that significant reform of the education system will take place until a unitary system of administration and management is established. The present structure of fifteen separate departments fosters duplication of effort, facilitates inequitable distribution of fiscal and educational resources, and "legitimizes" the geographic, racial and economic basis of inequities in educational access, attainment, and achievement. Reform of the primary education system should be accompanied by appropriate shifts in social and economic policy that will ensure a greater role for local populations in the provision and monitoring of basic educational services without abrogating the responsibilities of the central government as a guarantor of these services for all South Africans.

Our analysis of the various components of the primary education system resulted in a number of discrete recommendations, which, if enacted singly, would likely result in improved services. However, long-term sustainable change must be both comprehensive and holistic in nature. Curriculum reform for example, will not likely yield significant gains in student achievement unless it is accompanied by new programs and materials designed to enhance the quality of teachers. The success of management and fiscal reform is inextricably bound up in political, legal and land reform. Strategies for increasing access in economically deprived communities must make provision for the health and nutritional well-being of prospective students. Meaningful educational reform will result only from a system-wide approach to change and innovation.

In order to develop sustainable literacy and numeracy skills in South African children, the team recommends that consideration be given to shifting the three levels of the education system to a two cycle system with the first nine years (primary + lower

secondary: 6+3) compulsory for all South Africans. The introduction of a national testing scheme, with assessment beginning as early as year three, would enable education officials and teachers to diagnose learning problems at the school and student level earlier and with greater possibility for enacting corrective interventions.

The top priority for education officials must be to increase access to primary schooling for all children in South Africa. Resources must be directed to this objective without further eroding the quality of services already provided. The assessment team recommends a number of options, including the following organized by thematic intervention.

1. Efficiency

The highest failure rates at the primary level are among African children, especially in the first two years of schooling. This is the result of weak pre-school preparation, and inadequate fiscal and pedagogical resources. The scarcity of resources available to African children must be overcome through new finance schemes and by achieving greater efficiency within the system.

a) Pre-primary programs and reform efforts should be directed at the lower primary levels since they hold the most promise for keeping African students in school longer. Dropout rates for African children in the first two years of primary school exceed 20 percent. Repetition and dropout rates remain substantially higher than for other groups throughout both primary and secondary school.

b) Resource allocations for materials and facilities must be equalized across the population at the earliest possible moment. Resources should be directed at improving the quality of education services available to students since this holds the greatest promise for lowering repetition and dropout rates and for improving efficiency.

c) New allocation formulas must replace those currently used for state-aided schools, community schools, and farm schools. Inequities are legitimized by land-tenure laws and other politically/economically based rationale. Access and retention will increase in these areas only when resources are sufficient to meet demand and when the continuity of resources can be guaranteed to local populations.

d) Encourage and support the work of NGOs and PVOs working in disadvantaged areas. This could be done by

strengthening one or more development endowments or trust funds earmarked for those groups and local initiatives.

2. Finance

Equalizing resource allocations to all students must become a top priority of the government. New funding formulas, private contributions, and new resource generation strategies must all be explored as means of reformulating the financing of schooling.

a) Financial gains resulting from an upturn in GNP should be directed at equalizing educational expenditures across society. However, at the present rate of economic growth, new resources for public sector expenditures are unlikely to be found except from donor agencies. Disparities in education spending among groups have decreased, but most of the gains for Africans have been absorbed by equalization of teacher salaries.

b) Equalization will likely have to be achieved in large part by reducing allocations to schools for white children and increasing them for other children. The team recommends that consideration by given to phasing these reductions so that white parents can gradually marshall resources to offset lower per pupil allocations.

c) Pupil-teacher ratios should be equalized to the neighborhood of 40:1. This will help to equalize resource allocation by reducing funds required for teacher salaries, but should have little negative impact on student performance.

d) The growth in population size, especially among Africans, must be stemmed in order to reduce growing demand for educational resources.

e) Curbing increases in teachers salaries (after equalization) that are already above norms for most middle-income countries, will be politically unpopular, but perhaps economically necessary to meet the fiscal requirements of a growing student population.

f) Some financial gains are expected from the shift to a unitary system as duplication of services and administration are eliminated. Until the shape of the new system is defined, it is difficult to estimate potential savings.

g) Private contributions for educational purposes must be

explored. Support for private schools and pre-primary programs are the most likely areas to receive private support.

3. Educational Administration and Management

The creation of a unitary education system with common standards, core curricula, and uniform processes, procedures and rewards is a prerequisite for systemic change.

a) Elimination of the duplication of management functions should be a high priority under a unitary system. More resources should be devoted to supervision and teacher support.

b) Education leaders need to conduct a careful analysis of which management and technical functions are best located at the national, regional, and local levels of administration. A careful balance must be struck between local autonomy and government responsibility for certain functions. Local Education Units or their equivalent are seen as key institutions for creating more local responsibility and authority over schools.

c) An aggressive program of recruitment and training is required to bring about greater gender balance in the upper echelons of the education hierarchy. Women are severely under-represented in management positions such as principal at the secondary level and higher in the education bureaucracy.

d) Training opportunities in educational administration are in critically short supply and lack the substance and structure required to produce individuals capable of implementing and sustaining the complex changes facing the South African system.

e) Although there is considerable capacity for research and policy analysis among white administrators and policy makers, these skills are not widely held by educators from other racial groups who have not had the same training opportunities. Equal participation in the formation of new policies and strategies necessitates that these deficiencies be redressed through training and short-term technical support.

f) Classroom construction and teacher relocation must occur in order to eliminate the number of classrooms to number of teachers deficit. The greater number of teachers than classrooms in many schools results in teachers sitting idle waiting for space in which to conduct their classes. New construction and

improvements in the management information system will reduce this resource wastage.

g) Principals and teachers must strengthen relationships with parents and leaders in the local community. Community leaders must work with political action groups to eliminate the violence and threats that characterize learning environments even at the primary level. The team recommends the creation of a nation-wide social marketing campaign focused on those issues shortly after the revision of the Constitution.

4. Curriculum

The low quality and relevancy of instructional materials for African students is a major impediment to their success in school. The weak technical and pedagogical background of teachers in African schools is a major cause of low survival and achievement rates among these students.

a) Curriculum is not currently standardized across the primary cycle with the result that the quality of curriculum varies substantially by department and region. The quality of instructional content is poor and the curriculum needs to be reassessed and strengthened.

b) The curriculum does not reflect the diverse cultural and historical legacies of South Africans. A revision of the syllabi is required to enhance the relevancy of curriculum content.

c) Systematic and frequent evaluation, both diagnostic and summative should be introduced with a new curriculum in order to monitor better the performance of students.

d) Special attention needs to be focused on revision of the mathematics and science curricula and on the development of new, supplemental materials to improve student performance in these areas.

e) Annotated teacher texts and other instructional aids are urgently needed by teachers. In the absence of large numbers of highly qualified teachers, the production and dissemination of those materials may be the single most important short-term intervention to improve instructional quality.

f) The creation of Teacher Resource Centers that can be used to create new materials and which can be used as a site for teachers to discuss curriculum implementation problems is highly encouraged.

g) Consideration should be given to the creation of an independent body to oversee the development of a new curriculum and the implementation of it once developed. This autonomous body would be composed of individuals from a cross-spectrum of racial and geographic groups in society.

h) Textbooks do not reach the schools in sufficient numbers nor in a timely fashion. A new scheme for monitoring supply and demand of materials and for distributing them is required.

i) Interference between the language of instruction and mother tongue undoubtedly contributes to the high dropout rate among African children. A careful policy analysis of the language of instruction should be undertaken. Both the social and pedagogical dimensions of the issue must be analyzed.

5. Teacher Training

Improving the quality of teachers is the critical link in strengthening educational services available to all children, especially African. The development and distribution of teacher guides and supplemental instructional materials is the most cost-effective way to meet this objective.

a) African teachers are significantly under-qualified compared to other teachers in South Africa. Compensatory programs need to be established to redress the problems of poor technical preparation for teaching and under-representation of qualified Africans.

b) A number of in-service programs, especially those run through private funding sources are providing sound programs of skill upgrading for teachers. These programs should be supported with additional resources and their coverage expanded.

c) Pre-service programs, especially in African colleges, lack sufficient space for aspiring teachers. The curriculum lacks imagination and does not impart skills relevant for multi-grade, overcrowded classrooms.

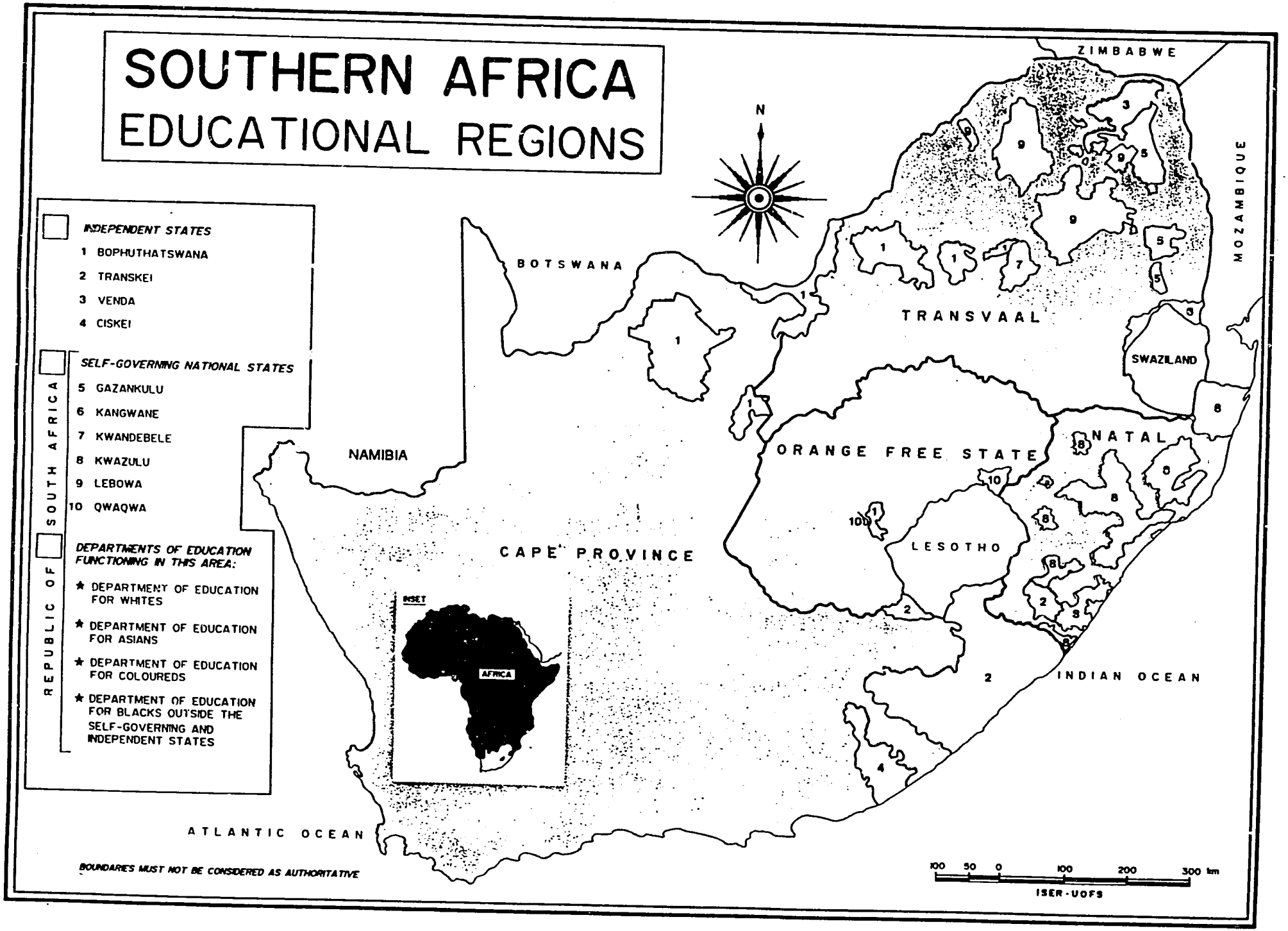
d) Distance learning programs should be explored as a means for skill-upgrading, especially in more remote areas.

e) Teachers require more support services, both technical and pedagogical. The creation of Teacher Resource Centers would help to alleviate this problem.

SUMMARY

Successful implementation of some or all of the options discussed in this assessment will be highly correlated with the degree of open, cross-sectoral dialogue that takes place on the critical education issues that motivated these suggestions and observations. The next decade is a critical one for South Africa. Unless proper planning and program design takes place quickly, education may be used as a criteria for legitimizing racial, class and geographic-based distinctions that are the product of the apartheid system. Improving access to and the quality of educational services, especially at the primary level, will diminish that possibility and will contribute to social and individual well-being in South Africa.

SOUTHERN AFRICA
EDUCATIONAL REGIONS



CHAPTER ONE

INTRODUCTION

1.0 NATURE OF ASSESSMENTS

The purpose of a sector assessment is threefold:

1) To provide an empirical overview of all or part of an education system using quantitative and qualitative information drawn from official and other sources;

2) To analyze these data with reference to stated social, political and educational objectives of the education system and identify barriers (structural, resource, policy and implementation) to the realization of those objectives; and

3) To suggest options for reform and development that would alleviate these barriers in an educationally responsible, cost-effective manner.

This assessment reflects the purpose as stated, but was handicapped on several accounts. The assessment team will identify several constraints on the purpose in the following section.

1.1 POLITICAL CONTEXT

South Africa is now in a state of political flux. Many of the formal and legal structures of apartheid have been dismantled, but the economic and social legacies of institutionalized separation and inequality linger in the educational system. Key political movements opposed to the present minority government recently have been "unbanned," and most political prisoners freed, but the minority government remains in place. The majority of South African citizens still lack political representation. Formal negotiations involving the government and other political organizations have begun, but a political system based on universal suffrage and majority rule remains an aspiration and not a reality.

The members of the assessment team have undertaken their task with a clear sense of the political and moral complexities of the situation in South Africa. Our work has been guided by the hope and expectation that our efforts will advance the aspirations of

all South Africans for full and equal citizenship in their own country.

Our time in South Africa has been brief, and our assessment of the primary education system has relied to a great extent on published reports, government documents, and interviews with "experts." Because of South Africa's long history of economic inequality and political exclusion, the ranks of "experts," authors, and public officials involved in policy analysis and policy discussion are disproportionately White. In our visits to educators in the field and in our contacts with the political opposition, we have made every effort to listen to other voices to reflect these in our report. We acknowledge, however, that biases may result from the disproportionate influence of privileged groups in the present educational policy debate.

Our central assumption in this report is that a unitary education system governed according to democratic principles and providing equal educational opportunities for all children will be established in South Africa. The analyses and recommendations presented in this report are intended to contribute to the accomplishment of this goal.

1.2 USE OF TERMS

One of the most objectionable legacies of apartheid is the divisions that it has encouraged among the people of South Africa. These divisions are inevitably reflected in the language of social policy. The educational system in particular remains structured according to arbitrary "racial" classifications. Reports published by the government are organized according to these classifications, and statistical data continue to be disaggregated according to race.

Our use of the terms "African", "Coloured", "Indian", and "White" in this report thus reflects the continued force of apartheid in the educational system. It does not imply any acceptance by the team of the political and social divisions and inequalities that the terms have been used to justify.

Another of the many objectionable legacies of apartheid is the putative separation of "homelands" from white South Africa. One consequence of the long-standing effort by the minority government to divide Africans by race, to deny them citizenship, and to prevent them from residing in white areas has been the designation of ten political-ideological areas -- the so-called homelands. These geographical divisions infect the language of social policy in the same manner as the racial terminology discussed above. Each homeland Government administers its own educational system, and publishes its own annual reports. Data

published by the central Government are disaggregated not only by race but by homeland as well. Data for the four "independent homelands" are often excluded from government reports altogether, and must be sought elsewhere.

As above, our use of the terms homelands, self-governing territories (SGTs), and Transkei, Bophutatswana, Venda, Ciskei (TBVC) states does not imply acceptance by the team of the racial and geographical separation that the establishment of the homelands was meant to foster, nor does it signify any retreat from our conviction that all South Africans are and should remain full citizens in a unitary state.

1.3 PURPOSES OF PRIMARY EDUCATION

The Government of South Africa has never published a statement of objectives for the primary education system. This is largely due to the fact that, in a nation still structured by apartheid, there is no single education system in South Africa. But fifteen different systems serve distinct racial and geographic populations.

In the absence of a national set of objectives for primary education, the assessment team frames its analysis by synthesizing the views of our key informants regarding the purposes of primary education in South Africa. It is our belief that the objectives of primary education in a unitary education system will include (but not be limited to) the following goals:

- Prepare children for the rights and responsibilities of citizenship;
- Develop an understanding of the common values and needs of all South African citizens;
- Provide children with basic skills in language, math, and science sufficient for participation in society and the economy; and
- Prepare students for further education and/or skill training.

The above objectives should be developed in a full and equitable manner without regard to race, gender or social background. Given the long history of structured discrimination in South Africa, it is unlikely that consensus can be reached on the objectives of a unitary education system unless provision is made for redressing the inequities of the past. Several options for

accomplishing this sensitive, difficult task are outlined in this document.

Early in the process of reconstruction, a policy paper should be formulated that addresses the special needs of children who come from environments of violence, poverty, and neglect. A policy paper of this sort has been developed in Namibia. In addition, recommendations flowing from the World Summit for Children held in New York in November, 1990, provide a framework for addressing the education needs of these populations of children. These documents may inform the debate on the issue in South Africa.

1.4 THE PROCESS AND CONTENT OF EDUCATIONAL TRANSFORMATION

The educational problems facing the primary education system in South Africa -- inefficiency, unqualified teachers, weak and insufficient instructional materials, ineffective administration- are not unique. The context in which they occur is. Many of the options discussed in this assessment have been tried in other countries where similar problems exist. Although numerous nations have complex patterns of racial and class disparity, in no other country is the condition due to explicit policies of discrimination and concomitant, government-funded organizational structures. In South Africa, new programs and proposals for reformulating the organization and management of the education system are unlikely to be accepted if they originate solely from within the machinery of the existing government. Since the government is perceived to be an illegitimate representation of constituent interests, so are initiatives that are generated solely by it.

Thus, educational transformation in South Africa is as much dependent upon the legitimacy of the process of change as it is on the content of the changes proposed. Unless the key actors representing the multitude of political interests in South Africa are incorporated into the discussions of educational change, it is highly unlikely that a sustainable education transformation can be realized. For this reason, we offer our analysis and options not as prescriptions for change but as a basis for policy dialogue among all individuals and institutions with interests in education.

Our interviews with South African educational leaders, practitioners, and students identified two critical components to the acceptance of phased change: democratization of the process of educational decision making, and decentralization of authority and autonomy in the management and administration of educational services. In order to achieve an effective transformation of the system, a careful balance will have to be struck between increased local responsibility for the management of the

education process and the tendency to fragment the system further along racial, geographical, and social class lines.

1.4.1 Democratization

As South Africans emerge from the rigid grasp of apartheid, there is a natural tendency to be suspicious about scenarios of change initiated by the managers of a heretofore autocratic system of governance. Representatives of political parties, nongovernmental organizations (NGOs), private voluntary organizations (PVOs), unions, and other groups feel that they are handicapped in two ways: 1) they have not had a voice in decision-making and in the establishment of policies that have determined their social and occupational status; 2) they do not have access to information that would allow them to enter into negotiations as equal partners. The latter is of special concern. Statistical information on educational revenues and expenditures, teacher deployment, classroom utilization, and even school enrollment across departments and regions are difficult to obtain, both because of the organizational complexity of the educational system and because of the failure of some authorities to release timely data.

Participation by representatives of all constituencies is a necessary element of a negotiated government and subsequent education strategy. It is beyond the scope and ability of this assessment team to suggest who should participate in these decisions or how the negotiation process should best be carried out. The Education Reconstruction Forum, properly constituted, would appear to offer one such avenue for dialogue. The Forum, scheduled to be held in early 1992, is a round table dialogue about education priorities and strategies with participants drawn from all major political and educational constituent groups.

The Education Renewal Strategy developed by government officials contains some proposals that may hold promise for restructuring the education system. However, the process by which the strategy was developed and presented to education stakeholders undermined the utility and legitimacy of the ideas contained in the document. Perhaps support for some of the Strategy's content will be forthcoming, but unless the identified options result from a process of debate and discussion by all parties who have a stake in the education process, recommendations for change have will not legitimacy.

Successful democratization of the education agenda setting and reform process will depend on several politically assisted events:

- The compilation and release of all education information relevant to educational planners and policy makers from all of the existing educational departments;

- Establishment of a democratically determined policy working group;

- Formal establishment of a unitary education system with common, central administrative mechanisms, and with a provision for local autonomy; and

- Development of a democratically determined plan for both short and long-term equalization of educational resources and opportunities for all citizens.

These measures should be considered a necessary first step in establishing legitimacy for centrally determined education change.

1.4.2 Decentralization

Decentralization is a complex concept as well as a process. The relationship between local communities and central authorities in the management and direction of schools is antagonistic in any educational system. The distribution of authority and responsibility between local and national actors is invariably contested, and constantly shifting. There is no way to resolve these tensions, and arguments for or against decentralization must therefore take very careful account of the historical and institutional context in which decentralization is proposed.

The institutional legacies of apartheid have produced an educational system in which control over resources remains very highly centralized while administrative responsibility is fragmented both geographically and across racial groups. The fragmentation of the educational system into fifteen nominally separate departments has been an instrumental factor in the construction of the pervasive inequalities that are documented in Chapters 2 and 3. In the long-run, these inequities can only be reduced through the forceful action of central authorities to re-establish a unitary educational system and to equalize the distribution of resources within it.

At the same time, the educational expectations and aspirations of households and groups may vary widely: a <u>unitary</u> education system does not necessarily imply a <u>uniform</u> system. A unitary system must ensure that all citizens have access to a common core curriculum, and guarantee the maintenance of minimum standards in facilities, materials, and instructional quality. Beyond these guarantees, however, local preferences can and should influence what does and does not go on in school.

The critical question is what services should be provided at different levels of the system in order to achieve maximum performance of school personnel and students at the lowest cost. Support for decentralization is based on the premise that school level administrators, teachers and parents are most familiar with the community and the constituency that the school serves. They are in a better position to determine how resources can best be used in the schools, and to hire and sanction teachers for their performance. They are also able to specify the relationship between curriculum and local needs in a more informed way than centrally located bureaucrats.

The autonomy resulting from decentralization policies must also be accompanied by accountability. Unless local level administrators, community leaders, and parents possess sufficient skills and organizational capabilities to ensure independence in the management and implementation of educational activities with wisdom and responsibility, decentralization will fail. The education of historically disadvantaged children in South Africa should not be constrained by the present lack of local experience and training among educational officials and parents. A highly focused training/social marketing campaign is needed to prepare educators and communities to accept the responsibilities and privileges that accompany local responsibility for schools. Decentralization should increase pride in and responsibility for primary education. The result should be an increase in both the quality and efficiency of services offered to children.

The transformation of the educational system will require a strong central authority to define and implement new curricula, to redistribute financial and other resources, and to ensure compliance with minimum standards of provision and performance. If the system is to respond to the diverse interests and expectations of households and communities, however, transformation will also require that regional and local authorities be permitted to make decisions about the allocation of resources and the implementation of policies at the local level. Striking a balance between these competing imperatives will be among the most difficult tasks facing those responsible for developing educational policies under a new government.

1.5 BUILDING BLOCKS OF PRIMARY EDUCATION

Two main themes run throughout this assessment and serve as the foundation upon which the analysis and options are constructed. These themes are the need for compulsory and compensatory educational services, and the importance of increasing access to and quality of primary education services.

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1.5.1 Compulsory Education

Under current legislation, primary education is compulsory for Whites, Indians, and Coloureds. Departments have the option of introducing compulsory education for Africans, although historical backlogs together with the rapidly increasing demand for education during the last decade have made it increasingly difficult to do so. In 1988, for example, only 13 percent of African primary pupils in Department of Education and Training (DET) schools were subject to compulsory education.

This incongruity is a result of national policy that established independent departments of education, each with its own governing statutes concerning policies such as required attendance. The resulting disparities in attendance, quality of instruction, and student performance are the direct result of structured inequities in the system; inequalities that have been fostered and tolerated by the overarching legal and social dynamics of apartheid. Thus, achieving greater equalization in the primary schooling process will be functionally related to the degree of progress made in social and political enfranchisement in society as a whole.

The assessment team assumes that under a new, post-apartheid government, universal compulsory education will be legislated for all students from Sub-Standard A through Standard 5 (the first seven years of school), and that these services will be provided free to all primary school-age children. Our cost projections and options are predicated on this assumption unless stated otherwise.

Compared to neighboring countries, and those of comparable economic development levels, South Africa has very low compulsory education expectations for its young people. The team encourages consideration of a phased transition to a 6 year + 3 year (primary + lower secondary) compulsory system. Economically such a change in the structure of schooling is affordable and perhaps also necessary in order to rejuvenate the flagging economy. Whether this option is adopted or not, it is imperative that the new government establish a uniform compulsory education policy; one that provides free education to all students at least through the primary cycle.

1.5.2 Compensatory Education

Creating formal requirements for primary school completion will not in itself bring about equalization. The impact of historical discrimination will continue to be felt among generations of black students unless compensatory programs are established in addition to compulsory education and the introduction of non-discriminatory practices to redress decades of inequity. Several options to deal with this problem are

outlined in the report. Turning the tide for African and other students will be complex and costly. High rates of failure in school partly are due to long-term deprivations in all sectors, in particular health and nutrition. Overcoming these problems, while at the same time meeting the growing demand for education, will require careful management of scarce financial and human resources.

International donors are a potential source of resources for non-recurrent investment in social services. If progressive, non-racial policies are implemented by the new government to provide essential services, it is conceivable that donor funds could be used imaginatively to help redress the legacy of apartheid policies. The NGO and PVO communities in South Africa have developed remarkably effective programs that service large segments of the undereducated, unemployed population. Especially noteworthy are the efforts in pre-primary education and teacher training. At present many of these activities are run on an ad hoc basis with no central integration or coordination of effort and with no-long term guarantee of funding. A new government would do well to capitalize on these NGO initiatives and to buttress those that have been most successful. A private-sector Coordinating Council that focused specifically on pre-primary through primary education could provide significant, cost-effective impetus to the compensatory programs that are so desperately needed to begin to extend equal opportunity to all groups in South Africa.

1.5.3 **Educational Access**

Access to primary education varies dramatically among constituencies and within regions. These disparities and their implications are discussed at length in Chapter 3 (Structure, Differentiation and Inequality in Primary Education). When compared to the nearly universal enrollment of Whites throughout the country, it is clear that increased access to school for Africans will be a political and functional priority.

In Annex D (Policy Options and Cost Projections), the capital and recurrent expenditure implications of achieving nearly full primary enrollment are detailed. As is emphasized in Chapter 4 (Economic and Financial Analyses), the costs of not providing educational services to large segments of the population may be higher than that of providing them. Gains in economic productivity, health, and social participation are just a few of the social benefits that result from primary education.

Achieving universal primary enrollment will not come easily or quickly. The new government should move quickly to develop enrollment targets that are ambitious but realistic. In the context of a national campaign to achieve complete primary enrollment, with a set of democratically developed policies and

budgets that will demonstrate the government's unequivocal commitment to this goal, the target can be reached by the year 2000.

1.5.4 Primary School Quality

Even more important than ensuring that there are sufficient places in school for all children is the guarantee that what happens to them in those institutions will be of personal and social consequence. Improving the quality of South African education is central to the realization of this goal. With repetition and dropout rates as high as 27 percent, especially in the first two years of primary school, it is clear that the process of schooling is not meeting the learning needs of young people. South African classrooms, especially those in African communities are characterized by high numbers of unqualified teachers, an irrelevant curriculum, a dearth of learning materials, over-crowding, and woefully inefficient management.

Although daunting in their frequency and severity, these problems can be redressed through the innovative use of highly focused instructional materials, by building on existing NGO initiated in-service teacher training and management development programs, and by restructuring the curriculum and the methods with which it is implemented. Improving the quality of primary instruction will reduce repetition and dropout and thereby result in resource savings that can be used to further improve quality and improve access to school. Without a concentrated effort to improve quality, not only will enrollments remain stagnant and efficiency stay low, but the important social and economic benefits associated with primary schooling will remain unrealized. For both political and economic reasons, South Africa cannot afford to let this happen.

Our emphasis on improving school quality should not overshadow the need for an ambitious school/classroom construction program. The need for additional space is especially acute in settlement and farm communities where the use of land for educational purposes is tenuous and transitory. As noted earlier, achieving universal primary enrollment must be the top priority education goal. The "quality" of the existing system must not be sacrificed to reach this goal, however.

1.6 CULTURES OF CONFLICT AND RECONSTRUCTION

Opposition political parties and liberal reformers have spent the past decades engaged in political and intellectual struggles with the government in their attempts to bring an end to the apartheid system. This engagement has produced a "culture of conflict" in which tremendous energy has been devoted to documenting the

injustices of racial segregation and differential social policies and spending. Opposition efforts have focused on bringing about an end to an untenable social-political system. Leading South Africans are able to articulate the problems facing the education sector well. Because they have been effectively without a role in the policy-making arena for several decades, they are less experienced in proposing and lobbying on behalf of solutions to those problems. Policy development and analysis is a new field to many South Africans; time and experience will overcome this handicap. However, as the pace of change quickens, the need to articulate new positions on social issues, and to analyze them in terms of both short- and long-term costs and benefits is intensified.

The policy void created by the unexpectedly hasty shift from conflict to reconstruction is understandable and will undoubtedly be overcome in the near future. The Education Reconstruction Forum, the education wing of the ANC, the Independent Development Trust, independent academics and writers, and the Government itself are beginning to formulate proposals for the transformation of the system.

This assessment, produced does during this interim period, was significantly affected by the rapidly changing political climate. Our interviews were held in the context of several important realities:

- Uncertainties about how opinions would be used by the team during this tense period of political negotiation occasionally inhibited a frank discussion of options;
- The perception that the efforts of the team might in some way be linked to U.S. government policy inhibited some individuals from expressing candid opinions; yet it encouraged others to share their ideas;
- In the current political climate, a technically focused neutral report (as is the norm in most sector assessments) is likely to be given little credence by the opposition majority; and
- The process of arriving at policy decisions was frequently identified as more important than solutions; without a process for dialogue in place, individuals were reluctant to posit new development scenarios.

As noted earlier, the assessment team is collectively and individually committed to the transformation of South Africa's primary education system to a non-racist, non-sexist entity in which social class disparities are also reduced. Building on the recommendations offered to the team we have developed a set of options for consideration that we believe are pedagogically,

socially, and economically responsible. Most of these options, if pursued, would also further the statement of intent by the government and opposition to reform the education system. Behind the selection of options is a myriad of political considerations. These are not within the province of this team to identify or debate. Hopefully our explication of the issues will focus the political discussion that will ultimately gird the education dialogue.

1.7 RESEARCH STRATEGY

A variety of strategies were employed to gather information quickly, accurately, and representatively. Logistical and time constraints necessitated compromises. Since these shortcomings have a bearing on the validity of the final report, they are noted below.

1.7.1 Published Documents

A list of all documents that were reviewed or cited as part of this assessment is contained in Annex B. A number of institutions and individuals generously provided us with in-house documents and unpublished, personal manuscripts. The data received were too voluminous to incorporate totally. The team has been selective in use of statistics. We have used data to illustrate and clarify major themes, not to catalogue all aspects of the primary system.

In order to make the document readable to the sophisticated layperson academic style references and footnotes have been minimized. Many of the ideas contained in this document are distilled from conversations and written papers. Appropriate credit always may not have been given to these sources in the interest of a simple and direct style. A great number of documents available on primary education in South Africa attests to the vitality of the communities interested in the subject.

1.7.2 Interviews

A list of all the individuals interviewed as part of this assessment is provided in Annex A. The time limitation on the completion of this document was severe -- six weeks from the beginning of data collection to the completion of the draft report. Because of time constraints, the assessment team was only able to make visits to two regional areas outside of Johannesburg: Cape Town and Durban. Our perceptions are necessarily limited by both the brevity and potential bias of these two visits. Approximately one week was spent in and around each city. The remaining information was collected in the

Johannesburg/Pretoria area and via phone interviews with individuals in other parts of the country.

Interviews lasted, on average, one hour. Discussions were facilitated by interview guides developed by individual team members. Team members attempted to gather opinions and information from an array of individuals representing a broad cross-section of the education community: by race and region, and senior and junior levels of the education hierarchy; political and education leaders, parents, and students. Our sampling was not scientific, but it represents a cross-spectrum of thought and stakeholder interests.

1.7.3 **Presentations and Forums**

The team met with several panels of distinguished South Africans who were well-informed about education issues. Presentations were made to the team. These were followed by question and answer sessions and informal dialogue. The first working draft of the assessment was presented to two groups of South African policy makers, NGO representatives, and other individuals connected with education in South Africa. Their responses to our observations and recommendations were incorporated into the report to the extent that they were relevant to the scope of the assessment.

1.8 RELATIONSHIP WITH THE GOVERNMENT

Under normal circumstances an assessment of this sort would be conducted jointly with government education officials. The unique situation in South Africa prevented this from happening for two reasons:

1) Since the current government is not regarded as legitimate by the majority of the population, close collaboration with ministry officials would have jeopardized whatever legitimacy this report might have; and

2) The United States Agency for International Development (USAID), the foreign assistance wing of the U.S. government, is prohibited from collaborating with the South African Government and from supporting government-funded activities. Because this study was funded by USAID, the team was required to work independently of government officials.

An acute dilemma faced the team because of restrictions on involvement with the Government. Transformation of the educational system will not take place in a historical vacuum.

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The legacies of the past, whether they be policies or statistical disparities, will influence the future. Policy analysts within the government and in government-sponsored institutions such as the Human Sciences Research Council (HSRC) -- with over 100 people employed in its Education Policy Unit -- have given thought to many of the issues raised in this assessment. It is unfortunate that time and circumstances did not permit access to such potential resources.

Two weeks after the team's arrival in South Africa, USAID education officials met for the first time with senior education officials from the Government. This meeting made an interview possible with three top officials late in the assessment process. The team has done its best to collect information and positions that bear on all the critical issues in primary education.

1.9 USES OF THE REPORT

The team has deliberately tried to reflect informed opinion and to enrich the broader debate on primary education issues. Our intent has been to synthesize key facts and figures about the primary sector, to analyze these data in light of internal conditions and international experience, and to define options that might foster dialogue on future courses of action for improving primary schooling.

This report is meant to be one piece of the larger dialogue concerning public education and its role in social change in South Africa. It is our hope that this document will be useful in the discussions planned for the Education Reconstruction Forum that will be convened in early 1992. Education change in most countries has been a slow process, often following change in the larger social system and less often being a catalyst for change. In South Africa, education transformation must be an integral part of the larger social restructuring. Some elements of change will occur rapidly, others more slowly. It is imperative that planners, politicians and educators develop a long-term (20 year) plan in which a series of benchmark indicators of progress are used to monitor the progress of change and to ensure that the objective of achieving an equitable, high quality primary education system is achieved.

For each issue defined in this assessment, there are many possible courses of action. This document identifies only a few of them; it is not a catalogue of options, but rather an illustrative menu of possible considerations. Improving access to basic education and strengthening educational quality of instruction must be priority considerations for the new Government to guide the continued development of South Africa. It is our hope that our report will contribute to the dialogue on

the future of education in South Africa by clarifying issues, indicating the economic feasibility of various courses of action, and sparking new ideas in the debate.

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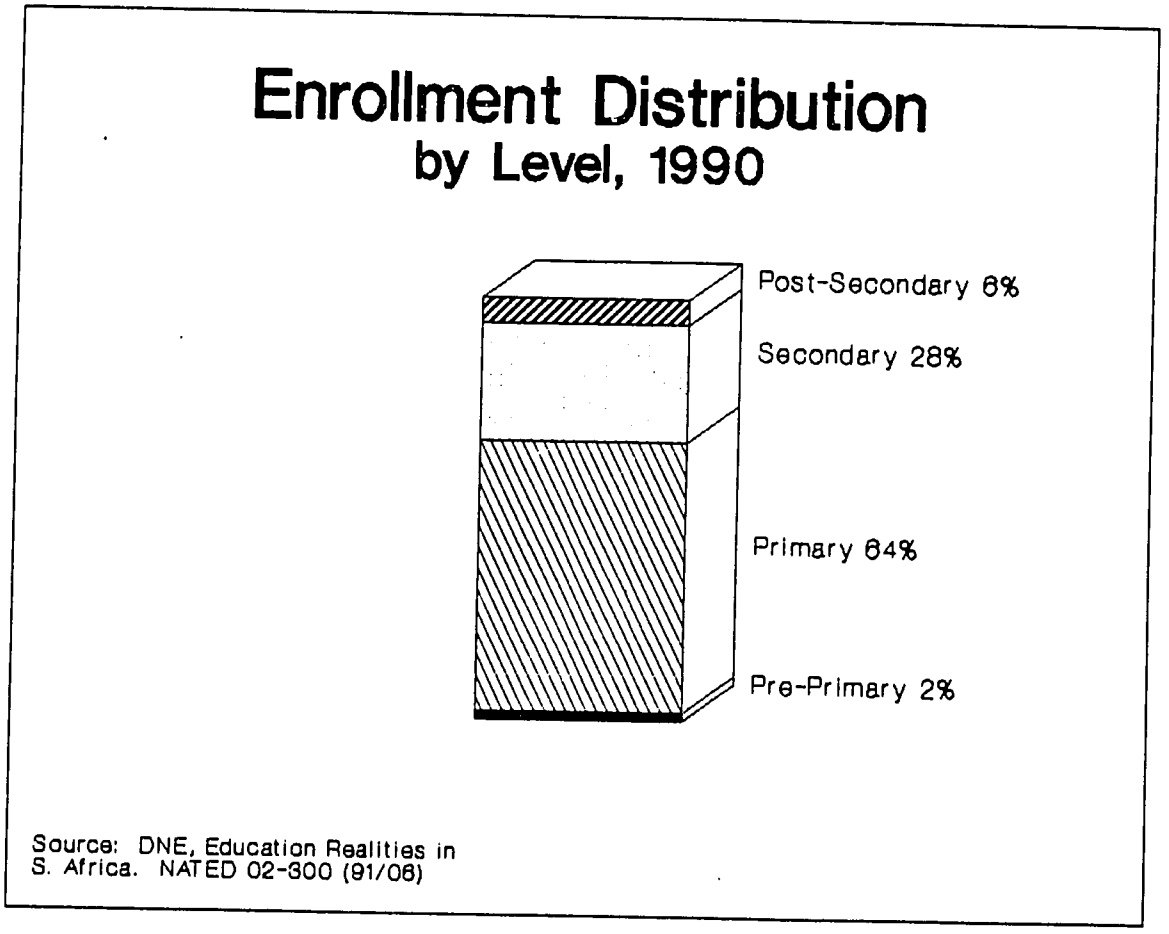
CHAPTER TWO

PRIMARY EDUCATION IN SOUTH AFRICA - OVERVIEW

2.0 STRUCTURE AND DIFFERENTIATION

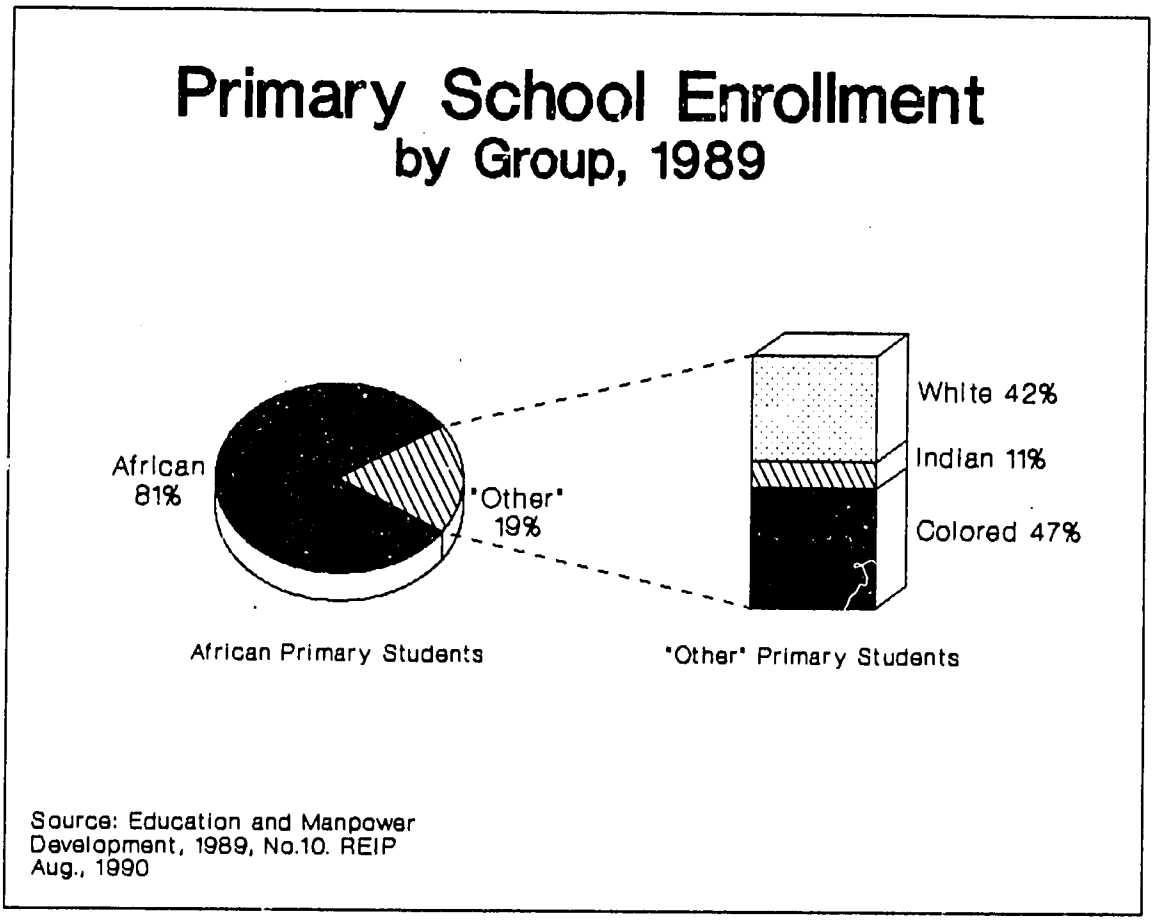
There are roughly 7 million children in primary schools in South Africa; it is estimated that there are another 800,000 between the ages of 6 and 12 who are not in school at all. As can be seen in Figure 1, over 60 percent of total public school enrollment in South Africa is at the primary level. Secondary education accounts for 28 percent of the total, and post-secondary for only 6 percent. Pre-primary education, which plays an extremely important role in making students school-ready, is available through public sources to only 2 percent of the total school population.

FIGURE 1



The majority of primary level students (81%) are African, as shown in Figure 2. White students make up nearly one-half (42%) of the remaining students (or 8% of the total cohort). In short, the vast majority of students (90%) are the target of discriminatory policies that affect both the quantity and quality of services to which they have access.

FIGURE 2



The education of these children is administered by fifteen different education departments organized according to region and race as shown in Table 2.1.

TABLE 2.1: POPULATION AND ENROLLMENT DISTRIBUTION BY ADMINISTRATIVE AREA (PERCENT)

	Enrollment as % of Pupils 1990 Total Enrollment	Population as % of Total Population 1989
DEC House of Assembly (White)	7.8	13.2
DEC House of Del. (Indian)	2.1	2.4
DEC House of Reps. (Coloured)	8.9	8.6
DET (African)	23.7	32
QwaQwa	1	.8
Lebowa	8.8	7.1
Gazankulu	3.3	1.9
KwaZulu	16.7	13.3
KaNgwane	2.4	1.6
KwaNdebele	1.3	1.3
Sub-total SGTs*	33.5	26.0
Transkei	13.1	8.6
Bophuthatswana	5.9	5.3
Venda	2.3	1.4
Ciskei	2.8	2.3
Sub-total TBVC	23.1	17.6
TOTAL	100	100

*) Self-governing territories

Note: 1990 figures unless otherwise specified.
Sources: Annual reports for various departments, 1990.
Statistical services within various education departments.
Demographic statistics from Race Relations Survey 1989/90.

Four departments administer education in the independent homelands (TBVC) and six in the self-governing territories (SGTs). Another four cater to four racially defined groups in the common area. The fifteenth department, the Department of National Education (DNE) does not administer any schools, but acts as an umbrella body for the four departments within this region.

The framework for the regional-racial system of education administration has its roots in social policies established throughout the last four decades, but the formal organizational structure was established in the 1960s. Prior to that, education was racially differentiated as measured by the degree of state responsibility for provision of services. Only white education was systematically organized; education for Africans took place mainly in schools established by missionaries. The Indian communities had taken responsibility for education into their own hands by establishing community schools. Schools for coloured communities fell under the White-controlled Cape Province Education Department.

In the last two decades, the state has taken increased responsibility for providing education to groups who live in the white-designated urban areas where students generally attend state schools. Education is now compulsory for white and coloured children up to the age of 16, and for Indian children up to the age of 15.

The creation of regional education departments facilitated the institutionalization of inequities in the allocation of fiscal resources along racial as well as regional lines. Education budgets and proportional allocations are not only determined at the government level, but also to some extent by the demands of constituents who receive the benefit of education services. As will be discussed in Chapter 3, education in white-designated rural areas and in the homelands was organized in such a way that the social-political structure of society inhibited the manifestation of demand for education services.

The total distribution of primary school students (excluding SGT and TBVC areas) by type of school, by gender, and grade level is depicted in Table 2.2. The data reveal how rigidly defined social barriers are in educational institutions. For example, less than 100 students of African, Coloured or Indian background were enrolled in HoA schools in 1989, although this figure has risen since white schools were allowed to admit African pupils. By February 1991, one month after schools started admitting African pupils, there were 5,360 African pupils registered at white schools.[1]

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[1]Hansard 7/2/91 col 364).

TABLE 2.2: NUMBER OF PUPILS BY TYPE OF SCHOOL, GENDER AND GRADE, 1989

		SSA	SSB	1	2	3	4	5
HoA	M	41,879	37,910	36,121	34,993	34,742	34,970	35,396
	F	39,184	36,228	34,857	33,564	33,541	34,154	35,135
	Total	81,063	74,138	70,978	68,557	68,283	69,124	70,531
Coloured in HoA	Total	87	82	83	79	57	58	30
Indian in HoA	Total	16	16	18	16	15	15	14
African in HoA	Total	27	27	28	32	36	41	39
HoD	M	11,154	10,343	9,775	9,698	10,058	10,045	10,059
	F	10,623	9,958	9,643	9,488	9,820	9,802	9,989
	Total	21,777	20,301	19,414	19,186	19,878	19,847	20,049
White in HoD	Total	1	3	1	1	1	1	0
Coloured in HoD	Total	372	339	337	313	295	257	288
African in HoD	Total	87	117	58	46	48	30	18
HoR	M	56,426	50,494	46,049	41,868	39,624	36,834	35,034
	F	52,521	48,379	43,045	40,505	39,400	37,789	36,930
	Total	108,947	98,873	89,094	82,373	79,024	74,623	71,964
White in HoR	Total	-	-	-	-	-	-	-
Indian in HoR	Total	156	182	175	147	169	134	141
African in HoR	Total	1,303	1,153	987	764	693	580	567
DET	M	171,202	133,252	123,527	101,420	97,644	82,073	77,982
	F	155,983	123,601	119,863	102,813	99,951	88,572	85,385
	Total	327,185	256,853	243,390	204,233	197,595	170,645	163,367

The data also reveal that few gender differences within a type of school exist with one exception. In DET schools, more boys than girls are enrolled in SSA. With each successive year of schooling, both males and females in DET schools have high drop-out rates, with male rates exceeding females by Standard 2 (lower enrollments), and increasing through Standard 5.

2.1 REGIONAL DISTRIBUTION OF STUDENTS

During the present period of transition, it is politically and economically imperative that the government address the issue of racial inequities in education. Reorganization of education management into a deracialized, unitary system will be at the core of any successful strategy for addressing these inequities. Reorganization alone will not, of course, ensure parity among schools; carefully designed, long-term strategies will be required to achieve equity in the provision of services, and to realize greater balance in student attainment and performance.

In Table 2.3 enrollment in primary education is disaggregated by administrative authority and type of school. As will be noted in more detail in Chapter 3, the vast majority of students attending partially subsidized farm schools and other state-ordered schools are African students (DET). Community schools form the primary educational mechanism in the Self-Governing Territories. These enrollment patterns have significant implications for resource distribution and for the perpetuation of education inequalities as South Africa shifts from a racially-based system to one in which differential access to resources could become based on geography and social class.

TABLE 2.3: PRIMARY EDUCATION ENROLLMENT DISTRIBUTION - 1990

	State	State-aided Farm	Other State-aided	Private	Community	Enrollment Total
DEC House of Assembly	507,807		(18 schools '91)	36,891		544,698
DEC House of Delegates	145,000		(35 schools) enrollment			145,000
DEC House of Representatives	516,920	100,732	n/a	(5 schools)		617,652
DET	1,144,550	464,405	26,598	13,293		1,648,846
QwaQwa	65,793				1,030	66,823
Lebowa		6,397	433	1,541	601,490	609,861
Gazankulu	10,164		42		224,396	234,602
KwaZulu	766	34	994	1,220	1,163,681	1,166,695
KaNgwane					165,181	165,181
KwaNdebele					94,019	94,019
Subtotal SGTs	76,723	6,431	1,469	2,761	2,249,797	2,337,181
Transkei						908,126
Bophuthatswana						409,799
Venda						*161,436
Ciskei						*196,809
Subtotal TBVC						1,6[illegible],170
Total						6,969,547

Sources: Annual reports for various departments - 1990.
Statistical Services within various education departments.

* HSRC data (unpublished).

About 43 percent of all primary school pupils attend schools in the common area. The DET, which administers schools for African pupils in this geographic area, has the largest enrollment of all the education departments.

The education departments of the six SGTs administer schools that accommodate 33 percent of all primary school pupils. This includes the KwaZulu Department of Education and Culture (DEC) which is the second largest department and serves 17 percent of all pupils.

The TBVC departments account for 24 percent of the total enrollment and 13 percent of all pupils attend schools in the Transkei, the third largest of the education departments. The communication structures among education departments reflect a history of regional and racial organization. The DET is linked to the non-independent homeland departments through two committees, which operate at the level of Heads of Education Departments, and at the level of Minsters of Education. Through these vehicles, the DET bureaucracy wields considerable influence on homeland departments. A third committee links the head of the DET bureaucracy to the departments for other race groups in the white-designated area.

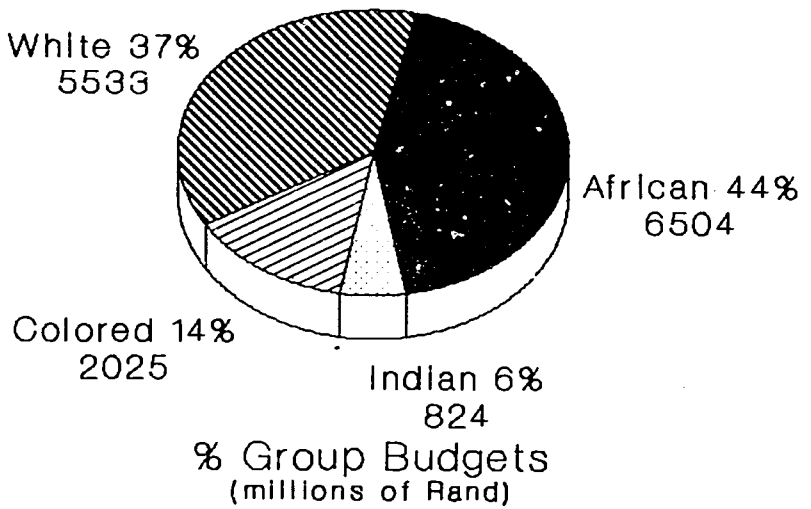
As there are no formal communication structures at this level between the independent homelands and the departments for other race groups, formal communication is necessarily indirect. Recently, however, more direct communication has been initiated between the independent homelands and the DNE via the Department of Foreign Affairs, which channels funding to these homelands.

2.2 PER CAPITA EXPENDITURE

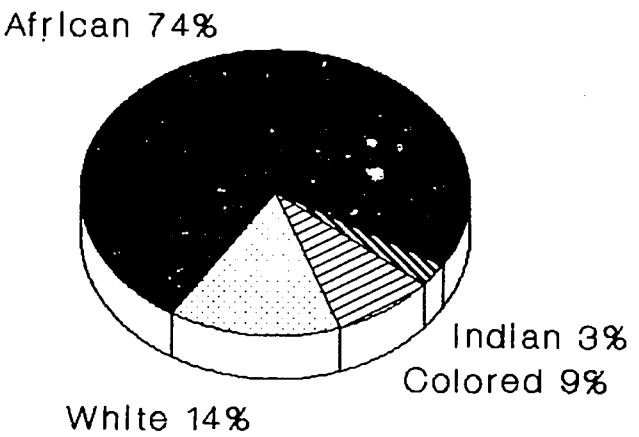
On a macro level, the main factor determining variations in the quantity and quality of education provision in South Africa has been the hierarchy of expenditure across the different departments. The pattern of expenditure has varied during the apartheid era depending on the broad government strategies of the period. In the early 1980s, there was an attempt to reduce the gap between the DET and other racial groups in the common area, while continuing to neglect the homelands. More recently there has been an attempt to narrow the gap between the homelands and the DET. These attempts at equalization have had limited success due to economic and political constraints. It has not been feasible to spend a greater proportion of the total budget on education in order to upgrade all departments to the level of the HoA.

Figure 3 depicts the distribution of government resources to education in general and contrasts that distribution with population distribution. African institutions receive 44 percent of the total education allocation, yet Africans as a whole comprise 74 percent of the population. Allocation for education of Whites equals 37 percent of the budget yet, as a group, they constitute only 14 percent of the total population.

Education Budget Allocation by Group
1990



% Group Budgets
(millions of Rand)



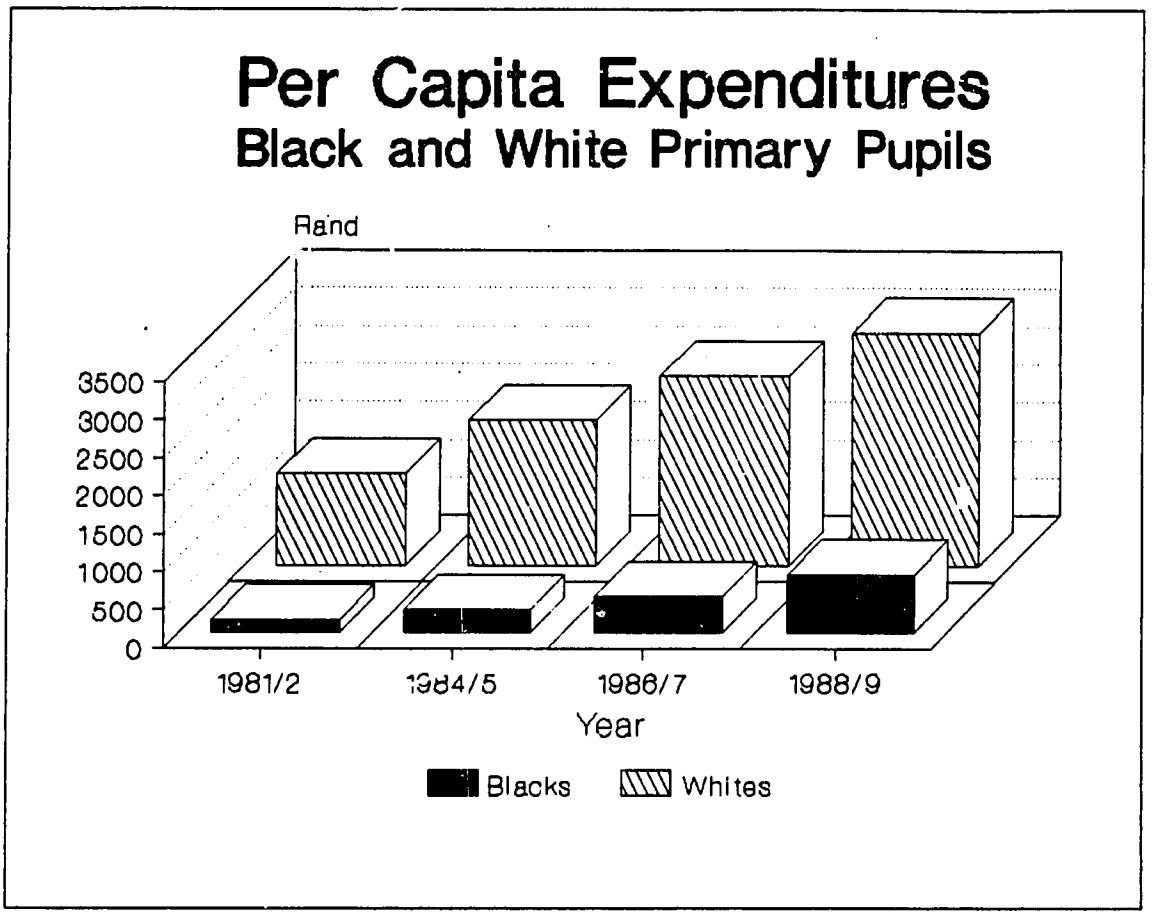
Group as % of Population

Source: (Bot , pg.3)

FIGURE 3

As can be seen in Figure 4, the disparity in spending between white and African primary pupils is dramatic. Per capita expenditures for both groups have increased dramatically in the past ten years, nearly doubling for both. Although the discrepancy between African and white pupils is decreasing slightly, the ratio is still nearly 4.1 in favor of Whites.

FIGURE 4



In addition to public school enrollments, private schools enroll nearly 50,000 primary students, the majority of these Whites. As Table 2.4 indicates, white students are enrolled at a rate nearly three times that of African students despite the fact that Whites form only about 20 percent of the population. Data not included in this Table clearly demonstrate that there is almost no cross-racial enrollment in these private schools.

TABLE 2.4: TOTAL ENROLLMENT BY CATEGORY AND LEVEL, 1989

Type of School	SSA	SSB	1	2	3	4	5
White Special	525	584	622	667	688	704	726
White Private	5,108	4,876	4,646	4,306	4,384	4,415	4,581
Indian Special	741	716	703	657	413	241	117
Indian Private	41	60	45	54	45	43	39
Coloured Special	553	496	556	576	569	519	467
Coloured Private	241	191	209	204	163	174	253
African Special	381	282	275	248	210	163	147
African Private	2,227	1,900	1,952	1,815	1,821	1,761	1,682

"Special" schools, as labeled in Table 2.4, include those providing services for those physically and mentally handicapped children. Enrollments for all groups are assumed to be far below need, especially in the African community. In most countries, between 5 and 10 percent of the population is normally in need of special school services.

2.3 ORGANIZATION OF SCHOOL LEVELS

Primary schools in the common area and non-independent homelands have a seven-year curriculum consisting of two sub-standard (SSA) plus five standard grades. This is subdivided into four junior primary and three senior primary years. Secondary schools have a five-year curriculum subdivided into three junior secondary and two senior secondary years. Two of the independent homelands, Ciskei and Venda, also follow this system.

2.4 PRE-PRIMARY EDUCATION

With the exception of a one-year pre-primary program, the current trend in government policy is to privatize pre-primary education. There is growing support for the incorporation of a one-year, pre-primary program into the formal school structure. Steps have been taken in this direction in schools administered by the HoA, HoR and HoD. Within the DET a different approach has been adopted in the form of a "Bridging Period Program." This is not an extra year at the pre-primary level; it is a course into which

SSA pupils are diverted after the first term if they are not considered to be school-ready. Strictly speaking, this is not pre-primary education; it does not allow children to start their education any earlier than SSA. Instead, it extends the existing curriculum for selected children who have already been disadvantaged by a lack of pre-primary provision.

The social and economic value of pre-primary education is seldom questioned. The current neglect of education at this level raises other kinds of issues:

- Should the state provide education at this level?
- Does pre-primary education deserve higher pedagogical and fiscal priority than other levels, for example secondary education?
- If the state should finance pre-primary education partially or completely at specified levels, who should administer it?

Although pre-primary education is not the subject of this assessment, it is of critical importance to the success of instructional programs at the primary level. Given the success of NGOs in offering pre-primary services, it would seem that the state's role in provision at this level might be best limited to facilitating private organizations in their efforts to offer more and better services. If the state is involved, its contribution should not be differentiated unless this favors disadvantaged communities. In addition, privately organized pre-primary education should be subsidized -- possibly on a selective basis favoring poor, unemployed, and single parents. Tax incentives could be made available to employers who provide child care. A carefully planned combination of public and private support for pre-primary education is necessary to alleviate the learning and socialization disadvantages with which many South African children begin school.

2.5 TEACHERS

Teachers and teacher training are discussed in Chapter 7 of this report; however, several overriding themes are worth pointing out.

According to the 1990 issue of Education and Manpower Development, with statistics for 1989, 18 percent of all African primary school teachers had no professional qualifications, 34.9 percent were professionally qualified but with academic qualifications lower than Standard 10, and 47.1 percent were professionally qualified and had at least a Standard 10

background. This is a result of apartheid policies in the 1960s and 1970s which limited secondary school facilities and therefore the number of recruits entering teacher training with a Standard 10 qualification.

In the late 1980s, the overall number of teachers in DET and SGT schools increased, but at a slower rate than the number of pupils. Consequently, the shortage of teachers increased. In the face of political, economic, and financial pressures, the DET and homeland departments could not make up the backlog.

The quantitative dimensions of inequities relating to teaching are easier to chart than qualitative ones. In 1990, teachers went on strike in most of the DET regions and in at least two homelands. Their demands focused on issues such as books, salaries, classrooms, and other improvements in teaching conditions, as well as on broader political issues. Throughout all the various regions and departments, there was consensus that the conditions in which African teachers are currently expected to work are unacceptable.

2.6 TEACHERS AND COMMUNITIES

Regardless of where they were trained, teachers tend to be disinclined to teach in rural areas. In South Africa, this resistance is exacerbated for teachers in the DET, the HoR and the homelands by the social, economic, and political relations prevailing in rural areas. For many, teacher training is perceived as a route to a more comfortable socio-economic status, greater autonomy, and an escape from deprivation. It is not surprising that teachers do not want to be subjected to the discomforts of rural life and rural teaching conditions, nor to the authority of farmers or chiefs.

Research in selected localities suggests that relationships among teachers in farm schools (and also in schools in shack settlements) and the communities to which the students belong are often characterized by lack of communication and even hostility. In the Orange Farm shack settlement, for example, teachers interviewed at a state primary school said that they were not there by choice, and that their colleagues looked down on them for being there.

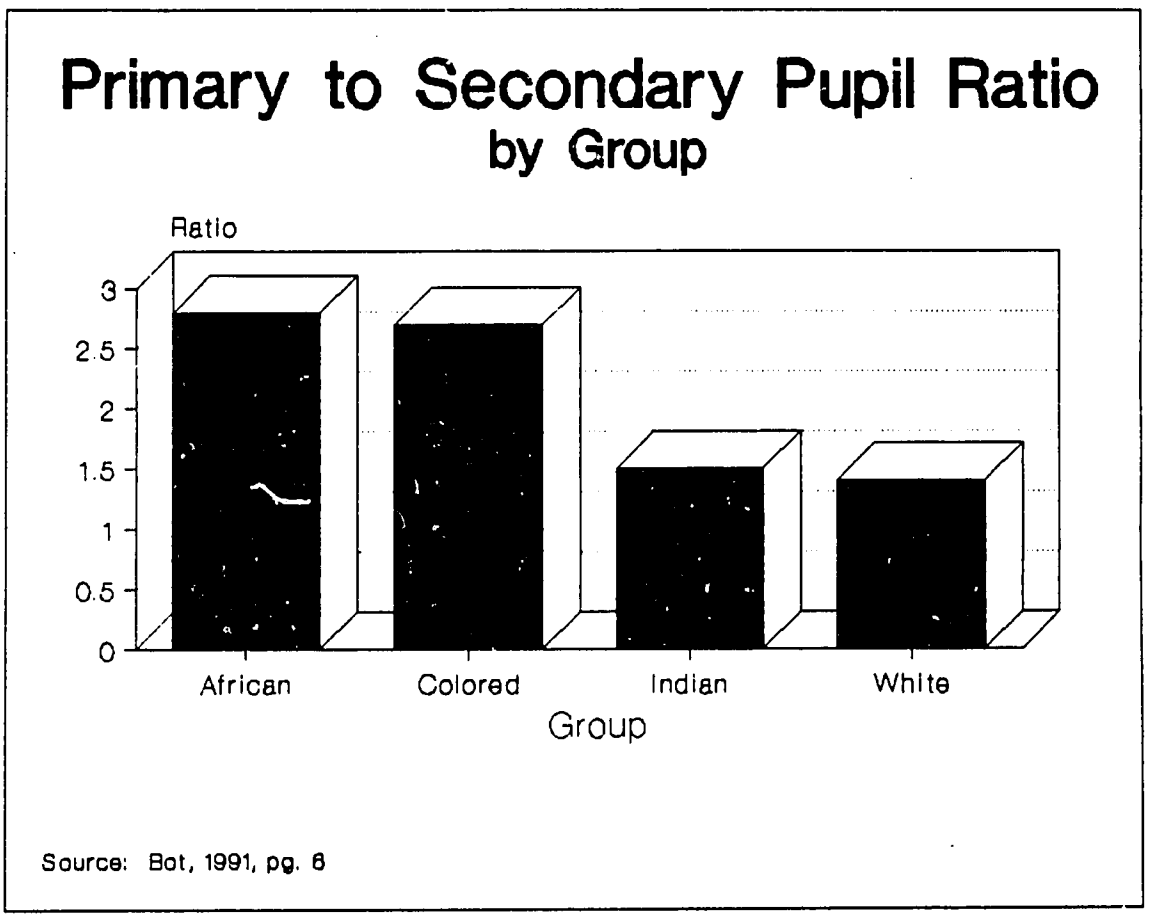
The class dimension of the relationship between teachers and poorer communities must be considered when the issue of teacher shortages is addressed. In a unitary department, all teachers will not automatically be distributed evenly across all regions. Instead, there may be too many teachers in the urban areas and too few in rural areas as is already the case in DEC (HoR) schools. Some policy makers propose providing incentives to

teachers who work in rural areas. This is not likely to address the problem of the alienation of teachers from the communities they serve. Again, this issue is deeply embedded in the social, economic and political disadvantages of rural communities. This problem cannot be solved with interventions that focus only on the teacher; instead the teacher, the community, and the relationship between the two must be addressed.

2.7 QUALITY AND PERFORMANCE

The cumulative impact of differences in resource allocation, teacher training, community support, and administrative structure is evident most prominently in measures of student performance. As Figure 5 depicts, the ratio of white students passing on to secondary school is considerably higher than it is for any other group.

FIGURE 5

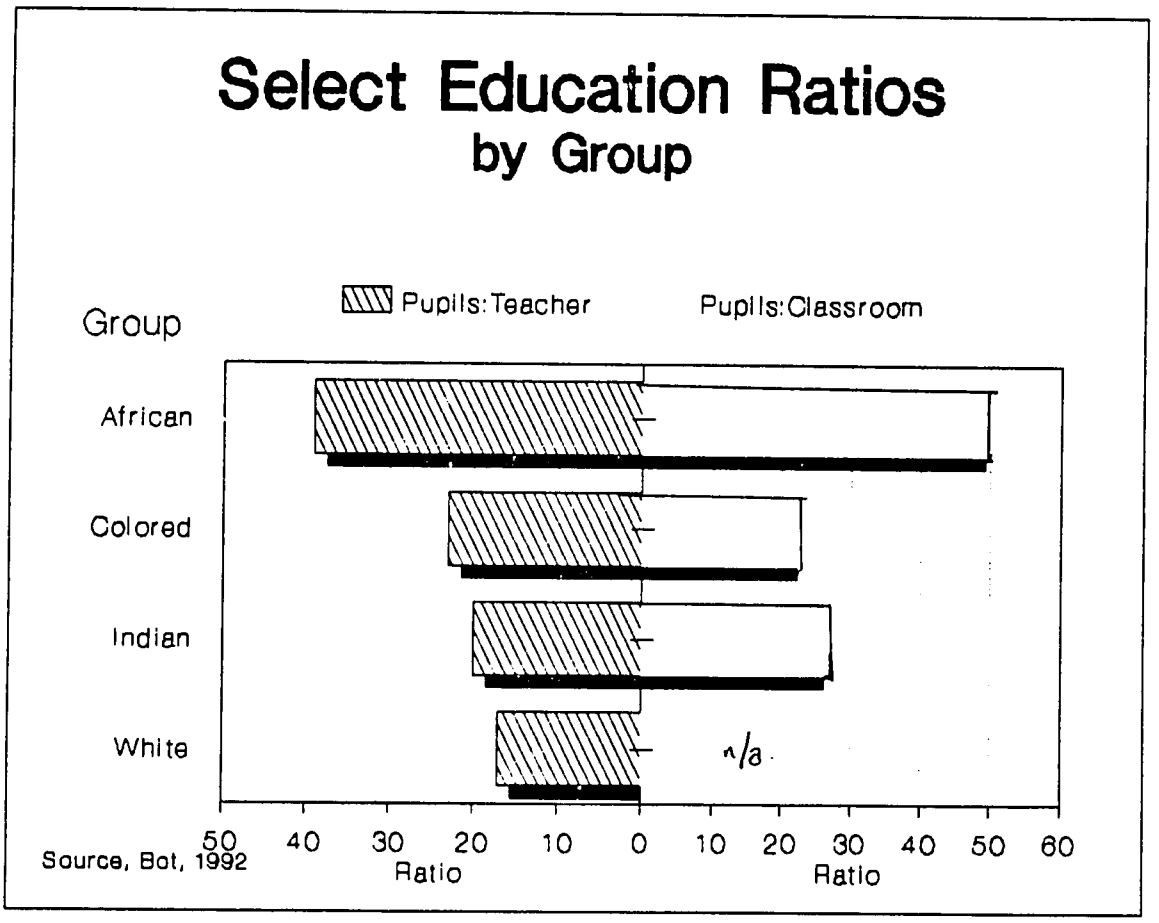


Three times as many African students are in primary school compared to secondary school. The ratio is only 1.5:1 for white students. African and coloured students are less likely to go on to secondary school for several reasons:

- Poor performance at the primary level;
- Lack of places at the secondary level; and
- Inadequate family resources to support the student.

A primary education that is poor in quality may be insufficient for developing a set of literacy and numeracy skills that will be sufficiently developed to last a lifetime. Another manifestation of school quality and related student performance is pupil-teacher and pupil-classroom ratios. Both of these measures indicate severe disadvantages for African students, as can be seen in Figure 6.

FIGURE 6

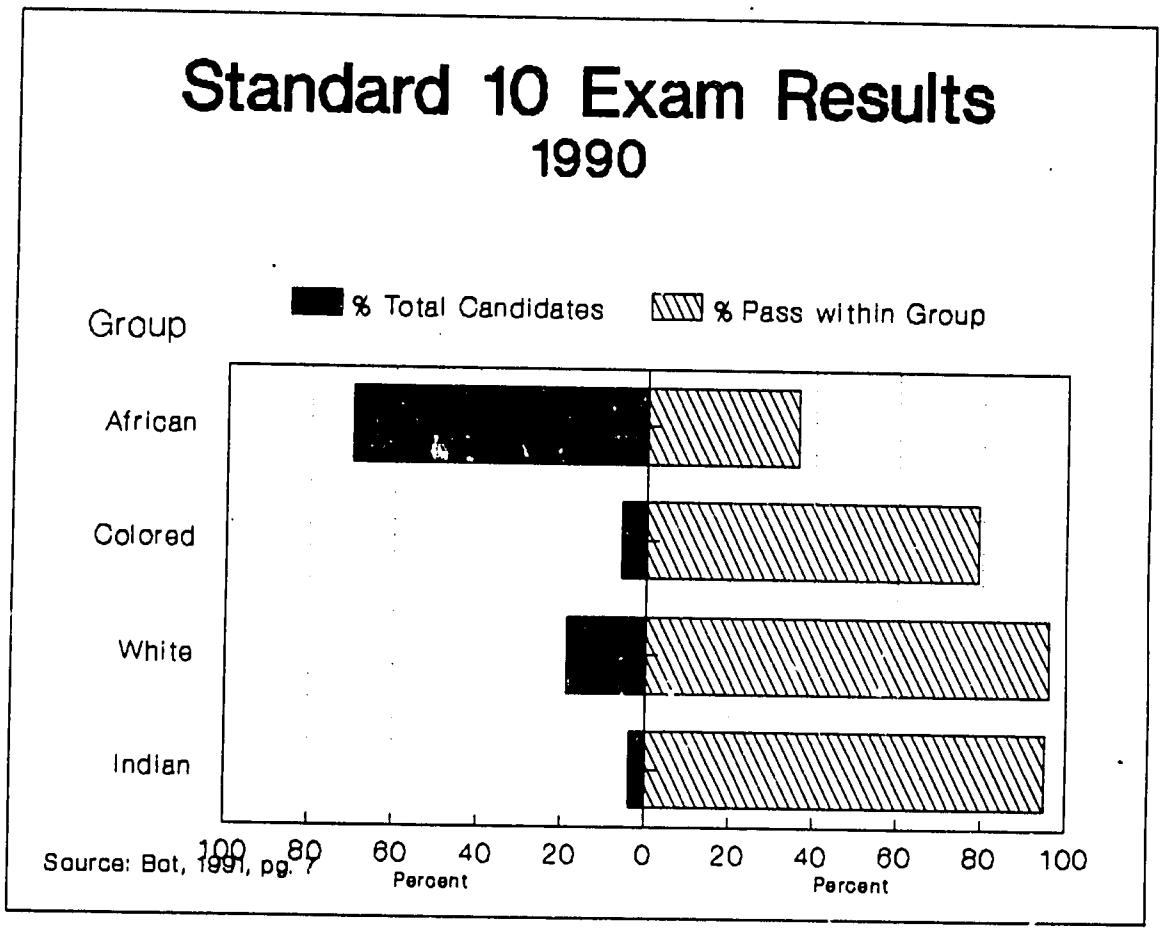


African students average forty students per teacher, and 50 students per classroom. When farm schools and TCVB schools are taken into account, the ratios reach levels unacceptable for instructional purposes. Pupil-teacher ratios for white students are less than one half those for African students. As pedagogically ideal as that rate might be (17:1), it also raises the question of how society can afford to maintain this favoritism, especially in light of the oppressive conditions faced by African students.

The only available valid, measure of student performance is the Standard 10 Examination. Occurring at the end of the secondary cycle, it measures the progress of only the best or most fortunate students, those who have access to and are able to afford post-primary schooling.

The results of the 1990 Standard 10 Examination, shown in Figure 7, are revealing.

FIGURE 7



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African students comprised nearly 70 percent of the total Examination candidates, yet fewer than 40 percent of those sitting for the test passed. Less than 20 percent of the candidates were White, yet over 90 percent were successful. Both the coloured and Indian populations have similarly favorable pass rates.

Assuming that only the best African students are able to complete enough schooling to sit for the examination, the results are shocking and deplorable. Over-crowded conditions, poor instruction, and inadequate curricula are surely among the reasons for such an unacceptably low level of performance. Suggestions for reducing these problems are made throughout the rest of this assessment.

2.8 INTERNAL EFFICIENCY IN PRIMARY SCHOOLS

Primary education for African children is characterized by high rates of inefficiency, as is illustrated in Table 2.5. Nearly one-quarter of African children do not make the transition from the first year of primary school (SSA) to the second year (SSB). The problem is especially severe in Transkei (SSA-SSB rate equals 61.4 percent) where only 61 percent of first year students survive to year two. Transition rates for non-African groups are at 90 percent are higher. It is noteworthy that once past the first year of schooling, the chance that an African student will continue to make successful transitions is much higher, although still lower than for their peers. A major impediment to success in school for African children appears to be a lack of school readiness that stymies their efforts and aspirations from the outset of the formal schooling process.

TABLE 2.5: SURVIVAL RATES 1990

	African	Coloured	Indian	White
Sub A - B	.76	.91	.97	.97
Sub B - Std 1	.95	.94	.97	1.00
Std 1 - Std 2	.89	.96	.99	1.00
Std 2 - Std 3	.99	.98	1.02	1.00
Std 3 - Std 4	.86	.96	.98	1.00
Std 4 - Std 5	.91	.95	.97	1.00
Std 5 - Std 6	1.00	.88	1.00	1.00
Std 6 - Std 7	.88	.97	.95	1.00
Std 7 - Std 8	.88	.80	.97	.98
Std 8 - Std 9	.86	.81	.87	.95
Std 9 - Std 10	.87	.70	.84	.95
Cum. pr.	.50	.74	.92	.97
Cum. mid. (5-8)	.77	.68	.92	.98
Cum. sec. (9-10)	.74	.56	.74	.90
Cum. to Std 10	.29	.29	.63	.86
Sr. Certificate	.36	.79	.95	.96

Source: EduSource and Research Triangle Institute (USA), The Education Reconstruction Model (version 1), Working Draft. October, 1991.

Fortunately, available data strongly suggest that an education reconstruction strategy that reduced internal inefficiency could permit an enormous expansion of the proportion of African pupils completing Standard 5 without any great increase in overall enrollment in the next decade. This point is made by the data in Table 2.6, which represents the results of analyses of internal efficiency made by following a cohort of new entrants to SSA through the system to the end of Standard 5 over 12 years (to

allow multiple repetitions), assuming repetition and dropout rates remain fixed at certain levels.

TABLE 2.6: INTERNAL EFFICIENCY INDICATORS FOR PRIMARY EDUCATION IN SOUTH AFRICA

	Years of instruction per entrant to Std 6	Percent of SSA entrants reaching Std 6 within 12 years	Average years in school on entering Std 6
White, 1985 rates	7.44	95.8	7.18
African, assumption 1	11.42	62.6	7.91
African, assumption 2	12.03	61.8	8.22
African, assumption 3	12.24	59.2	8.15
African, assumption 4	11.49	51.6	8.15
African, assumption 5	11.58	60.4	8.34
Actual 1990 mean age difference, Std 6 - SSA			
Bophuthatswana			8.13
KwaZulu			7.76

Assumption 1: Donaldson's 1985 rates, based on RIEP data and demographic adjustments for SSA, SSB, and Std 1.
Assumption 2: RTI projected repetition rates for SSA and SSB, Donaldson's other 1985 rates.
Assumption 3: RIEP average 1985-89 repetition rates, RIEP 1985 drop-out rates.
Assumption 4: RIEP 'outflow' ratio for 1990 for drop-out, RIEP average 1985-89 repetition rates for repetition.
Assumption 5: As 4, but Donaldson's repetition rates for SSA, SSB, with drop-out rates adjusted accordingly.

Sources: du Pisani, et al (1991); Donaldson (1985); Orbach (1991a); KwaZulu & Bophuthatswana (1991). Age distribution of 6-year old KwaZulu SSA pupils assumed same as Bophuthatswana.

Note: These should be regarded as indicators, not reflections of reality; the numbers are calculated on the basis of unchanging repetition and drop-out rates applying equally to first-time in standard and repeaters, throughout the career of the cohort, and permitting as many as five repeats. These are highly unlikely assumptions.

Repetition and dropout data for South Africa, and especially for Africans, are inappropriately collected, widely believed to be inaccurate, and difficult to obtain. One basic difficulty is with how repetition data are defined by RIEP, the only agency that collects them. RIEP uses a strict definition of repetition, namely that a repeater is a pupil who completes a given standard, is not promoted to the next higher standard, and repeats the given standard the following year. This may make sense from some points of view, but is misleading from the point of view of tracing what happens in the system over time. By this definition, a pupil who leaves school before completing a given standard and then returns to the same standard the next year is not a repeater, but part of the outflow the first year (i.e. a dropout), and a new entrant the second year. It is widely acknowledged that this latter phenomenon is common among African pupils in South Africa, particularly in SSA and SSB.

In the table, the first line gives the results of the cohort trace for white pupils, using the transition rates for 1985 as a reference point. It takes 7.44 pupil-years of instruction for each pupil who completes 7 years of school; 95.8 percent of pupils do complete 7 years of school within 12 years; and each pupil entering Standard 6 has had on average 7.18 years of school. This is not outstandingly efficient by industrial country standards, but is extraordinarily good for Africa or for a country of South Africa's income level.

For Africans, five different sets of assumptions are used. Donaldson (1989) used demographic data to set maximum new entrants to SSA each year, and used an algorithm to derive reasonable repetition and dropout rates for SSA, SSB, and Standard 1 in 1985; the rest of his transition rates are RIEP's 1985 rates. That is assumption 1. Assumption 2 uses the SSA and SSB repetition rates derived by the team from the Research Triangle Institute by similar methods, and the other rates are as for assumption 1. Assumption 3 uses RIEP average 1985-89 strict repetition rates and 1985 dropout rates. Assumption 4 uses RIEP 1990 "outflow" rates for dropout, average 1985-89 strict repetition rates for repetition. Assumption 5 is the same as assumption 4, except that Donaldson's 1985 repetition rates are used for SSA and SSB, with dropout rates adjusted to maintain the same promotion rates.

The range of outcomes is surprisingly narrow, all indicating extraordinary inefficiency. It takes between 11.42 and 12.24 pupil-years of instruction for each completer of Standard 5; between 51.6 percent and 62.6 percent of entrants to SSA complete Standard 5 within 12 years; and each entrant to Standard 6, which should be the eighth year of school, has on average attended between 7.91 and 8.34 years of school already. As a crude check on the realism of the numbers calculated, the table also shows the actual difference in mean age of pupils in SSA and Standard 6

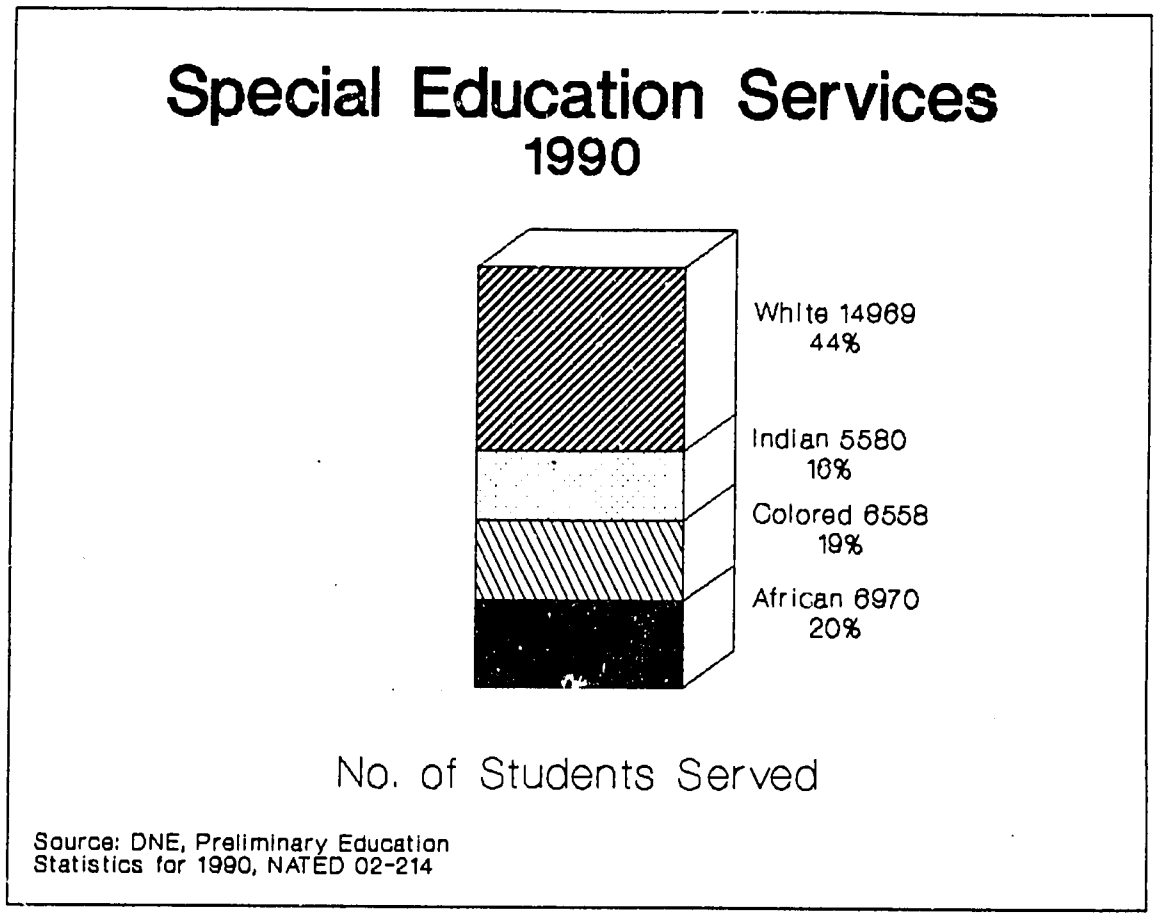
in KwaZulu and Bophuthatswana in 1990, the only two African authorities for which it was possible to obtain "age by standard" data. These are 7.76 years in KwaZulu and 8.13 years in Bophuthatswana. Since KwaZulu by reputation has a considerably lower quality primary school system than Bophuthatswana, which Donaldson and others hail as the best African system in South Africa, the KwaZulu figure looks suspiciously low, and the Bophuthatswana figure reassuring that the calculations used are producing results of the right order of magnitude.

What this analysis strongly suggests is that a very high priority should be placed on reducing African repetition and dropout rates in primary schools, especially the early standards. African enrollment in SSA is roughly 150 percent of the number of African children aged 6, and has been for at least a decade. Although it is often claimed that this is caused by underage enrollment and/or overage enrollment of late entrants, it is easy to show that this is just not consistent with the known data (Healey and Crouch, 1991). If repetition could be reduced, class size in SSA would shrink and as a result the primary system's capacity could be expanded. This suggests that attention should be paid to expanding properly designed pre-primary programs for African children, for retraining SSA and SSB teachers, and revamping the curriculum at that level, generally improving the quality of African early-childhood education.

2.9 SPECIAL SERVICES

A frequently overlooked, but extremely important indicator of equity and quality in an education system is the amount of services available to students with special needs. As shown in Figure 8, approximately 34,000 students received special services in 1990.

FIGURE 8



These services include instruction for handicapped children and those with special learning needs. As with other types of educational opportunity, disparities exist by race. Although over 80 percent of the total student body is African, these students comprise only 20 percent of those with access to special services. Whites, with 20 percent of the student population, form 44 percent of those receiving special education benefits. Compared to many countries, South African is doing relatively well in taking care of its special clients. However, great inequities exist by race and presumably by region -- differences which must be addressed for <u>all</u> deprived groups.

2.10 SUMMARY

The education structure in South Africa is highly differentiated and discriminatory. The bureaucratic infrastructure is highly developed at the central level, with substantial variation in human and fiscal resources at the functional administrative level (Department).

Fiscal inequities are the most apparent feature of this highly stratified system resulting in differences in teacher qualifications, access to and use of educational facilities, and differences in student performance, all hallmarks of primary education in South Africa. A detailed description of each of these problems and recommendations for ameliorating them are provided in the following chapters.

CHAPTER THREE

STRUCTURE, DIFFERENTIATION AND INEQUALITY IN PRIMARY EDUCATION

3.0 INTRODUCTION

There are roughly 7 million children in primary schools in South Africa; another estimated 800,000 between the ages of 6 and 12 were not in school at all in 1990. As noted earlier, for those who are in school, the quality of their learning experience varies dramatically by race, region and class. During this time of transition the forms of differentiation based on class and region are of particular importance because there is a danger that they may be carried forward into a unitary and deracialized education department.

In the past, education analysts have focused on racially defined categories of learners and particularly on those in schools administered by the DET. Less attention has been given to regional differences and to the experiences of learners in the homelands even though 60 percent of all primary school pupils live in these regions as shown in Table 3.1.

3.1 MANIFESTATIONS OF INEQUALITY: ACCESS, RETENTION AND COMPLETION

3.1.1 Access

Investigators from the Research Triangle Institute (RTI) have estimated that over 800,000 children between the ages of 6 and 12, or nearly 12 percent of all primary school-aged children, were not in school in 1990. These out of school children are not evenly distributed across regions. A 1986 DET report acknowledged that 36 percent of African children between the ages of 6 and 14 in white-designated rural areas were not in school.

3.1.2 Repetition and Completion

The hierarchy of privilege across departments is also evident in the proportion of pupils who reach the senior classes. The proportion of children in DET and homeland schools who reach standard 6 within 12 years is between 51 percent and 62 percent of the initial cohort of sub-standard A students. In DEC (HoA) schools the equivalent figure is 96 percent.

Michael Taylor found that for every 100 pupils who entered SSA in 1979 the following number entered Standard 5 in 1985:[1]

Department	No. of Std. 5 Entrants
DEC (HoA) (White)	93
DEC (HoD) (Indian)	96
DEC (HoR) (Coloured)	62
DET	43
KwaZulu	52
Transkei	31
Lebowa	63
Bophuthatswana	65

The proportion of students who reach the senior classes is much lower in the Transkei while in DET state-aided farm schools the proportion of pupils who reach secondary school is dramatically low. In 1990, only 6 out of 5,699 DET farm schools offered classes at the standard 10 level.[2] Consequently, only 0.03 percent of the total enrollment are in standard 10 in DET farm schools as against 2 percent in the Transkei, 2.7 percent in KwaZulu, 3 percent in DET state schools and 7 percent in DEC (HoA) schools (see Table 3.1).

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[1] Taylor, B, Falling at the First Hurdle, University of Witwatersrand, Johannesburg, 1989.

[2] Personal communication from DET to M. Bot, November 6, 1991.

TABLE 3.1: PERCENTAGE DISTRIBUTION OF ENROLLMENTS AMONG THE VARIOUS DEPARTMENTS

	Enrollment	Percent of Total
White (DEC/HoA)	544,698	7.8
Indian (DEC/HoD)	141,746	2.0
Coloured (DEC/HoR)	613,215	8.8
African (all)*	5,650,366	81.3
Total	6,950,025	100.0

*Breakdown of African Percentage

DET		23.7
Self-Governing Territories		33.6
GazanKulu	3.3	
KaNgwane	2.4	
KwaNdebele	1.3	
KwaZulu	16.7	
Lebowa	8.9	
QwaQwa	1.0	
TBVC Territories		24.0
Transkei	13.0	
Bophuthatswana	5.9	
Venda	2.3	
Ciskei	2.8	
Total African Percentage		81.3

Source: Annual reports for various departments, 1990; Race Relations Survey 1989/1990; Statistical services within various education departments; and Education and Manpower Development, No. 11, RIEP, University of Free State, 1991.

In farm schools drop-out rates are very high throughout primary school as shown in Table 3.2.

TABLE 3.2 PERCENTAGE LOSS OF PRIMARY SCHOOL PUPILS IN TRANSITION FROM GRADE TO GRADE 1988 - 1990 IN DET FARM SCHOOLS AND DET URBAN STATE SCHOOLS

Percent Transition Loss From	Farm Schools	Johannesburg Schools
SSA to SSB	27.0 %	20.5 %
SSB to SS1	9.3 %	3.8 %
SS1 to SS2	27.6 %	5.8 %
SS2 to SS3	5.3 %	(3.7)%
SS3 to SS4	29.9 %	3.6 %
SS4 to SS5	29.4 %	2.2 %

Source: Development Bank of Southern Africa

The highest apparent drop-out rate in most departments is in SSA averaging over 20 percent of the total SSA enrollment in the DET and most homeland departments and reaching nearly 30 percent in the Transkei. As noted in Chapter 2, it is possible that many children who leave at the SSA level return in later years. It has also been suggested that SSA statistics in all African schools may be skewed by the fact that very young children are enrolled at this level (i.e. SSA is used as a substitute for preschool).

There is some disagreement in the literature about the ratio of SSA pupils who leave to those who repeat. Donaldson has argued that of all DET and homeland pupils in SSA, less than 1 percent leave the school without returning and 31 percent repeat the grade. Whatever the ratio, the very low survival rates at the SSA level provide cause for alarm. The problem of interpretation arises because the only available data on repeaters and drop-outs define repeaters as those who complete the year in question and then repeat it. In SSA, it is believed that many stop attending before the end of the year (and are thus counted as drop-outs), and return to SSA the next year.

Correlation between drop-out rates and failure rates is complicated. In a study of farm schools Gordon found that, although children who failed were more likely eventually to drop out, there were many other reasons for children leaving school. The most important of these was the lack of classroom space. There is also a relationship between lack of classroom space and

failure in many schools. According to Gordon, farm school teachers sometimes only pass the number of pupils that can be accommodated in the next classroom. A study by Ritchken of secondary schools in Lebowa also suggests that students are failed when places in the next class are full. Although there have been fewer studies conducted of primary schools, it is not likely that the findings would differ at the lower level.

The direct and indirect (opportunity) costs of schooling are also frequently given as a reason for pupils leaving school early. An important underlying cause of high failure and drop-out rates in rural areas is the prevalence of a mode of provision which links the quantity and quality of school facilities to the socio-economic level of communities, subjecting schools to the same biases characterizing social relations that pervade the broader environment.

The number of children who leave school at the primary level is inordinately high. What are the employment opportunities for those who leave? A study by Moll of the wages of male workers in the manufacturing and agricultural industries found that each additional year of schooling was linked to higher wages. Other studies in rural areas suggest that this may only apply to particular types of farm work. Women's wages do not correlate as well with education levels in rural areas as do those of men.

3.2 THE CAUSES OF INEQUALITY

It is frequently argued that the prime determinants of the levels of schooling that pupils achieve are rooted in the broader social, economic, and political conditions prevailing in the society, rather than in the formal schooling system itself. An understanding of how schooling reproduces social imbalances is necessary for informed assessments of schooling, and to formulate recommendations for change.

3.2.1 Departmental Spending.

Differential levels of financial allocation to the various education departments is arguably the most important of the ways in which inequality has been built into the provision system. Table 3.3 indicates the range of per capita expenditure in 1986 (a more recent complete regional breakdown is not available).

TABLE 3.3: 1986 PER CAPITA EXPENDITURE - PRIMARY AND SECONDARY

	Total (R)	Excl. Salaries (R)
DEC (HoA) (White)	2,365	514
(HoD) (Indian)	1,936	417
(HoR) (Coloured)	1,163	206
DET	572	182
DET - Farm Schools	280 **	n.a.
QwaQwa	859	324
Lebowa	365	82
Gazankulu	427	72
KwaZulu	262	33
KaNgwane	307	48
KwaNdebele	384	31
TBVC	n.a.	
All: Average	871	195
Average: DET + TBVC + SGT's (African)	477 *	n.a.

Source: SAIRR Race Relations Survey 1989/90
*) EduSource
**) Bill Nasson, "Bitter Harvest in P.I.E. 88" . Vol 10, No 1

The component of the departmental budget that remains after salaries have been paid is the most flexible portion and the most telling index of inequality. In the past, the range of per capita, non-salary expenditure across departments has been much wider than the range for total per capita expenditure. Recently, attempts have been made to close the gap between the departments in so far as political and economic constraints have allowed. At present, DEC (HoA) spending on primary education is about 4 times that of the DET, and 4.6 times that of the combined average for the DET and homeland departments. Expenditures in TBVC were not readily available.

3.2.2 **Modes of Provision**

The system of bureaucratic differentiation of the education system follows unequal provision according to region and race. Different modes of provision further differentiate the quantity and quality of schooling along urban-rural lines within departments.

Modes of provision are defined by the degree of responsibility assumed by the state for the financing and administration of schools. Historically, three modes have been utilized within education departments:

- State schools are schools which are initiated, planned, financed, and administered by the state;
- State-aided schools are initiated, administered and partially financed by a non-state individual or group. Teachers are paid by the state and subsidy rates are higher than for private schools (this category includes community and farm schools); and
- Private schools are registered with the state and may apply for a subsidy of 15 percent or 45 percent of recurrent costs providing certain criteria relating to facilities, administration, teaching, and curriculum are met.

Numerically, the most important mode of provision is not the state school as might be assumed, but state-aided schools. Over 50 percent of all primary pupils attend state-aided community schools in the homelands. Another 9 percent attend DET and DEC (HoR) farm schools.

3.3 THE RURAL-URBAN DIVIDE: COMMUNITY SCHOOLS AND FARM SCHOOLS

The importance of different modes of provision in the structuring of inequality in education cannot be overemphasized. The prevalence of state-aided schools in rural areas is the result of an administrative strategy in which the state has never taken responsibility for the systematically planned provision of education in these regions.

3.3.1 Community Schools

Although historically most homeland primary schools are community schools, there have been shifts in the way these schools are administered and financed in homeland urban areas. Politically cohesive urban communities have pressured the homeland governments to take greater responsibility for the planning and financing of schools. Urban communities also benefit from schools provided by housing programs such as the Bophuthatswana Housing Corporation. Communities in rural areas tend to be poorer and less cohesive than those in urban areas. They have been less able financially to resist the long-term disadvantages inherent in this mode of provision.

Typically, communities take the initiative for providing the labor to build or expand a school. Communities are also required to contribute financially. In Bophuthatswana, these initiatives are financed on a "rand for rand system" with matching money provided by the department. In KwaZulu, the Government contributes a set amount of R 7,500 per classroom. (The minimum cost of a classroom shell without extras such as water or electricity is about R 17,000.) This system ensures that the quantity, quality and distribution of facilities is linked to what communities can afford.

Land for schools is allocated by local tribal authorities who also control school funds. In community environments often (though not always) characterized by economic scarcity and political illegitimacy, funds may be mismanaged and support for schools may be used for private political advantage.

The community school system of control and financing does not provide a rationale for excluding students from school on the basis of race or other characteristics, but it does not guarantee expansion of facilities to accommodate increases in the number of students. The availability of space determines how many pupils are accommodated. The system tends to result in many small, overcrowded schools with inadequate facilities. In the Transkei, for example, the pupil classroom ratio is 49:1 if all accommodation is counted, but 77:1 if only permanent classrooms of an acceptable standard are counted (see Table 3.4).

TABLE 3.4: PUPIL/TEACHER AND PUPIL/CLASSROOM RATIOS, 1990

	Pupil/Teacher Ratio	Pupil/Classroom Ratio
DEC House of Assembly	17.4:1 **	n.a.
DEC House of Delegates	23.9:1 ***	29.3:1 ***
DEC House of Representatives	25.5:1 ***	25.6:1 ***
DET DET Farm Schools	40.2:1 38:1	39:1
QwaQwa	32.1:1	30:1
Lebowa	41:1	60:1
Gazankulu	43:1	64:1
KwaZulu	53:1	56:1
KaNgwane	39:1	77:1
KwaNdebele	36:1	59:1
Transkei	69:1*	49:1 *
Bophuthatswana	33:1	42:1
Venda	33:1*	58:1*
Ciskei	41:1*	46:1*

Sources: Annual reports for various departments 1990.
Statistical services within various education departments.
*) HSRC data
**) RTI Model
***) RIEP 1991 (Via 7)

The provision of teachers is less of a problem than space, as teachers in approved positions are paid by the departments. Consequently, there are commonly more teachers than classrooms. The number of classes taught at any one time is determined by the available space. In 1990, 58 percent of primary school teachers in the SGT's had a matric plus a professional qualification as

against 55 percent in the DET (1990 DET Annual Report). But here as elsewhere teachers generally prefer to live and work in the urban areas so that rural areas within homelands are disadvantaged relative to urban areas.

There are success stories in the homelands. The introduction of teacher support programs such as Primary Education Upgrading Project (PEUP) in Bophuthatswana and Molteno in the Ciskei are reported to have improved primary education significantly. The relatively low failure rate at SSA level in Bophuthatswana appears to have been a result of this program. Such programs are necessary and useful but they do not rectify the most important cause of inequitable primary schooling in the homelands, i.e. the need for the South African state to ensure equitable allocation of resources in a systematic way to all primary schools.

3.3.2 Farm Schools

There are over 570,000 primary school pupils attending farm schools throughout the country (excluding the TBVC states). Of these, over 464,000 attend schools administered by the DET. Most of the available research has focused on the DET farm schools as will this discussion which is informed by that research. It is worth noting first, however, that 16 percent of primary school children in DEC (HoA) schools are in farm schools as well.

The history of farm schools has been determined primarily by the Land Acts of 1913 and 1936 which placed the provision of services for black communities on white farms under the jurisdiction of white landowners. Prior to 1948 most schools for Africans were run by missionaries and other private individuals and groups; many of these schools were located in rural areas. Under apartheid the state took control of the majority of these rural schools in the white-designated region, not as state schools but as state-aided schools.

Calculations based on the Urban Foundation's demographic data suggest that the number of workers and their families living on white-owned farms is over 4 million, and that nearly 1.5 million of these people are between the ages of 5 and 19. Thus, over a million children in these areas are either not at school or have traveled away to schools in the towns, cities, or homelands. On average, there is only one school for every ten farms. Because pupils have to walk long distances to schools they tend to start school when they are older than pupils in urban areas.

The establishment and maintenance of farm schools depend on the will of the owner of the land on which the school is built. In most cases, this would be a farmer, although some farm schools are on church owned land. Farmers who build schools receive a subsidy of 75 percent of capital costs. Teachers are paid by the state and supervised by the land owner or the land owner's

appointee. In theory, books and equipment are also provided by the state, but in practice there are often not sufficient funds for these purposes.

The dependence of farm schools on the will of the farmer undermines the security of the school and the autonomy of the teacher and parent community. A farmer who receives a subsidy for a school is obliged to allow the school to operate for ten years, after which the buildings may be repossessed for other purposes. If the farm changes hands the new farmer is not obliged to allow the school to operate. The farmer can also determine the number of children that are allowed to attend the school, and whether the school may be attended by children from neighboring farms.

This mode of provision neither guarantees access to schools nor does it allow for systematic planning. It contributes to the dependence of farm workers and their children on the farmer and subjugates their educational interests to his. Generally, farm workers as a group are perhaps the most poorly paid and financially insecure members of the workforce. Their rights as employees or residents are not protected by law and they are not extensively unionized. They have no time or place in which they are beyond the reach of their employers. Adult illiteracy rates are high. Farm workers have little political or economic power and thus are dependent upon the "good will" of their employers for social services.

Children have commonly been expected to work on the farms; it is reported that child labor practices are continuing even though legislation prohibiting this has recently been introduced. Children are frequently undernourished. On the whole, women and girls are worse off than men and boys; not only do they receive lower wages but they are less likely than men to be paid higher wages if they achieve higher educational qualifications. Thus their educational and occupational expectations are lower than those of men. The opportunity costs of sending children to school are high, and there are no guaranteed advantages to completing school in the agrarian labor market.

The real disadvantages of farm schools must be measured not only in terms of what happens in schools but also in terms of the ways in which farm schools reflect and reinforce the disempowerment of farm worker communities outside the school. Although the general picture is bleak, there are, of course, also examples of good farm schools run by caring landowners. In general, however, farm workers have no guarantee of good wages, good working conditions and good schooling, and they have very little influence on the decisions governing any of these matters. The state-aided mode of provision helps to perpetuate this cycle of economic deprivation, educational inequity, and powerlessness.

As measured by all indicators of the quality of schooling, farm schools generally are at the worst end of the range. They have the lowest access figures, the fewest facilities and the highest drop-out rates. It has been suggested that the term "squeeze out" is more appropriate than drop-out in this context as the single most important factor determining whether children go to school and stay in school is the number of places available in classrooms. Many farm schools are small, with one or two teachers and multiple classes. Space can also determine failure rates noted earlier in reference to the study by Gordon.

Teachers also face other difficulties in farm schools. There may be no accommodation for them, and they may be expected to be subservient in their relationship with the farmer. The difficulty of finding teachers who are prepared to live in rural areas and teach in farm schools is a common cry not only in the DET but also in the DEC (HoR).

In the mid 1980s there were indications of changes in farm school provision policies within the DET. A 1986 DET report recommended that farm schools become the responsibility of the state. The timing of this report suggests that this move was linked to the Ten Year Plan announced in 1986, in which the equalization of educational opportunities was promised. It also coincided with the introduction of the Orderly Urbanization policy which promised freedom of movement to farm workers. In 1988, the report was followed by the Education Laws (Education and Training) Amendment Act, which created the legislative authorization for the state to expand state education in rural areas. Increased subsidies were introduced, and some primary schools were expanded to become intermediate or combined schools.

Practice has been less than promise, however, as only five state schools have in fact been established in rural areas. The strategy of creating rural state schools has been strongly opposed by Conservative Party members in Parliament. DET officials claim that a lack of funding prevented the implementation of the new policies.

More recently, the DET appears to have reverted to an affirmation of the state-aided mode of provision, judging by statements in the DET Annual Report for 1990. This shift is consistent with broader discursive shifts in all spheres of education provision towards diversified provision models that reduce the state's financial responsibility. At the same time, the current government has proclaimed a commitment to universal primary education. This implies that the state must at least pick up the responsibility for provision of primary schools in areas where employers and communities have not done so; what this will mean in practice is not clear.

Farm schools may cater to a relatively small proportion of students, but those students are among the most disadvantaged in the country. Any serious attempt to address this inequity must go beyond the allocation of funds and technical improvements, and be linked to the broader social, economic, and political restructuring of rural life.

3.3.3 The New Urban Topography

In non-homeland urban areas, the state school mode of provision, and the principle that the State is responsible for the financing of education, are well established. Recently, a redefinition of this mode of provision has emerged within government discourse as part of a broader strategic response to demographic, economic, and political pressures. The increasing use of other modes of provision has also been affirmed; the introduction of the ABC models by the DEC (HoA) has been the most publicized example of this shift. The use of these models accommodates changing demographic patterns in the middle class suburbs of the cities.

The DET has had to respond to a different demographic phenomenon in urban areas, namely the proliferation of legal, permanent, free-standing shack settlements at the peripheries of the cities. Over 7 million people live in urban shacks in South Africa. Many of these live in back yard shacks, but an increasing proportion live in free-standing settlements. In Durban, for example, 95 percent live in free-standing settlements; while in the Pretoria Witwatersrand Verenigen (PWV) area the proportion of shack dwellers in free-standing settlements is still below 20 percent.

Emerging DET policies and practices differentiate the quality and quantity of state schools according to the socio-economic profile of communities. Shack settlements constitute a special category within this classification. Fewer schools and schools of a lesser quality are provided in these areas. Generally, secondary schools are not provided although exceptions are made in particular circumstances.

As in the case of communities in rural areas, shack settlement communities tend to be poorer and less politically cohesive than communities in the formal townships and suburbs. As a result, they are less able to contest policies which are disadvantageous to them.

3.3.4 Private Schools in Urban Areas

Traditionally, private schools have been the preserve of individuals who have been willing and able to pay higher costs in order to provide educational alternatives (usually of higher quality) to state education for their children.

This mode of provision has recently been utilized in at least two new ways:

- In the inner city area of Johannesburg, organizations have offered private education to students as an alternative to the crisis-ridden DET schools. Many older students who have been excluded from DET schools on the basis of age have been drawn to these street academies. These tend to be secondary rather than primary schools and most rely heavily on international and local donors for their continued existence.

- Squatter communities in places such as Crossroads (Cape Town) and the Winterveld (Pretoria) have their own tradition of private schools. These schools have been a substitute for state provision. (In terms of the law, state schools could not be established in illegal squatter areas.) This tradition has been taken up in legal shack settlements in the absence of adequate state provision. Recent DET policies favor the registration of these schools, which are then regarded as substitutes for state schools for planning purposes. Shack settlement private schools tend to be under-resourced; they invariably do not fulfill the criteria for normal subsidies.

In these new types of urban private schools, students and their families have been obliged to pay for their own education as they have not had access to state provision. The use of these schools as substitutes for state provision represents yet another way in which inequality is structured: poorer communities are required to pay a greater proportion of the costs of education than less impoverished communities.

3.4 CONCLUSIONS

Inequities in education have been the result of inadequate funding and technical support, and of the ways in which the education system is rooted in the country's broader social, political and economic relations. In rural areas, the state-aided mode of provision has provided an important structural link between the community and the school. In urban areas, current state policies tend to link education provision to the socio-economic status of communities.

A unitary, deracialized education department will not necessarily bring greater equality in the provision of education. The Education Renewal Strategy (ERS) affirms practices which differentiate state provision in urban areas. It also affirms the use of different modes of provision involving different

financing and control models. There is a danger that this will provide a rationale for continuing the current approach to provision in rural areas. At the very least, this approach would have to be adapted and supplemented if the current government's commitment to universal primary education is to be taken seriously.

In the past, there has been a stronger relationship between educational outcomes and the socio-economic status of communities than between educational outcomes and the resourcing of education. Schools within the DEC (HoD) system have performed better than their position in the resource per capita spending hierarchy would suggest, while schools in the DEC (HoR) have performed less well than might have been predicted on the basis of funding levels. Students attending DEC (HoR) schools in rural areas have produced particularly poor results. The permanence of these communities, and the consequent continuing need for education have motivated urban communities to exert political pressure on the state to take greater financial responsibility for provision. This, combined with pressure from the private sector to provide more skilled labor, has given rise to shifts toward more equitable provision.

Improvements have been initiated from within education circles, however. Large NGO education support programs have made an impact on educational outcomes at the primary level.

3.4.1 Recommendation 1: Principles for Equalization of Education

The equalization of primary education in South Africa depends on the application of two tenets:

- The principle of equity should guide education provision practices; and
- The principle of democratization should be asserted to ensure that improvements in education are not designed to serve the interests of the most powerful. This principle links activities aimed at the improvement of education to the broader social, economic, and political interests of the community.

The assertion of these principles in the context of state, NGO and funders' activities would have the following implications:

- The state would be required to allocate an equal level of resources to all communities at a nationally affordable level. In addition, historical inequities (such as the existence of poor facilities in certain areas) must be addressed through affirmative, supplementary funding;

- Democratization of state education provision involves democratic participation in policy making at the local, regional, and national levels; and

- NGOs and funders should support the principles of equity and democratization. The principle of equity involves targeting the most disadvantaged communities. The principle of democratization requires involvement of the direct beneficiaries in the communities that receive services and funds.

3.4.2 Recommendation 2: State Education Provision in Rural Areas

The provision of education in rural areas needs to be completely restructured. The state-aided mode of provision must be reformulated and a systematically planned network of state schools must be provided. To this end, some useful suggestions have been made in the research. These include the better use of existing facilities by:

- Rationalizing provision by bringing all schools in a geographic area under a single administration;

- Locating schools at infrastructural nodes (in rural towns, for example) to a greater extent than is already the case;

- Removing existing school facilities from the control of the farmer/landowner/local authority. Establish a new linkage on the basis of a contractual relationship, in which these entities participate in consultation with a national organization selected by the local community.

In addition to the more effective use of existing facilities and infrastructure, new facilities with adequate resources should be provided by the state. This will involve the purchase or leasing of land, where the state does not already own it or providing tax breaks for farmers who are willing to deed land for education purposes.

3.4.3 Recommendation 3: Nutritional Support Program

Feeding schemes for pupils in rural areas have been frequently proposed. The viability of such schemes must be assessed in the light of the following considerations:

- From the point of view of progressive primary health policy makers, preschool children and pregnant mothers constitute a priority target for feeding schemes;

- Nutrition schemes are likely to cost 30 to 50 cents per pupil per day. For every 3,000,000 children reached by such a scheme, the cost will be in excess of R1 million per day or R200 million per year. (There are 200 school days in the year.); and

- It is difficult to target nutrition schemes in schools at individual students rather than the whole school population.

- Should the costs of nutrition programs be borne by the state or be conducted in cooperation with private sector sources?

Despite these difficulties, the idea of a nutrition scheme in the poorest communities should not be abandoned. Too many children in rural areas are too hungry to benefit from schooling.

In the light of these problems it is recommended that a small, short-term research project be established to propose the most cost effective, financially viable, logistically feasible way of organizing and targeting a nutrition scheme.

3.4.4 **Recommendation 4: Rural Education Trust**

Rural areas have been so disadvantaged in educational and other ways that a multi-dimensional, holistic intervention is required in these areas to break the inertia caused by poverty. It is proposed that a Rural Education Trust be created to serve as a vehicle for initiating and funding interventions which could be based on the principles of equity and democratization.

The objectives and functions of the Trust would include:

1) Make resources available to communities for education and development in such a way that the communities themselves can influence the way resources are used;

2) Put rural education on the national agenda;

3) Encourage the state to provide systematically planned schools in rural areas. One way to do this would be to support and initiate research in selected areas, to expand needs assessment and mapping activities which already exist, and to utilize the media to inform the public about the problems of rural education;

4) Co-ordinate existing NGO activities in rural areas and provide a vehicle through which communities can select and call upon particular NGOs;

5) Draw in potential support groups (e.g. university education students) who are willing to take teaching assignments in rural areas;

6) Support the training of rural education development workers. Existing NGOs have proposed the training of community field workers (Independent Teacher Enrichment Center (ITEC), East London) and rural education facilitators (Dr. Gordon, through the Center for Continuing Education, University of the Witwatersrand);

7) Initiate and/or fund education support services considered to be a priority by the communities represented on the Trust. An example of such a service would be mobile resource units (ITEC has proposed that such units be established). Radio/distance education programs are other examples; and

8) Support and initiate research in all areas relevant to rural education and development. Research priorities would be determined by the Trust. Examples of useful research may be:

- Monitoring regional and gender inequality in rural areas;
- Developing ways to cope with specifically rural education problems; and
- Monitoring the exploitation and abuse of children.

3.4.4.1 Implementation Procedure

It is imperative that rural communities be involved with the establishment of the Trust at the earliest stages of development. For this reason, the above suggestions should be regarded as preliminary, drafted to illustrate the concept. A consultative group would be needed to draft a version that adequately represents community interests. Such a consultative group should include:

- Representatives of organizations whose constituents are farmworkers such as the Farmworkers Associations in the Border area and the Agricultural Workers Union;
- Teachers' representatives;
- Homeland based civic and education organizations; and
- NGOs presently working with farm schools such as the Farm Schools Network (Johannesburg), the Independent Teachers' Enrichment Center (East London) and the Center for Social and Development Studies (Durban).

Plans should include a strategy for interacting with other interested parties such as independent farmers, the churches and the Rural Foundation.

3.4.4.2 **Geographic Focus**

The activities of the Trust could either be initiated in one region, or in a number of regions by "piggy-backing" on the infrastructure of existing NGOs and universities. It is proposed that this decision be guided by the principle of equity. The most disadvantaged regions should be accorded highest priority, which suggests that the following three regions should be the initial focus of Trust activities:

1) Historically white farm areas;
2) Transkei; and
3) KwaZulu.

CHAPTER FOUR

ECONOMIC AND FINANCIAL ANALYSIS

4.0 OVERVIEW

The state of the national economy is of crucial importance for the future development of the educational system in South Africa. When output grows faster than population, public and private wealth and income increase. This allows increased investments in education by government and by households, and helps to create new jobs. Investment in education in turn contributes to the production of skilled, knowledgeable, and adaptable citizens prepared to contribute to the further development of the society. The productive employment of citizens increases the wealth of the society and of its constituent households. As citizens increase their investments in education, further economic growth ensues. A virtuous circle of investment, education, and development is established.

When the rate of economic growth falls behind the rate of population increase, maintaining or increasing public investment in education requires government either to raise taxes or to reduce other expenditures, both of which may inhibit future growth. Sending children to school requires households to cut back their spending in other areas, which for the poor may mean reductions in expenditure for food and shelter. The social and private costs of failure to invest in education are high in the long term, but the short-term opportunity cost of investment is higher still. The consequences may include declines in enrollment, deterioration in the quality of schooling, and political conflict over the distribution or redistribution of educational resources and opportunities. All of these help to perpetuate economic stagnation. Once set in motion, this downward cycle is very difficult to reverse.

After several decades of vigorous growth, the South African economy has recently entered a period of stagnation, attributable to a variety of factors including declining world markets for gold and other South African exports, poor economic policies, the perpetuation of minority rule and attendant political uncertainties, and external trade and investment sanctions. At the same time, the political transformation that is now underway has generated new and insistent demands for greatly increased expenditures on education and other social services. Great political and social pressures are being exerted to equalize the public provision of basic services and to enfranchise those citizens who were previously victims of apartheid. These claims are just, and a new government will have to meet them. The public obligations that these claims entail can only be met in the long run if the economy resumes growing in real, per capita terms.

This chapter presents an analysis of issues related to costs and financing in the South African educational system. The first section presents a brief summary of some of the principal economic and political arguments supporting investment in primary education. The second section examines the recent performance of the South African economy, and discusses potential obstacles to the resumption of vigorous economic growth. The third section describes the financing of education in South Africa, with a focus on the respective roles of public agencies, private agencies, and households. The final section assesses the degree to which a new South African government will be able to meet the demands of previously disenfranchised groups for expanded access, improved quality, and equalized opportunity in the educational system in the coming decade.

4.1 RATIONALE FOR INVESTMENT IN EDUCATION

Economists have long argued that investment in education contributes both to increased individual productivity and to aggregate economic growth. The relationship between education and productivity is especially well established in agriculture, where a number of studies in Africa and elsewhere have shown a positive relationship between years of education and measures of farm output. These relationships are especially strong in settings where non-traditional crops and farm inputs are being adopted. The ability to read instructions and to calculate costs and application levels is critically important for the success of such efforts. In the urban economy the relationship is more difficult to establish empirically because of the uncertain relationship between formal sector wages and individual productivity and because of the difficulty of measuring output in the informal sector. The importance of literacy and numeracy in the performance of most urban jobs is nevertheless well documented. Educated people are better able to acquire and make use of information, to negotiate the complexities of the urban economy, and to recognize and respond to new opportunities.

Studies of the social rate of return to investments in education conducted in developing countries around the world show an almost invariant pattern of results. The rate of return to investments in human capital is consistently higher than the rate of return to investments in physical capital, and the rate of return to investments in primary education is consistently higher than rates of return to investments in secondary and higher education. These studies provide strong support for increased public investments in education, and especially in primary education where students acquire the essential skills of literacy and numeracy. Substantial returns accrue to society when all of its citizens are literate and numerate. Formal schooling remains the most cost-effective way of achieving this objective.

Studies of the private rate of return to investments in education in developing countries show a rather different but equally consistent pattern of results. Highly educated people are in short supply, and private returns (i.e., wages) to those who succeed in completing secondary or higher education are consequently large. In many developing countries, most or all of the costs of secondary and higher education are often paid by the government rather than by the student. As a result, private rates of return to post-primary education are substantially higher than social rates of return: students capture most of the benefits of schooling, but pay few of the costs. This disparity between private and social rates of return argues for the adoption of policies aimed at shifting a larger share of the cost of secondary and higher education to those who will receive the benefits (i.e., students and their families). This conclusion is strengthened by other studies that show that students at these levels of the education system are disproportionately drawn from among the wealthiest households, who are least in need of public subsidies. The establishment of selective scholarship and loan programs can help to expand the access of students from poor households to secondary and higher education.

Primary education contributes to economic growth in less direct ways as well. Among the most important of these are the well-established relationships between education and health, and between education and fertility. Educated mothers have been shown to be more likely to immunize their children, and educated individuals are more likely to adopt effective health and sanitation practices. Educated mothers have also been shown to have fewer children than those with little or no education. The consequences of these education-related changes for economic growth are clear. Good health makes a labor force more productive; reductions in fertility lessen the strain on public services (e.g., primary schools) and increase the quantity of public and private resources that can be invested in each child.

Basic education is also essential to the exercise of citizenship, and to the establishment and maintenance of democratic institutions. As apartheid is ended and the political system of South Africa is transformed, South African citizens will be increasingly obliged to absorb and to evaluate information, to weigh the often difficult political choices that face them and their nation, and to organize and to act to protect and advance their own interests in the larger political system. Citizens who lack literacy and other basic skills will be ill-equipped to fulfill their civic obligations. They will simultaneously be handicapped in the political competition for resources and opportunities. Democratic politics may thus compound the economic disadvantages of the poorest and most vulnerable groups if these groups are not assured of equitable access to basic education.

4.2 MACRO-ECONOMIC CONTEXT FOR INVESTMENT IN PRIMARY EDUCATION

South Africa has the most developed, diversified, and modern economy in the sub-Saharan region. The South African economy grew rapidly between 1939 and 1975, but since the mid-1970s a combination of factors has resulted in economic stagnation. These factors include:

- adverse changes in the world economy;
- internal political conflict and uncertainty;
- less than optimal economic policies; and
- international trade and investment sanctions against the South African regime.

Real GDP growth averaged about 6.0 percent per annum in the 1960s, but only 1.9 percent between 1975 and 1983. In the first half of 1991, real GDP was only 5.6 percent higher than it had been in 1984, yielding a compound annual growth rate for the period of only 0.84 percent. This is well below the rate of population growth, which is generally estimated at about 2.4 percent per annum.

In the 1980s the South African economy has come to resemble other semi-industrialized, middle-income countries in its industrial structure, although mining is more important and agriculture less important than in most. (See Table 4.1) As is true in other countries, national income accounts do not fully reflect the size of the informal sector in South Africa, which employs between 2.65 and 3.0 million persons on one recent estimate. Because of failure to take account of informal sector activities, official statistics may underestimate the average per capita income of Africans by as much as one third.[1] Far fewer members of other population groups are obliged to depend on informal sector activities for their livelihood, though their numbers may increase if the economy continues to stagnate.

[1] van der Berg, "The Informal Sector," p. 39.

TABLE 4.1: SECTORAL ORIGIN OF GDP, SELECTED YEARS, PERCENT

SOURCE	1983	1985	1987	1989	1990
Business Enterprises of which:	86.5	85.1	84.4	84.3	83.9
Agriculture, forestry & fishing	4.9	5.8	6.3	6.1	5.1
Mining	14.1	14.8	12.9	11.4	10.7
Manufacturing	24.7	23.1	23.8	25.3	25.6
Electricity, gas and water	3.8	4.3	4.6	4.5	4.6
Construction	4.1	3.7	3.3	3.2	3.2
Commerce, catering and accommodation	13.4	11.8	12.7	13.0	13.5
Transport and communications	8.8	8.8	8.8	8.1	8.2
Finance etc. services	13.1	14.0	13.2	13.9	14.5
Community, social and personal services	1.7	1.7	1.7	1.7	1.7
Less imputed financial services charges	-2.3	-2.8	-2.9	-2.8	-3.1
General Government	11.1	12.4	13.1	13.4	13.7
Other producers	2.4	2.5	2.5	2.4	2.4
Total	100.0	100.0	100.0	100.1*	100.0

* Rounding error

Source: Based on current price data in South African Reserve Bank Quarterly Bulletin, No. 181, September 1991

The South African economy is relatively open, although there is still a good deal of protection for domestic manufacturing. (See Table 4.2) Exports currently account for about 35 percent of GDP, and imports for 25 to 27 percent. Since 1985, foreign and domestic investment have effectively collapsed. This collapse is attributable to reduced business confidence, international sanctions, and increased consumption expenditure both by households and by government. Since 1986, investment has averaged barely 19 percent of GDP, well below the 28 to 30 percent that would be required for economic growth to keep pace with population increase. In fact, for the past several years, net foreign investment in South Africa has been negative.

TABLE 4.2: AGGREGATES AS A PERCENTAGE OF GDP

Year	Gov't. Deficit	Gov't. Revenue	Gov't. Expenditure	Gov't. Debt	Exports	Imports	Balance on Current Account	GFCF	Public Sector Inv.
1983	-2.8	20.6	23.5	31.8	28.4	23.4	-0.5	n/a	11.2
1984	-4.4	20.1	24.5	32.1	29.4	26.7	-2.4	n/a	n/a
1985	-3.4	21.2	24.6	32.8	32.5	23.1	4.1	23.3	9.8
1986	-3.2	23.5	26.7	32.4	31.9	22.5	4.3	19.1	n/a
1987	-4.3	23.4	27.7	32.3	31.7	23.1	3.6	18.2	6.7
1988	-5.6	22.4	28.0	33.6	31.6	26.6	1.4	19.1	n/a
1989	-3.3	24.0	27.3	33.2	33.9	26.2	1.5	19.7	7.1
1990	-0.6	27.5	28.1	34.1	35.3	25.6	2.2	19.6	6.1
1991*	-6.1	23.8	29.9	36.4	35.5	27.0	1.3	19.0	n/a

* 1991 - First half

Government Deficit, Revenue, Expenditure, Debt, and Balance on Current Account in current price terms.
Exports Imports (both of goods and non-factor services), and GFCF (Gross Fixed Capital Formation) in real terms.

Source: South African Reserve Bank Quarterly Bulletin, No. 181, September 1991.

Public-sector investment declined especially rapidly in the 1980s, to the point where net investment (i.e., gross investment less depreciation) was negative in some years. By regional standards, public infrastructure in South Africa is of good quality, and functions well for those who are socially and financially able to make use of it. The distribution of this infrastructure is unequal, however, both geographically and among population groups. There is a large backlog of demand for public investment in roads, water, electricity, housing, and physical infrastructure for the provision of educational and medical services. A new government will be expected to meet this pent-up demand, which is especially acute in rural areas, in informal urban settlements, and among Blacks. At the same time, much of the infrastructure historically reserved for Whites (e.g., classrooms) is under-utilized.

The South African government has run a fiscal deficit in every year since 1983. (See Table 4.2) During this period, government revenue has risen from approximately 20 to nearly 24 percent of GDP, but government expenditure has risen as well, to almost 30 percent of GDP in the first half of 1991. These persistent deficits, coupled with a relatively accommodating monetary policy and strong wage demands by unions, have been associated with inflation of between 12 and 17 percent per year. In part, because of inflation, government debt has grown only slowly as a percentage of GDP, and remains at a manageable level of about 36 percent. Foreign debt and interest obligations also remain at comfortable levels, representing about 24 percent of GNP and 7 percent of export earnings respectively.

The South African economy remains fundamentally sound, but the recent slowdown in growth and investment poses a very difficult challenge for all groups involved in the current political transition. The dismantling of legal apartheid and the anticipated enfranchisement of the African majority have released powerful pressures for increased expenditure and new investment in education and other sectors in order to expand African opportunities and incomes and to equalize the provision of public services. In the absence of real economic growth, satisfying these demands is a zero-sum game. More resources for education requires either additional taxes or reduced spending in other areas (i.e., health, housing, job creation, etc.). More resources for the African majority must be withdrawn directly from those previously allocated to other groups. Policy choices made under these circumstances may well intensify rather than reduce political conflict. Only the resumption of economic growth will make the accomplishment of a new government's educational and other objectives attainable in the short term and sustainable over the long run.

4.3 THE LABOR MARKET FOR EDUCATED YOUTH

Barely half of the African labor force has regular wage employment in the formal sector of the South African economy. The remainder (in descending order) are engaged in informal sector activity, are wholly unemployed, or are engaged in subsistence agriculture. The rate of population growth among Africans (2.93% per annum) is 3.7 times that of Whites (.80% per annum), 1.7 times that of Indians (1.71% per annum) and 1.6 times that of Coloureds (1.87% per annum). Thus, there are many more African entrants to the labor market than there are entrants from other groups. The average educational qualifications of African entrants to the labor market have increased markedly in recent years, but they are still well below those of Whites, Indians, and Coloureds. For these reasons, and because of continued racial segmentation and discrimination in the labor market, growing proportions of new (especially African) workers are unable to find employment in the formal sector. Those who are excluded either enter the informal sector or spend substantial amounts of time after leaving schooling in open unemployment. The trend may be slowed or even reversed with renewed economic growth and/or structural changes in the economy, but it is unlikely that at any time in the short or medium term all new entrants to the labor market will be able to find regular wage employment.

Unemployment data in South Africa are unreliable, and discussions of the subject often employ loose definitions. Estimates of the unemployment rate consequently range as high as 50 percent of the labor force. It is unlikely that more than about 20 percent of the economically active population are entirely unemployed. An additional 25 percent (+ or - 5 percent) are engaged in very low productivity agriculture or in informal sector activities, both of which typically produce incomes far lower than those of employees in the formal sector. (See Table 4.3) The growing acceptance of informal sector activity by the authorities allows a more extensive recirculation of income within the economy, and offers some opportunity for earnings to those for whom formal sector job openings are not available.

TABLE 4.3: BASIC DATA ON SOUTH AFRICA*

	Total	Whites	Coloureds	Indians	Africans
1991 population	38,445,400	5,090,900	3,299,400	992,600	29,062,500
Growth, 85-90, % p.a.	2.47	0.80	1.87	1.71	2.93
Growth, 90-95, % p.a.	2.38	0.77	1.68	1.48	2.85
Total GDP, 1990, billion US $	101.5				
GDP per capita, US $	2,640				
Inflation, CPI, % p.a. mean, 1988-1990	14.0				
Labor force, million, 1991	13.79	2.36	1.37	0.38	9.68
Formal Employment	8.0	1.86	0.95	0.26	4.93
Subsistence Agriculture	0.75-1.0	-	-	-	0.75-1.0
Informal Sector	2.65-3.0	-	0.12-0.13	0.5-0.6	2.5-2.85
Unemployed	2-2.75	0.04	0.10	0.02	1.9-2.6
Primary School Enrolment 1990, 000's	6,943	539	615	145	5,644
Population aged 6-12,1990, 000's	6,389	535	498	140	5,215
As % total Pop	17.0	10.6	15.3	14.4	18.5
Gross enrolment rate, primary	1.09	1.01	1.23	1.03	1.08

Labor force estimate from Sadie, 1991. Employment data from S.A. Labor Statistics 1991 and Servaas van der Berg, 1990 and 1991. The obvious inconsistencies are not easily reconciled; depending on definition, the unemployment rate for Africans is estimated anywhere from 20 to 40 + %.

Open unemployment remains substantial, however, and it has undoubtedly grown in the recent past. In the 1960s, formal sector employment grew faster than the labor force (at 4 percent per annum compared to about 2.8 percent), with the result that the proportion of the labor force with formal sector jobs grew substantially. In the 1980s, in contrast, formal sector employment growth averaged only 1.2 percent per annum, while the labor force continued to grow at an annual rate of 2.8 percent. (The African labor force grew even more rapidly.) A recent

report by the DBSA asserts that, in 1970, almost 74 percent of new entrants to the labor market found formal sector jobs, but that only 12.5 percent of new entrants found jobs in 1989. Because of the continued stagnation of the South African economy, the percentage may now have fallen to 10 percent or below.[2] Thus, the proportion of adults with formal sector jobs has been declining at the same time as the expectations and average educational qualifications of new entrants to the labor market have been rising.

The evolution of the South African labor market will depend on a number of factors, each of which may develop in a favorable or unfavorable direction. These include:

- the nature and speed of political transition;
- aggregate rates of real economic growth and investment;
- the capital intensity of new investment;
- the exchange rate and trade regime policies adopted by a new government;
- the evolution of world demand for South Africa's traditional and manufactured exports;
- the evolution of the real wage structure in the formal sector; and
- the evolution of the educational characteristics of the labor force.

Historically, the South African economy has required real output growth of 2.5 to 3 percent per annum in order to maintain a given level of formal sector employment. At present, however, new entrants to the labor force have much higher educational qualifications than those leaving through retirement. The relative supply of more educated workers is consequently rising, and will continue to do so at an accelerating rate.

In the past, because of the racial segmentation of the labor market and racial discrimination in the provision of education, differentials between the costs of educated and uneducated labor have been unusually high in South Africa. As the average qualifications of new entrants rise, and as racial barriers are brought down, such differentials should erode, thus expanding the demand for labor in the formal sector and reducing the attractiveness of capital intensive technologies. The elimination of legal and other barriers to geographical and occupational mobility should also cause formal sector wages to fall (because of pressures from the very low supply price of labor recruited from rural areas and the informal sector). There are opposing tendencies, however, including the power of white (and increasingly African) organized labor in the formal sector

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[2] See reports in Business Day, 2 October 1991; and The Sunday Star, 19 May 1991.

to maintain or increase their own wages at the expense of the unemployed. Experience in other countries suggests that the differential between wages in and outside of the formal sector may be quite durable.

4.4 PROSPECTS FOR GOVERNMENT REVENUE AND EXPENDITURE

Government spending has increased as a percentage of GDP over the past decade, from approximately 29 percent in 1983/84 to approximately 33 percent in 1990/91. (See Table 4.4) There are undoubtedly ways to increase public revenues without incurring excessive economic or political costs. For example, the income tax could be made more progressive, and additional luxury and excise taxes could be imposed. If inflation and debt service obligations are to be contained, however, the largest share of these new revenues will have to be used to reduce the public sector deficit, which has ranged between 3 and 6 percent of GDP in the years since 1983. (See Table 4.2) This means that opportunities for new spending will be limited until the current period of stagnation is brought to an end.[3]

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[3] The inconsistencies between Tables 4.2 and 4.4 are apparently attributable to the exclusion of the TBVC states from the public expenditure data presented in Table 4.2, which were published by the South African Reserve Bank in the Quarterly Bulletin of September 1991. The expenditure data in Table 4.4 were provided by officials in the Department of Finance; they are the same data supplied by South Africa to the IMF. The data in Table 4.4 are more useful for most purposes.

TABLE 4.4: BUDGETARY TRENDS

Financial Year	Govt Spending Rm Current	As % GDP	Govt Educ Spending Rm Current	As % Total Govt Spending	As % GDP
1982/83	23,182	----	4,348	18.76	----
1983/84	27,603	28.93	4,977	18.03	5.22
1984/85	33,423	30.06	6,157	18.42	5.54
1985/86	39,685	31.03	7,601	19.15	5.94
1986/87	48,368	32.74	9,327	19.28	6.31
1987/88	56,373	32.60	10,886	19.31	6.30
1988/89	67,440	32.62	12,389	18.37	5.99
1989/90	82,324	34.25	15,169	18.43	6.31
1990/91	90,381	33.43	17,744	19.63	6.56
1991/92	102,353	33.21	21,341	20.85	6.92

Source: South African Reserve Bank Quarterly Bulletin, personal communication from Jan Botha, Department of Finance, RSA, to M. Bot, 17/10/91, and projections. Expenditure data are actual for 1982/83 through 1987/88, thereafter budget estimates.

. The percent of GDP for 1991/92 is based on a crude projection of GDP that assumes approximately -0.5% real growth over 1990/91, but a GDP deflator increase of about 14.5 percent. If inflation is more rapid, the turnout will be lower percentages of GDP.

4.4.1 Education in the government budget

Within the total government budget education spending has increased from about 18.5 percent at the beginning of the decade to about 20.85 percent, as budgeted, in 1991/92. (See Table 4.4) Many conflicting estimates of government education spending are available, however, and resolving the differences among them is not easy. Moreover, revenues for education are obtained from a multitude of sources, depending in part on the educational department in question. An estimate of national education spending must therefore be based on a compilation of data from multiple sources, some of which are more reliable than others. The education vote in the national budget estimates for 1990/91,

for example, amounted to only R205 million, because it covers only the Department of National Education, which administers no schools. Education for Whites, Coloureds, and Indians is financed out of the votes for Administration in the Houses of Assembly, Representatives, and Delegates respectively. The Education and Training Bill covers African education outside the homelands. Educational systems in the six self-governing territories (i.e., non-independent homelands, or SGT's) are funded through the Department of Development Aid, which develops a separate budget for each. Transkei, Bophutatswana, Venda, and Ciskei (the nominally independent homelands, or TBVC states) receive funds through the Department of Foreign Affairs, but also control revenue sources of their own. (In the case of Bophuthatswana, for example, own-source revenues are about three times as large as transfers from the central Government). Each of the four TBVC states has its own budget process and documents.

To complicate matters further, supplementary estimates and overspending have been quite common in the highly inflationary economic environment of the past fifteen years. Initial estimates are thus an unreliable guide to actual spending, which is best verified through Auditor-General's reports. The central Government is relatively prompt in publishing such reports, but the same cannot be said for all of the homelands. It is exceedingly difficult to obtain information on actual spending from some of them.[4]

The reason for dwelling on these statistical difficulties is that they have considerable salience for the debate on education in a new South Africa, and especially for the debate on education finance. Commentators often disagree on numbers, in some cases because their numbers come from different and conflicting sources. These debates over the accuracy of statistics can divert attention from substantive issues. Reliance on inconsistent or inaccurate data may also lead to mistaken conclusions about future possibilities, since projections may be based on incorrect premises.

The data in Table 4.4 show that the share of total government education spending rose slowly from between 18 and 19 percent early in the decade to just under 21 percent as budgeted for 1991/92. Growth in education spending as a percentage of GDP has been steadier, rising from a bit over 5 percent to just under 7 percent over the decade. The proportion of total spending allocated to education by the South African Government is not unusually high among middle income countries. As a proportion of GDP, however, spending on education by the South African government is higher than in most other countries, regardless of

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[4] For a further discussion of these problems see Trotter, Social Costs, p. 18; and Footnote 3 above.

national income level. It is noteworthy, however, that all four of South Africa's Anglophone neighbors (Botswana, Lesotho, Swaziland, and Zimbabwe) spent a higher proportion of GNP on education in 1985 than South Africa is spending in 1991/92.[5]

4.4.2 Primary education in the education budget

The various education departments normally combine spending on pre-primary, primary, and secondary schools in their published expenditure data. This makes it difficult, and in some cases impossible, to separate out expenditure on primary education. The best available estimates of expenditure on pre-primary and primary education by departments are presented in Tables 4.5 and 4.6.

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[5] International comparisons are commonly based on GNP rather than GDP. In recent years South African GNP has been between 3 and 5 percent lower than GDP, because of net factor payments abroad of between R4 and R10 billion per year. The numbers in the last column of Table 4.4 would therefore have to be increased by 0.2 to 0.3 to show the percentage of GNP allocated to public education spending.

TABLE 4.5: BUDGETARY ALLOCATIONS FOR EDUCATION, 1985
(R '000,000)

	Total	Primary	Percent
DEC (HoA)	3,328	760	23
DEC (HoR)	728	412	57
DEC (HoD)	329	135	41
DET	944	472	50
Lebowa	187	109	58
Gazankulu	64	38	59
KaNgwane	34	21	62
KwaNdebele	28	27	96
KwaZulu	256	158	62
QwaQwa	74	39	53
All SGT's	642	393	61
TBVC	n/a	n/a	n/a
Africans (ex. TBVC)	2,178	1,201	55
S.A. (ex. TBVC)	5,972	2,173	36

TABLE 4.6: BUDGETARY ALLOCATIONS FOR EDUCATION, 1990
(R '000,000)

	Total	Primary	Percent Primary
DET	2,661	1,232	.46
DEC (HoR)	2,026	906	.45
DEC (HoD)	796	285	.36
DEC (HoA)	5,844	1,666	.29
All SGT's	2,685	1,415	.53
TBVC	2,290	1,105	.48
All Africans	7,636	3,752	.49
All South Africa	16,367	6,610	.40

For South Africa outside the TBVC states, 36 percent of all education spending went to primary education in 1985. (See Table 4.5) The percentage varied from 23 percent in DEC (HoA) schools to 93 percent for schools in KwaNdebele. For all African authorities an average of 55 percent of all education expenditure was allocated to primary education; in the six SGT's the average was 61 percent.

Between 1985 and 1990, the share of education spending allocated to primary education declined for all groups except Whites. The decline was especially sharp in the DEC (HoR) education system, where the percentage of resources allocated to primary schools fell from 57 to 45 percent; and in the SGT's, where the percentage fell from 61 to 52 percent. Overall, however, the share of resources used for primary education appears to have remained reasonably stable, though the exclusion of the TBVC states from the 1985 data means that the figures are not strictly comparable.

To some extent, current and capital spending on primary education by the various authorities corresponds with the demographic characteristics of the populations each serves. The several African authorities devote a larger percentage of their resources to primary education because of higher rates of population growth and correspondingly larger numbers of young children in African communities.

Table 4.7 presents estimates of per pupil government expenditure on pre-primary and primary education for 1985/86, and on primary education only for 1990/91. The Table also presents per pupil expenditures on primary education as an index number, with spending on African pupils set to 100, and 1990/91 allocations shown in constant 1985 Rands. Disparities in expenditure have been reduced significantly since 1985/86. Real per pupil expenditures have been increased for Africans, Coloureds, and Indians, and reduced for Whites. In real terms, per pupil spending on Africans increased by 42 percent, while per pupil spending on Whites fell by 21 percent. Per pupil spending in DEC (HoD) and DEC (HoR) schools increased by 16 and 13 percent respectively. The shift in budgetary allocations across groups was far larger than the shift in per pupil expenditures suggests, however, because the number of pupils in African primary schools increased by 17 percent between 1985 and 1990. Nevertheless, in 1990, more than four times as much public money was spent on each white primary pupil as on an African pupil, with three times as much spent on each Indian pupil and over twice as much spent on each coloured pupil.

TABLE 4.7: PER PUPIL GOVERNMENT SPENDING IN 1985/86, RAND

		Primary	Index Africans=100
DEC (HoA)		1,979.22	830
DEC (HoR)		687.38	288
DEC (HoD)		933.19	391
DET		238.50	100
All - South Africa		460.90	193

Source: Trotter, Social Costs, pp. 32, 73

PER PUPIL GOVERNMENT SPENDING IN 1990/91, RAND

	Primary	Index Africans=100	In 1985 Rand
DEC (HoA)	3,197	461	1,59
DEC (HoR)	1,595	230	778
DEC (HoD)	2,212	319	1,079
DEC	693	100	338
All - South Africa	1,003	145	489

Source: Donaldson, "Financing Education"

Virtually all of the observed increase in real spending per pupil in African schools can be attributed to changes in the average real salary of African teachers. In 1985/86 African teachers were paid on a lower salary scale than teachers of other groups, and female teachers were paid on a lower scale than male teachers. By 1993, all teachers will be paid on a single salary schedule, with no discrimination on the basis of race or gender.[6] It can in fact be argued that inequalities between DEC (HoA) and African schools increased in this period, as disparities in non-salary expenditure widened substantially. These disparities are discussed further in the following section.

[6] The new salary schedule was implemented according to a formula that did not give full weight to the years of experience of African teachers, which left their salaries below those of equivalent white and Indian counterparts. It should also be noted that African teachers tend to have lower qualifications than other teachers, and that approximately 25 percent of African teachers are "unqualified." All these factors reduce the average salary of African teachers compared to other teachers, given that the salary scales are based on qualifications and experience.

4.4.3 Public spending on primary education

The complexity of educational finance in South Africa is compounded by the fact that several of the fifteen authorities fund various types of schools according to different criteria. In all departments, for example, the government provides subsidies of 45 percent, 15 percent, or 0 percent of recurrent expenditure to private schools, according to their degree of compliance with state standards and regulations. In 1988 there were 178 private schools registered with the DEC (HoA). In addition, parents of students in DEC (HoA) schools have recently been given the opportunity to change the status of their schools to one of three new models via referendum. At present 547 schools have chosen the status of Open State Schools (Model B), in which the school continues to be fully funded by the government but admissions policies are decided at the school level. An additional 18 schools have chosen to become State-Aided Schools (Model C), in which control over the school is transferred to a local managing body, while the government continues to pay staff salaries. Thus far no state schools have opted for privatization (Model A), under which the school would receive partial subsidies according to the same criteria as those applied to existing private schools.

In those parts of South Africa where the education of Africans is under the control of the DET, schools are either public, state-aided, or private. In public and state-aided schools, the DET pays the salaries of staff and provides supplies and textbooks. In public schools, the DET is also responsible for provision and maintenance of facilities. More than 80 percent of DET schools are state-aided. Of these, almost all are farm schools. There are 5,461 farm schools in South Africa, most of which are quite small. Although the vast majority of DET schools are state-aided, fewer than one third of DET pupils attend such schools. Only one third of farm schools offer the full primary school curriculum, through Standard 5. Nearly 20 percent offer an instructional program that ends at Standard 2.

In state-aided schools, the DET in theory provides a subsidy of 75 percent (or, in certain border areas, 80 percent) of the capital expenditure incurred in building or expanding a school. In 1990, 640 classrooms and other facilities were erected, and the DET obligated R12 million in subsidies. An obvious difficulty for farmers who build or maintain schools is that they are always out of pocket for 20 or 25 percent of the cost.[7] Moreover, the costs must be incurred before the subsidy is paid,

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[7] However, it has been argued that farmers can profit from DET subsidies (even at 75 percent) by constructing or expanding schools with the labor of the poorly-paid workers already employed on their farms and then overstating their labor costs.

and if the DET budget for subsidies is exhausted, the farmers must wait up to a year for reimbursement.

In 1990 there were only 42 registered private primary schools for African students. These received an average per pupil subsidy of R429. The rapid growth of informal settlements in and around major cities and townships may quickly increase the number of private schools, however. Because the DET is unable to keep pace in providing public schools in these settlements, some communities have established schools on their own, sometimes with NGO or donor support. By DET criteria, these are private schools, entitled only to a partial subsidy or to no subsidy at all. The DET is now under pressure to provide fully-funded public schools for residents of informal settlements. It has begun to do so, but the schools provided are of lower cost and quality than those in the established townships. This is clearly inequitable: the residents of informal settlements are almost invariably poorer than those in officially-recognized communities (Whites and Blacks), and so are less able to bear the private costs imposed by reduced public subsidies.

Departments of Education in the SGT's are responsible for the provision of public schools, and they may also subsidize private schools. Virtually all schools in the SGT's are community schools, in which the government pays the salaries of teachers but provides other funds on a matching basis. Departments of Education in the TBVC states are free to set their own financing policies.

The policies governing expenditure on primary education are hard to summarize, because of the considerable variation across authorities. Further, as noted earlier, it is difficult to find data on the distribution of educational expenditure by function, and nearly impossible to find such data for primary education alone. Tables 4.8 and 4.9 present data on wages and salaries as a proportion of the education vote in 1985 and 1990, for all authorities for which data were available. These data cover all levels of education, and so reflect differing patterns of enrollment in primary and other grades. The range is nevertheless wide. In 1985 the government of QwaQwa allocated under 72 percent of the education vote to wages and salaries, while more than 95 percent was allocated to wages and salaries in Lebowa.[8] The percentage of educational resources spent on wages and salaries declined in most systems between 1985 and 1990. In 1990 only 58 percent of the DEC (HoA) education budget was spent on personnel; the average figure for African schools was 82 percent.

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[8] This difference is largely attributable to the fact that most schools in QwaQwa are fully funded out of public revenues, while most in Lebowa are community schools.

TABLE 4.8: SALARIES AND WAGES AS A PROPORTION OF EDUCATION VOTE FOR THE FINANCIAL YEAR 1985/86, PERCENT

White Departments[9]	74.2
House of Delegates (Indians)	89.0
House of Representatives (Coloureds)[10]	77.4
Self-Governing States, mean	90.3
Gazankulu	83.1
KaNgwane	81.1
KwaNdebele	83.7
KwaZulu	93.5
Lebowa	95.1
QwaQwa	71.2
"Independent" Homelands, mean	83.6
Bophuthatswana	78.7
Ciskei	80.6
Transkei	85.5

World Bank data for primary education, by country income level:

Country Income Level	Median
Low	95.3
Lower middle	91.0
Upper middle	87.9
High	76.1

Source: Trotter, 1988, p. 25; and World Bank Policy Paper, Primary Education, 1990. The World Bank classifies South Africa as a lower middle income level country.

[9] Weighted average of a 1980 estimate for the Cape and 1985 estimates for Natal and Transvaal.

[10] 1980 estimate.

TABLE 4.9: BUDGETARY ALLOCATIONS FOR EDUCATION, 1990
(R '000,000)

	Total	Personnel	% Personnel
DET	2,661	2,100	79%
DEC (Hor)	2,026	1,585	78%
DEC (HoD)	796	597	75%
DEC (HoA)	5,844	3,376	58%
All SGT's	2,685	2,259	84%
TBVC	2,290	1,900	83%
All Africans	7,636	6,250	82%
All S.A.	16,367	11,808	72%

Using audited 1986 data, Moulder showed that non-salary educational expenditures varied widely across authorities. The average for all pupils was R195. Per pupil, non-salary expenditures in DEC (HoA) schools averaged R514, in DEC (HoD) schools R417, in DEC (HoR) schools R206, and in DET schools R182. Non-salary expenditures in the SGT's were considerably lower. Per pupil, non-salary expenditures averaged R82 in Lebowa, R72 in Gazankulu, R48 in KaNgwane, R33 in KwaZulu, and R31 in KwaNdebele. More recent data suggest that disparities in non-salary spending have widened in recent years, to the further detriment of African pupils. In 1989/90 R1,308 per pupil was provided for non-salary expenditures in DEC (HoA) schools. The corresponding figures were R695 in DEC (HoR) schools, R664 in DEC (HoD) schools, and R286 in DET schools. The amounts spent in the SGT's and TBVC states were no doubt lower, though comparable data are not readily available.

These data lead to two main conclusions:

- Racial disparities in salary and non-salary expenditure remain large, despite recent progress toward equalization; and
- Large disparities also persist within racial categories, across regions and across types of school.

Bringing about further equalization in these expenditures will be among the most pressing and most difficult of the tasks facing a new government.

4.4.4 International comparisons

In 1985, average per pupil expenditure in primary schools in South Africa was equivalent to $207, or 11.0 percent of GNP per capita. (See Table 4.10) Average figures conceal large variations across groups: expenditure per primary school pupil varied from $107 for Africans (only 5.7 percent of GNP per capita); to $308 in DEC (HoR) schools (15.6 percent of GNP per capita); $419 in DEC (HoD) schools (21.2 percent of GNP per capita); and $888 in DEC (HoA) schools (an astonishing 44.8 percent of GNP per capita). The average for South Africa is very close to the median for lower middle income countries (10.9 percent of GNP per capita), but the figure for Africans is well below the median for any group of countries. The figure for Whites is far higher than that observed in any other country, rich or poor. Estimates of per pupil expenditure for 1990 indicate a narrowing of the range, but per pupil expenditure on white pupils remains inappropriately high as a percentage of GNP per capita. Subsidies to the education of white children will need to be reduced much further if educational provision is to be equalized.

TABLE 4.10: INTERNATIONAL COMPARISONS

	1987 GNP/hd US $	Primary per pupil expenditures 1985 US $	Total Educ expenditures as % of GNP 1985	Total Educ as % of Government expenditure 1985	Primary recurrent exp. as % of total Educ exp. 1985
Botswana	1 050	93	8.2	-	43.2
Zimbabwe	580	102	8.5	16.0	66.0
Thailand	850	102	3.9	-	58.4
SA Africans	n.a.	107	n.a.	n.a.	46.7
Brazil	2 020	133	3.3	17.2	-
Argentina	2 390	200	2.0	22.6	37.7
Panama	2 240	260	5.2	18.7	38.3
Malaysia	1 810	282	6.6	16.3	37.8
SA Coloureds	n.a.	308	n.a.	n.a.	51.4
South Korea	2 690	311	4.8	28.2	46.7
SA Indians	n.a.	419	n.a.	n.a.	39.0
Hong Kong	8 070	489	2.8	18.7	31.4
Ireland	6 120	693	6.9	8.7	29.1
SA Whites	n.a.	888	n.a.	n.a.	32.0
New Zealand	7 750	1 073	4.7	18.4	36.9
SA Overall	1 890	207	5.6	16.5	39.4
SA Africans (DET only) 1989/90, in 1985 $		163			
1990/91, in 1985 $		157			

Source: WCEFA Background Document except for South Africa, derived from Trotter (1988) and South African Reserve Bank Quarterly Bulletin, No. 181, September 1991.

One cause of the wide variation in spending per pupil is variation in average pupil/teacher ratios, as shown in the first column of Table 4.11. In 1990, there were 17.4 pupils per teacher in DEC (HoA) schools. (Breakdowns between primary and secondary schools are not readily available.) In African schools, there were 49.2 pupils per teacher. Variation in pupil/classroom ratios was similar, as the second column in Table

4.11 reveals.[11] A second cause is the persistent disparity in average teachers' salaries across groups. (See Table 4.12) There are more inexperienced teachers among Africans than in other groups, and on average white and Indian teachers have higher qualifications than African and coloured teachers. Their salaries are consequently higher. In 1989 (before the unified salary schedule was introduced), average white teachers' salaries were 24 percent higher than average coloured teachers' salaries, and 68 percent higher than the average salary of African teachers. Average Indian teachers' salaries were 12 percent higher than white teachers' salaries, and 88 percent higher than average African teachers' salaries. These differences will have been reduced but not eliminated by the implementation of the unified salary schedule.

[11] The pupil/classroom ratio for Whites is not reported because the DEC (HoA) provincial departments of education do not release data on how many classrooms are under their control. It is widely assumed that there is excess classroom capacity in DEC (HoA) schools.

TABLE 4.11: PUPIL/TEACHER AND PUPIL/CLASSROOM RATIOS - PRIMARY SCHOOLS

Place/Year	Pupil/Teacher	Pupil/Classroom
S.A. Africans, 1990	49.2:1	51:1
S.A. Africans, Primary and Secondary, 1990	42.7:1	47.8:1
S.A. DET, 1990	40.2:1	39.0:1
QwaQwa, 1990	32.1:1	29.0:1
KwaZulu, 1990	53.4:1	55.9:1
KaNgwane, 1990	n.a.	63.4:1
Bophuthatswana, 1985	39.3:1	48.1:1
Transkei, 1985	64.0:1	47.0:1
Gazankulu, 1990		
worst circuit	49:1	83:1
best circuit	34:1	45:1
average	43:1	64:1
Zimbabwe, 1985	40:1	n.a.
Botswana, 1985	32:1	n.a.
Thailand, 1985	19:1	n.a.
S.A. Coloureds, 1990	25.5:1	25.6:1
Brazil, 1989	24:1	n.a.
S.A. Indians, 1990	23.9:1	29.3:1
Argentina, 1985	20:1	n.a.
Panama, 1985	25:1	n.a.
Malaysia, 1985	24:1	n.a.
South Korea, 1985	38:1	n.a.
New Zealand, 1985	20:1	n.a.
S.A. Whites, 1990 Primary & Secondary	17.4:1	n.a.

Sources: RIEP (1991); WCEFA background document; Annual Report of the Respective Departments

TABLE 4.12: AVERAGE TEACHERS' SALARIES, 1989

	Personnel	Teachers	Average	% GNP/Head
DEC (HoA)	2,274,056	59,359	38,310	5.69
DEC (HoR)	490,788	11,391	43,086	6.40
DEC (HoD)	1,112,359	36,132	30,786	4.57
DET	1,341,588	54,763	24,498	3.64
Gazankulu	165,418	8,799	18,800	2.79
KaNgwane	94,704	5,966	15,874	2.36
KwaZulu	604,914	29,891	20,237	3.01
Lebowa	650,937	24,527	26,540	3.94
QwaQwa	95,001	4,661	20,382	3.03
KwaNdebele	71,280	3,856	18,485	2.75
All African	3,023,842	132,463	22,828	3.39
All SGT	1,682,254	77,700	21,651	3.22
All S.A.	6,901,045	239,345	28,833	4.28

4.4.5 Education spending by other agencies

As is the case for public funding of education, data on contributions to school finance by households, communities, NGOs, and other organizations are scattered and not entirely reliable.[12] According to the best available estimates, the Government bore 63.8 percent of total education costs at all

[12] The discussion that follows is based on data collected by Trotter, (Social Costs), and updated to 1990 in a report by BMI, "Role of Business."

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levels in 1985, with students and households bearing an additional 31.2 percent. Of the costs borne by households, 12.1 percent were direct expenditures for fees, books, uniforms, transport, and other out-of-pocket costs, and 19.1 percent were the foregone earnings of students. Of the remaining 5 percent, 3.4 percent comprised external subsidies to universities. The balance consisted of contributions by private schools (0.9 percent), business, trusts, and foundations (0.3 percent), foreign governments (0.2 percent), and correspondence colleges (0.2 percent). At the primary level (omitting foregone earnings), government paid 82.4 percent of the costs. Households paid an additional 16.1 percent of the costs, with the balance divided among private schools (1.5 percent),and other private sector contributions (0.1 percent).

The volume of private contributions to the educational system has increased greatly since 1985. In 1990, businesses invested approximately R550 million in education, which represented two-thirds of all corporate social investment. Substantially larger amounts were spent on training. Only 8 percent of business contributions to education went to primary education, with an additional 6 percent spent on pre-primary education. Foreign donors contributed R125 million, most of which was distributed as bursaries or donated to local NGOs. In 1985, business and foreign contributions to education were equivalent to about 1 percent of government expenditure. By 1990, their contributions had increased to the equivalent of 5 percent of government expenditure.

4.5 FISCAL CAPACITY ANALYSIS

Fiscal capacity analysis assesses a government's ability to generate the resources that will be needed to accomplish its objectives; in this case, in the education sector. For South Africa these objectives include the provision of full primary education for all children, the equalization of educational provision across population groups, and the improvement of educational standards in previously disadvantaged schools, among others. The determinants of fiscal capacity include the state of the national economy, the size of the population to be served, and the availability of alternative sources of funds. Each of these will be examined in turn in the sections that follow.

4.5.1 The state of the economy

Short-term forecasts of the South African economy are driven by assumptions about overseas economic growth, exchange rates, and gold prices. Their validity is entirely dependent on present and future political conditions. The consensus in October 1991 was that negative real growth would end in 1991, that the economy

would grow in 1992 at a 2 percent annual rate, and that in 1993-94 growth might reach 3 or 4 percent per annum.

Longer-term forecasts are always speculative. In the South African economy, the growth rate over the next decade will depend in the first instance on the timing and character of the political transition to majority rule. It will subsequently be influenced by the economic policies adopted by a new government. If these inspire the confidence of domestic and foreign investors, or bring about large increases in productivity, then annual growth rates of 6 percent or more might be seen again. If not, the economic stagnation of the past decade may persist. Beyond the coming decade, the relative strength and sophistication of the South African economy, compared to those of its African neighbors, could well lead to very high rates of sustained economic growth similar to those currently experienced in some East Asian countries. This will depend on political and economic developments (including changes in educational policies) in the intervening years.

4.5.2. **Demographic expansion**

In 1991, according to the best available estimates, the total population of South Africa was approximately 38.5 million, of which 75 percent was categorized as African, 13 percent as White, 9 percent as Coloured, and 3 percent as Indian. (See Table 4.3) The aggregate rate of population growth is estimated at 2.4 percent per annum, but population growth rates differ dramatically across groups. The African population is growing at a rate 3.7 times as fast as the white population, 1.7 times as fast as the Indian population, and 1.6 times as fast as the coloured population. The main consequence of these differing growth rates is that the African population is, on average, considerably younger than the other groups. The percentage of the population that is of primary school age (between 6 and 12 years old) ranges from 10.6 percent for Whites to 18.5 percent for Africans. Nearly 82 percent of South Africa's school-aged population is African, and this percentage will continue to rise in the decades ahead.

These demographic data have two principal implications for the feasibility of a new government's efforts to increase the rate of enrollment <u>among</u> Africans and to equalize educational provision <u>across</u> groups. First, achieving universal primary education will require that the number of places in schools grows fast enough to keep pace with growth in the school-aged population. Population is increasing most rapidly among Africans, whose present enrollment rates are lowest; thus, the overall quantity of resources required to achieve and maintain universal primary education will continue to rise for the foreseeable future. Second, the equalization of educational provision across groups in South Africa entails the redistribution to Africans of

budgetary resources previously allocated to other groups. The latter groups comprise a relatively small and declining percentage of the population, while the African population is large and growing rapidly. Redistribution of resources under these circumstances of demographic growth and decline can only achieve equalization at a relatively low level of per capita expenditure. For example, providing a per pupil allocation for all students in primary schools equal to the present South African average of R1,003 would reduce per pupil spending in DEC (HoA) primary schools by 69 percent, spending in DEC (HoD) primary schools by 55 percent, and spending in DEC (HoR) primary schools by 37 percent. These reductions would make possible a 45 percent increase in per pupil spending in African schools, from R693 to R1,003 per year. (See Table 4.7) This is a large increase, by any standard, if the requisite redistribution can be accomplished. Raising average per pupil expenditures beyond this minimum will require the generation of additional resources.

Equalizing expenditures is not an end in itself. The goal is not formal equality in per pupil spending but improvement in the quality of education provided to all students. Bringing about such improvement for the majority of students in the South African educational system will clearly require increased spending in the schools attended by the African majority. This increase will have to be financed in large part by reducing spending in schools now attended by children from other groups.

4.6 NEW RESOURCES FOR EDUCATION

The crucial educational issue facing a new government is therefore where to acquire the additional resources that will be needed to achieve the goals of free and compulsory primary education, equalization in the distribution of educational resources, and improvement in the quality of schooling. The best way to obtain these resources is to ensure sustained real growth in the economy, which can increase government revenues without increasing taxation. Additional ways in which new resources can be obtained include cost-savings from increased efficiency within the system; cost-shifting to households, communities, and private agencies; and the acquisition of funds from external donors. Each of these is discussed in a subsequent section of this chapter. The new government of South Africa should be able to gain resources by taking advantage of all of these alternatives in the years ahead.

A second issue that bears on the feasibility of a new government's educational objectives is the containment of costs, and specifically of teachers' salaries. Salaries are by far the largest component of educational costs. (See Tables 4.8 and 4.9) In 1990, 82 percent of all expenditures in African schools at all

levels went to pay personnel, and the percentage was undoubtedly higher in primary schools. If teachers' salaries are allowed to rise substantially in real terms in the next decade then the accomplishment of the government's other objectives will quickly come into question.

There are at least three reasons to suppose that personnel costs will rise in the coming decade, and one to suppose that they might fall. With respect to the latter, the rate of unemployment is sufficiently high in South Africa that teaching remains an attractive occupation for educated citizens. South African teachers are also relatively well paid. Teachers' salaries in South Africa are on average 4.28 times GNP per capita, which is high by the standards of comparable countries. According to the World Bank, teachers' salaries in middle income countries like South Africa are on average 2.25 times GNP per capita. White teachers' salaries are on average 5.69 times GNP per capita; African teachers' are salaries 3.39 times GNP per capita across systems. Even in KaNgwane, where salaries are lowest, the average teachers' salary is 2.36 times GNP per capita, which is above the average figure cited by the World Bank. For these reasons, there is likely to be a surplus of candidates for teaching positions in the short and medium term, and competition for positions may help to hold wages in check.

On the other side, however, there are several obstacles to the containment of teachers' salaries. First, continuing racial disparities in salaries may bring calls for redress that will be difficult for a new government to ignore, although the full implementation of a unified salary schedule may go some way toward muting these demands. Second, large numbers of African teachers and a substantial number of coloured teachers still lack formal qualifications. Upgrading the skills and credentials of these teachers will be among the educational priorities of a new government. Teachers who participate in this process and succeed in obtaining formal qualifications will expect salary increases to match their new status. Finally, the need for educational expansion and improvement in South Africa is most pressing in rural areas, but recruiting teachers for posts in such places is invariably difficult. Many qualified teachers prefer urban unemployment to rural teaching. Providing high-quality instruction in rural communities may therefore require salary incentives for those who agree to teach there.

If teachers' salaries can be contained in real terms over the coming decade then the number of teachers in the system can be increased substantially (as the anticipated expansion of enrollments will require) without a large increase in the overall education budget. If salaries rise, then the attainment of the new government's educational objectives will require even larger quantities of new resources.

4.6.1 The effects of economic growth

As noted at the beginning of this chapter, attaining these new educational objectives will be far easier if real economic growth resumes. Redistributing resources across groups on the requisite scale will be politically difficult under the best of circumstances; equalizing provision will necessarily entail real reductions in per capita allocations for white, Indian, and coloured pupils in order to fund increases for African students. If the rate of economic growth exceeds the rate of population growth the necessary reductions will be smaller and the goals of expanding enrollments, equalizing provision, and improving standards can be pursued simultaneously. Without sustained economic growth, achieving these goals will be vastly more difficult, both financially and politically.

The importance of economic growth can be illustrated with a simple exercise. In 1990 the GNP of South Africa was R252.6 billion, and the population of the country was just over 37.5 million. Per capita GNP was therefore approximately R6,730. According to demographic projections made by the Urban Foundation, the population of South Africa will rise to 42.3 million in 1995, and to 47.6 million in the year 2000. The data in Table 4.13 illustrate how per capita GNP rises or falls depending on the rate of economic growth. (See Table 4.13) As these projections show, per capita GNP will be 21 percent lower in the year 2000 than in 1990 if the economy stagnates over the next decade. If the economy maintains an annual growth rate of 6 percent, per capita GNP will be 41 percent higher.

TABLE 4.13: ECONOMIC GROWTH PROJECTIONS, 1990 - 2000
(GDP in R '000,000,000; GDP/Head in R)

	1995 GDP	1995 GDP/Head	2000 GDP	2000 GDP/Head
0 percent growth	270.4	6,386	270.4	5,681
2 percent growth	298.5	7,049	329.6	6,925
4 percent growth	329.0	7,769	400.3	8,410
6 percent growth	361.9	8,546	484.2	10,173

Source: Estimate of 1990 GDP obtained from CSS Bulletin of Statistics, June 1991. Population projections from the Urban Foundation.

The data in Table 4.14 illustrate how government financial resources for primary education may vary depending on the rate of economic growth. The projections in the table are based on the conservative assumptions that government expenditures remain at 33 percent of GDP, that education expenditures remain at 20 percent of total government expenditure, and that primary education expenditures remain at 40 percent of total education expenditure. (Given competing claims on public resources, and a growing demand for secondary and tertiary education, the second and third of these assumptions may be optimistic.) If growth averages 0 percent over the coming decade, real resources for primary education will remain unchanged under these assumptions, at R9.6 billion. If growth averages 6 percent per year, real resources available for primary education will almost double by the end of the decade, to R17.2 billion.

TABLE 4.14: PUBLIC EXPENDITURE FOR PRIMARY SCHOOLS, 1990 - 2000
(in 1990 R '000,000,000)

	1990	1995	2000
0 percent growth	6.9	6.9	6.9
2 percent growth	6.9	7.7	8.5
4 percent growth	6.9	8.5	10.3
6 percent growth	6.9	9.4	12.5

Source: Projections are based on data presented in Table 3.4.

In Table 4.15 the available government revenues for primary education projected in Table 4.14 are divided by projected primary school enrollments, to yield an estimate of the revenues available for each pupil in each of the three years. Two key points should be made. First, average per pupil expenditure in primary education in 1990 is higher than average expenditure in African schools, but substantially lower than average expenditure in schools administered by the three DECs. This is because of policies discriminating against Africans, and because of the numerical preponderance of African students in the system. Second, only when economic growth significantly exceeds population growth (i.e., at 6 percent per annum in this table) does the amount of available revenue per pupil increase substantially. It is important to recognize, though, that even

if the annual growth rate averages 6 percent over the coming decade, attainable levels of per pupil expenditure will still be well below 1990 levels of spending in DEC (HoR), DEC (HoD), and DEC (HoA) schools. Public expenditures will therefore have to be reduced significantly in these schools, under even the most optimistic of assumptions, if greater fiscal parity is to be achieved. If the rate of economic growth is lower than the rate of population growth, then per pupil revenues will steadily decline toward present levels of expenditure in African schools. If the South African economy continues to stagnate, then achieving the new government's educational objectives will be a difficult task at best.

TABLE 4.15: PER PUPIL EXPENDITURE IN PRIMARY SCHOOLS, 1990 - 2000 (in 1990 R)

	1990	1995	2000
0 percent growth	1,007	861	708
2 percent growth	1,007	950	863
4 percent growth	1,007	1,047	1,048
6 percent growth	1,007	1,152	1,268
No. Pupils ('000)	6,943	8,123	9,875

Source: Financial projections are based on data presented in Table 3.4. Enrollment figures are RIEP Projections.

4.6.2 Efficiency gains

A second way to generate additional funds for the educational system is to increase the efficiency with which currently available funds are spent. Making better use of present revenues has the effect of freeing resources for new activities without requiring an increase in the overall education budget. This is hardly a "free lunch," because increasing efficiency has its own economic and political costs. In the long term, however, the savings can be large. Potential gains in efficiency represent an important avenue for the new government to explore as it seeks resources to accomplish its educational objectives.

There are several potential opportunities for efficiency gains in the South African educational system, some of which are discussed

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in greater detail in other chapters. Four of these are especially important, and merit discussion here.

First, it is sometimes argued that the rationalization of administrative structures in a unitary educational system should over time allow savings in administrative overhead, and free resources for use in schools and classrooms. Reducing the number of educational systems from fifteen to one will limit the multiplication of functions and sinecures, and permit the consolidation of some essential activities (e.g., teacher remuneration, exams administration) into a single bureaucracy. On the other hand, the decentralization of other activities to regions and schools (e.g., in-service training, community relations) and the strengthening of administration and instructional support at all levels may entail increased expenditure.

Any estimate of the savings available from administrative rationalization is necessarily speculative for two reasons. First, the administrative structure of a unified educational system has yet to be defined, and alternative divisions of responsibility between centralized and decentralized agencies will imply very different costs. Second, the lack of standard budget categories across the present fifteen departments means that any estimate of current expenditure on administration based on published data will be purely arbitrary. Furthermore, the net savings from administrative rationalization are likely to be small. Nevertheless, the goal of containing or reducing administrative costs and making the most efficient possible use of existing administrative resources should be one of the guiding principles in negotiations to define the organizational structure of a single educational system for post-apartheid South Africa.

A second opportunity for efficiency gains in South Africa may arise from the redeployment of resources freed up by the administrative rationalization of the educational system. For example, reducing pupil/teacher ratios in African schools may not require additional expenditure if current teachers can be shifted into African schools from elsewhere in the system. Similarly, the removal of racial barriers to enrollment may reduce overcrowding in many schools at virtually no public cost by allowing students in overcrowded schools to move to schools where there is excess capacity. Geographic and other obstacles to the redeployment of resources should not be underestimated, but the opportunity for savings that accompanies better and more intensive use of existing personnel and physical plant should not be passed up.

The third and potentially largest source of efficiency gains in the educational system is reduction in rates of repetition and drop-out in African and DET (H/R) primary schools. Based on current estimates, each African entrant to Standard 6 has, on

average, attended school for between 7.91 and 8.34 years, which means that the average African student repeats one or two grades before completing Standard 5. Moreover, the percentage of African entrants to SSA who complete Standard 5 within twelve years lies between 51.6 and 62.6 percent; nearly half of those who enter the system never complete primary school. Because rates of repetition and drop-out are so high, producing one African completer of Standard 5 requires between 11.42 and 12.24 pupil-years of instruction.

These estimates suggest that changes in policy, redesign of curricula, and improvements in instructional quality aimed at lowering repetition and drop-out rates in African and DEC (HoR) primary schools to the levels observed in DEC (HoD) and DEC (HoA) schools would allow a very large increase in the number of pupils completing primary school with virtually no increase in overall enrollment. (Enrollment in lower standards where repetition rates are high would fall; enrollment in higher standards would increase.) As with the other opportunities for efficiency gains noted above, improving the internal efficiency of primary schools should be among the educational priorities of a new government.

The final source of efficiency gains would require a closer fit between teachers and classrooms. At present there are more teachers than classrooms in many schools. (See Table 4.11) As a result some teachers sit idly as they wait to rotate into classrooms vacated by their peers. Implementation of a regionally-based management information system to enable a more rational allocation of teachers among schools, along with construction of new classrooms to accommodate underemployed teachers, would therefore allow expanded enrollments or reduced pupil/teacher ratios at relatively low cost, given the weight of teachers' salaries in total educational expenditures.

4.6.3 Additional sources of funds

A fundamental choice facing a new South African Government will be whether to channel additional funds for education through the public or the private sector. In the public sector one strategy would be to institute an earmarked tax designated for the educational system. Candidates for such a tax might include a surcharge on income tax or a regional property tax, both of which would be progressive in their incidence. The revenues generated could help to finance the transition to a post-apartheid educational system.

An alternative strategy for generating additional resources for the education system would be to increase the participation of students, households, communities, and private and nongovernmental organizations in the financing and control of education. Maintaining legal and political protection for private participation in the educational system has two main

advantages. First, it can channel financial and in-kind resources to the educational system beyond those that can be produced by the government through taxation. Most of these additional resources will be obtained from the best-off households, which are able to purchase private education for their children. Their departure from the public system frees resources that can be used to improve the quality of instruction provided to the children of poorer households.

In some cases, the resources generated by increased private participation may substitute for public funds. The enrollment of students in private schools reduces the number of pupils in public schools, and increases the quantity of governmental resources that can be invested in the education of the remaining students. In other cases, private resources may complement public funds, allowing expansion and improvement in the educational system beyond that which the Government can afford. Private venture vocational training schools supported by student fees and business contributions often provide training in new or non-traditional fields (e.g., computer programming) neglected in public vocational schools.

A second advantage of increased private participation in financing education is that it can allow the educational system to respond more rapidly and directly to changing demands and expectations for services. One example of this responsiveness in South Africa is the rapid expansion of pre-school education in recent years, which has taken place almost entirely at private and community expense. A second example is the rise of private (for-profit) and business-sponsored vocational education programs, which seek to meet demands for skills left unsatisfied by the public school system. Private responsiveness to changing circumstances is especially important at a time when public resources are fully committed to the expansion and improvement of the basic educational system.

The main disadvantage of increased reliance on non-public resources to finance education is that expanded private participation almost invariably contributes to the perpetuation of inequalities within the educational system. Households that are able to pay fees or supplementary levies receive more or better educational services than those with lower incomes. Communities with the political capacity to build, maintain, and administer pre-schools are better served than those that lack such capacity. This disadvantage may be overcome to some extent through the provision of compensatory assistance to poor households and communities.

A second potential disadvantage is that private costs may be imposed on those households least able to bear them (e.g., Africans in rural areas), because they lack the political influence to counter such imposition. Meanwhile, more prosperous

households with readier access to the government continue to enjoy public subsidies. Precisely this distribution of private costs and public benefits characterizes the South African educational system under apartheid. A similar policy now appears to be in force with respect to community schools in informal settlements and rural areas, and with respect to the provision of education in informal settlements more generally.

Any expansion of private schooling at primary or secondary levels would require corresponding reductions in the public subsidies provided to students in post-secondary institutions. Otherwise, increased privatization may produce the perverse combination of policies encountered in many countries, where students from wealthy households attend elite private schools, score high marks on university entrance exams, and attend university at public expense. Poor students who attend public schools perform less well on exams, and so are prevented from attending university. The net result of these policies is a redistribution of resources from poor to rich households. As the private costs of higher education are increased, access for poor students can be protected through the provision of means-based scholarships or loans.

On balance, the alternatives to increased private participation in educational finance are almost certainly worse. As noted in Section 4.6.1., equalization of public resources will result in a relatively low level of educational provision for children in public schools. For the new government to enforce equality at this level, it would have to prevent households and communities from investing additional resources in the education of their own children. It would be politically difficult to adopt and enforce such a policy, and substantial reductions in the quality of instruction provided in the country's best public and private schools could result in shortages of the highly-qualified personnel needed to maintain economic growth. (Growth will increase the resources available for the education of all children.) For the government to continue to provide high-quality (and high-cost) education for some and lower-quality education for others, however, is either to perpetuate the present distribution of privilege or to undertake the technically difficult and morally arbitrary task of selecting winners and losers. Selective subsidies and compensatory programs will have to be provided for those previously victimized by apartheid, but insofar as possible households should be left free to make their own choices about the quality and quantity of education to be provided to their children.

There are several alternative sources on which a new government can call in an effort to generate additional educational resources. In fact, the present government has already begun to experiment with many of them. Households can be induced to increase their private contributions to the education of their

children, either by encouraging the establishment and expansion of private schools or by permitting private supplementation of public subsidies in public schools. Local communities may be encouraged to build and maintain their own schools, or to provide supplementary educational services (e.g., pre-schools) for local children.[13] Reducing public subsidies and increasing private contributions at higher levels of the educational system (perhaps in association with an expanded program of student loans) can free additional resources for the expansion and improvement of primary education. Private agencies and NGOs can be encouraged to provide supplementary educational services (e.g., pre-schools, special education, vocational education) on a non-profit basis, or entrepreneurs may be permitted to seek profits in offering similar services. Large business organizations can be induced to expand their activities in compensatory and vocational education. Taking advantage of some of these alternatives may require no more than the protection of legal and political space for private action. Others may require active encouragement through incentives and sanctions.

An additional source of new revenues for the educational system in the short and medium term is likely to be foreign assistance. Because of South Africa's regional importance, both politically and economically, a new Government can probably count on large flows of aid. These may become available to fund capital investment in the educational system and to subsidize programs aimed at easing the transition from a divided and unequal educational system to one that provides for the education of all South Africans. Foreign assistance will never comprise more than a small percentage of overall educational expenditure but, carefully managed, it can nevertheless play a useful supplementary role in the accomplishment of the new Government's educational objectives.

In the South African educational system, the central question is not whether inequalities across regions and population groups will persist; they clearly will for the foreseeable future. The main question is whether inequalities will be maintained at public or private expense. To the extent that private resources

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[13] Two points should be made with respect to community provision of schools. First, such provision is already common in rural areas and informal settlements in the South African educational system, as is discussed in Chapter 3. Second, the communities that are called on to provide their own schools are often the poorest communities in the country, while rich communities enjoy facilities provided by the Government. Additional resources can no doubt be obtained from communities, but policies to expand their participation should be aimed at reducing the burden on the poorest communities, and increasing the burden borne by the better-off.

can be mobilized to fund the advantages of privileged groups, public resources will be freed for distribution according to egalitarian or compensatory criteria, permitting more rapid improvement in the quality of instruction in schools attended by poor children.

4.7 SUMMARY AND CONCLUSIONS

The educational objectives of the next South African Government will, at a minimum, include three main goals:

- guaranteed access to primary schooling for all children;
- equalized provision of educational resources across population groups; and
- improved facilities and instructional quality for members of previously disadvantaged groups.

The simultaneous pursuit of these three objectives will require a transformation of the existing educational system. One of the key problems that prospective reformers will face is where to find the resources to make this transformation possible.

The state of the national economy is consequently of the first importance for the success of educational reform. If the rate of economic growth continues to lag behind the rate of population growth, government revenues for education will continue to decline. In a declining economy expanding access and improving quality will be extremely difficult, and the redistribution of resources required to equalize educational provision can be expected to generate intense political conflict. If growth accelerates, rising public and private income will make the transformation far less painful.

Additional resources to aid in the transformation of the educational system may be available to the government from sources other than taxation. First, there are opportunities to improve the efficiency with which current resources are used, and some of these may generate large savings. Three of these are especially important:

- Unification of administrative structures and rationalization of administrative expenditure;
- Redeployment of personnel and physical plant across educational "systems;" and
- Policy changes, curriculum reforms, and quality improvements in African schools to reduce rates of grade repetition and drop-out.

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The savings available from the third of these may be very large. If rates of repetition in African schools can be substantially reduced, the number of primary school completers could be increased over a relatively short period with no increase in the total number of students in the system.

Another way to generate additional resources for the educational system is to increase participation by students, households, communities, and private and non-governmental organizations in the financing of education. To this end a new government might:

- Encourage the establishment or expansion of private schools;
- Permit the private supplementation of public subsidies by parents;
- Encourage communities to build, maintain, and administer their own schools and supplementary educational institutions, including pre-schools;
- Encourage private and non-governmental agencies to expand the provision of preschool and vocational education on a non-profit or a for-profit basis;
- Encourage business organizations to expand their activities in compensatory and vocational education; and
- Encourage a systematic and coordinated national approach to managing the expected foreign aid to education.

To the extent that private resources can be mobilized in support of the educational system, additional public resources will be freed to expand access and improve instructional quality for children from groups previously victimized by apartheid.

The transformation of the South African educational system will be difficult under the best of circumstances. This chapter has identified some of the main economic hurdles, and has suggested some strategies by which they might be lowered. A more detailed analysis of the kinds of choices that will have to be made in the effort to expand enrollments, equalize resources, and improve the quality of instruction is presented in Annex D.

CHAPTER FIVE

EDUCATIONAL ADMINISTRATION AND MANAGEMENT

5.0 OVERVIEW

On October 24, 1991, the Minister of Education and Training, Sam de Beer, stated, "It is quite clear that the Government is committed to devising a new education system" and that "We are in the process of phasing out the Department of Education and Training...and [to] start talking of a system to address the needs of all our people".[1] The Minister proposed that a forum be convened wherein all parties with an interest in education would discuss the new education system.

A myriad of issues will emerge in moving from one educational administrative structure to another. Principal among these is the establishment of a unitary education system with equal provision for all students. The government has yet to propose formally such measures; even the June 1991 "Educational Renewal Strategy" was not designed to address such measures. The Minister's announcement and the reactions to it by critics are harbingers of difficulties associated with the development of a unitary educational system despite the fact that this is one general area of agreement among Africans, Coloureds, and Indians and many progressive Whites. New policies and functions of the proposed single system must be negotiated among all groups. Alternative and emergent roles for administrators must be developed and redefined.

5.1 ADMINISTRATIVE AND GOVERNANCE STRUCTURES: THE NATIONAL LEVEL

5.1.1 The Department of National Education and General Policies

Figure 9 provides a graphic representation of the educational structure in South Africa, including the self-governing and independent territories. In addition to the fifteen departments of education, the Department of National Education (DNE) is responsible for establishing national policies and standards for certification and remuneration. Created as a result of the 1984 Education Act, the DNE develops policy for all education departments. Hence it works closely with all education departments but is not involved in the direct provision of educational services. It is also charged with responsibilities for sport and recreation and for cultural affairs.

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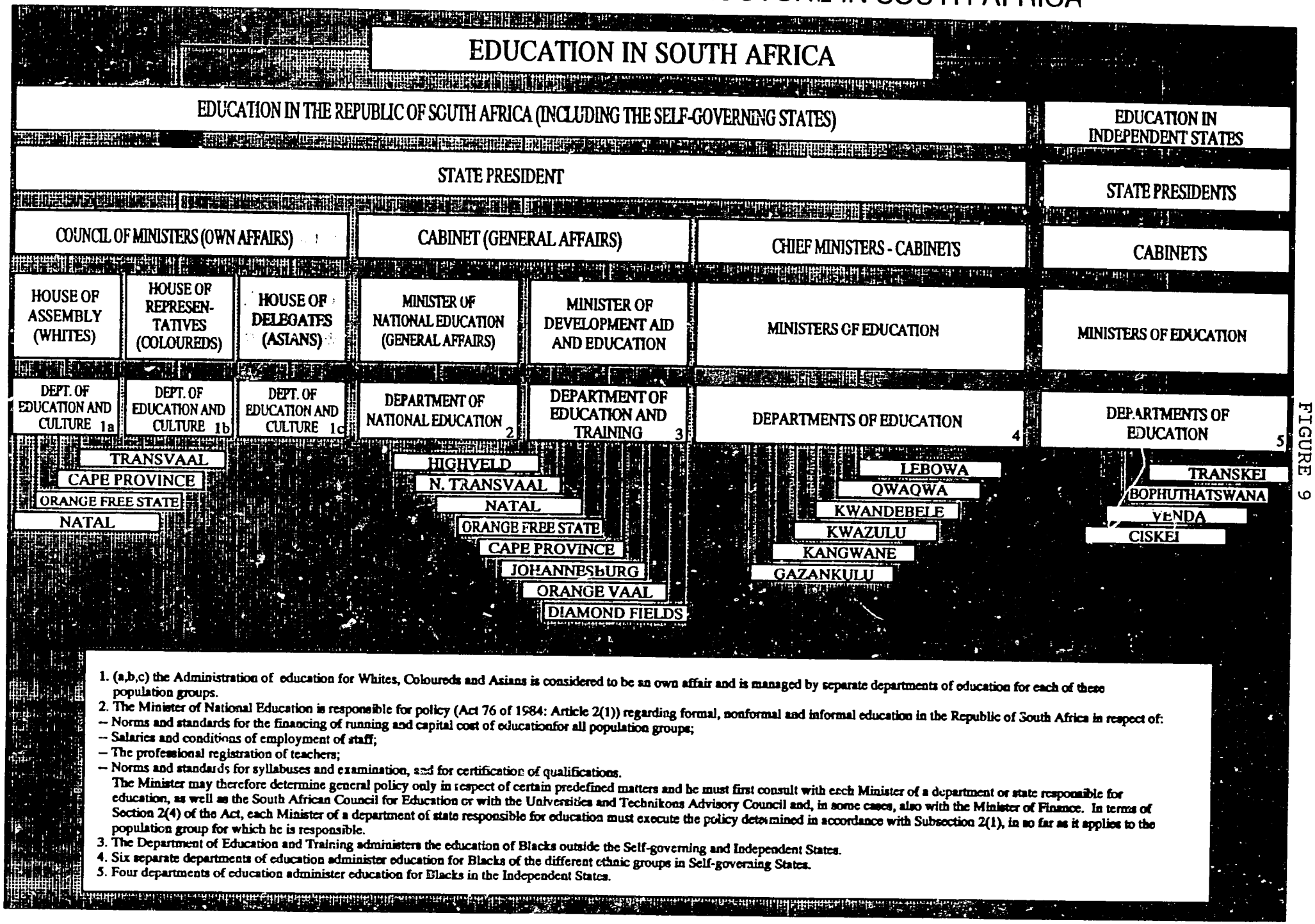
[1]"New Education System.." The Natal Mercury, October 25, 1991, p. 2.

THE DECENTRALIZED EDUCATION STRUCTURE IN SOUTH AFRICA



1. (a,b,c) the Administration of education for Whites, Coloureds and Asians is considered to be an own affair and is managed by separate departments of education for each of these population groups.
2. The Minister of National Education is responsible for policy (Act 76 of 1984: Article 2(1)) regarding formal, nonformal and informal education in the Republic of South Africa in respect of:
   – Norms and standards for the financing of running and capital cost of educationfor all population groups;
   – Salaries and conditions of employment of staff;
   – The professional registration of teachers;
   – Norms and standards for syllabuses and examination, and for certification of qualifications.
   The Minister may therefore determine general policy only in respect of certain predefined matters and he must first consult with each Minister of a department or state responsible for education, as well as the South African Council for Education or with the Universities and Technikons Advisory Council and, in some cases, also with the Minister of Finance. In terms of Section 2(4) of the Act, each Minister of a department of state responsible for education must execute the policy determined in accordance with Subsection 2(1), in so far as it applies to the population group for which he is responsible.
3. The Department of Education and Training administers the education of Blacks outside the Self-governing and Independent States.
4. Six separate departments of education administer education for Blacks of the different ethnic groups in Self-governing States.
5. Four departments of education administer education for Blacks in the Independent States.

FIGURE 9

The Minister of National Education, after consultations with other education ministers, proposes policies regarding formal, informal, and nonformal education that cover several areas. These include:

1) norms and standards for financing and capital costs of education;
2) professional registration of teachers;
3) standards for syllabi; and
4) conditions of employment and salaries for staff.

Several principles (such as equal opportunities for all, recognition of that which is common and diverse, a balance between centralization and decentralization, and recognition of the professional status of teachers and lecturers) serve as the ideal framework within which national policies should be undertaken.

Policy and program implementation and related matters reside with the other fourteen departments of education. In general terms, each department of education regulates its "own affairs", that is, its own population group and specific needs. The House of Assembly is responsible for the Department of Education and Culture (DEC) for Whites, which is further divided into four provincial departments (Transvaal, Cape Province, Orange Free State, and Natal). The House of Representatives is responsible for the Department of Education and Culture (DEC) for Coloureds; the House of Delegates is responsible for the Department of Education and Culture (Indian); and the Department of Education and Training is responsible for African education, except in the self-governing and independent territories.

Six other departments of education are in the self-governing territories: Gazankulu, KaNgwane, KwaZulu, KwaNdebele, QwaQwa, and Lebowa. Four are in TBVC states: Transkei, Bophuthatswana, Venda, and Ciskei. While there are distinctions among the fifteen departments, it is beyond the scope of this assessment to delve into a substantive examination of each. Instead, discussions will focus on four illustrations, the DEC (White), the DEC (Indian), the DET, and the Department of Education in KwaZulu. Select general descriptive statistics will be presented to illuminate critical issues.

Figure 9 reveals the extent of duplication of management and administration in South Africa. Each Department has 10 or more functions that exactly duplicate the tasks performed in counterpart departments. Creation of a unitary system will eliminate some of the redundancy; however, in some Departments (most notably the DET) many critical line positions are not filled by staff in sufficient numbers or of sufficient capability to adequately perform the required tasks. Redundancies may be a prominent feature of the bureaucracy, but so is the need for

reallocation of staff to those areas which desperately need more administrative support.

5.1.2 The Department of Education and Culture (White)

At the national level of the DEC (House of Assembly), the Minister of Education interacts closely with the Superintendent-General for Education and Culture, the Executive Director for Education and Culture, and Chief Directors for Specialized Services, Education Policy, Tertiary Education, Administrative Auxiliary Services, and Culture and Youth Affairs. An executive director is the key officer in the four provinces. Superintendents, management inspectors, and academic subject inspectors occupy central administrative positions in the provinces. In 1990, these administrators and approximately 3,436 principals exercised managerial responsibilities for about 932,181 students in public schools.

The legislative decision permitting parents to determine whether local sites would become Model A, B, or C schools is receiving considerable attention since it is designed to enable Whites to control their own affairs, including admission, via local decisions. Model A schools will become private institutions; Model B schools will remain state-funded institutions; and Model C schools will become state-assisted sites, enabling them to receive public funds for staff salaries, but not for other expenditures. In all three models, black intake cannot exceed 49 percent. More recently, a fourth model was introduced whereby there are no racial constraints whatsoever, and the school remains a state-funded institution. Three such schools, almost entirely black, now fall under the white Transvaal Education Department. In essence, the administrative and governance structures for white education allows flexibility through decentralized decision-making.

5.1.3 The Department of Education and Culture (Indian)

The executives in the DEC (House of Delegates) include the Minister, the Chief Executive Director, the Chief Director for Control and Planning, the Director for Education Administration, and nine regional superintendents (control or management positions). They have administrative oversight for about 450 principals. Table 5.1 portrays the key regional positions in the Indian system.

TABLE 5.1: EDUCATION CONTROL INSPECTORATE, DEC (HoD)

Posts		Approved Posts	Actual 1990/91	Projections				
				1991/92	1992/93	1993/94	1994/95	1995/96
Chief Superintendent of Education	Level 7	8	9	9	9	9	9	9
Superintendent of Education (School Management)	Level 6	7	9	9	9	9	9	9
Superintendent of Education (Academic)	Level 6	19	12	13	14	14	14	14
Deputy Superintendent of Education (Academic)	Level 5	19	17	17	18	18	18	18
Assistant Superintendent of Education (Academic)	Level 4	32	35	37	38	38	38	38
Total		85	82	85	88	88	88	88

Explanation for Changes:

1991/92
1 Superintendent of Education (Academic) - Junior Primary
1 Assistant Superintendent of Education (Academic) - English/Speech and Drama
1 Assistant Superintendent of Education (Academic) - LRE

1992/93
1 Superintendent of Education (Academic) - Geography
1 Deputy Superintendent of Education - English (Transvaal)
1 Assistant Superintendent of Education (Academic) - Gifted Pupils

1993/94
Nil

1994/95
Nil

There are 233,101 students enrolled in the system. Since 1989, a substantial number of Indian schools have accepted African students, although several innovative ones began regularly enrolling Blacks in the mid-1980s. Thus far, few Whites have matriculated in Indian schools, and only two of these schools have white principals. However, white males occupy senior executive positions at the national level.

5.1.4 The Department of Education and Training

The Director General for Education and Training and Development Services, three Deputy-Directors General, and four Chief Directors comprise the executive managerial team. Eight regional directors supervise about 45 area offices headed by area managers. Within these area offices, about 450 inspectors have administrative and academic oversight for about 7,800 principals. The DET is responsible for 2,217,563 students.

About 7,700,000 students are enrolled in all urban and rural African schools, including those in the self-governing territories and TBVC states. In several large townships, the DET maintains administrative responsibility for the schools. In reality, their responsibility stops with the payment of teachers' salaries because the policies and roles of the DET are sometimes perceived as illegitimate by staff and constituents. In other instances, the regional directors and inspectors simply have too many schools in their portfolios, and some sites are visited only every few years. A DET inspector stated, "We have to focus on the problem areas, which can take a lot of time."

5.1.5 KwaZulu Department of Education

Within the KwaZulu Department of Education, the senior executives are the Secretary, the Deputy Secretaries for professional services, administrative services, and auxiliary services. The chief education officers for planning, examinations, and public relations are also part of the administrative team. Five regional directors are responsible for the 25 circuit inspectors (who serve in line managerial roles) and 87 academic subject inspectors. The number of principals in KwaZulu was approximately 3,000 in 1989. One circuit inspector stated that 63 schools are in his circuit and believed that his area was typical in size. A recent annual report for Kwazulu indicates about 1,540,852 students. Several national government reports state that the total number of pupils in the self-governing States was approximately 3,263,493 in 1990.

5.2 PERSONNEL QUALIFICATIONS AND DEMOGRAPHIC CHARACTERISTICS

A DEC director of personnel stated that in HoA and HoD schools (and perhaps 60 to 65 percent of the HoR schools), the vast majority of principals have the minimum qualifications for the job. That is, a matric pass plus a four-year diploma in education and previous experience as a department head or deputy principal. HoD and HoR principals need a matric plus three-year diplomas and previous experience. Subject inspectors are usually drawn from the ranks of principals, and in rarer instances, from department heads in large schools. Circuit or management inspectors usually have a baccalaureate degree and five or more years of administrative experience. In African schools, particularly those in rural areas, principals often have a diploma in education. However, prior administrative experience is not always the norm, especially since a substantial portion may assume the principalship due to political conditions, patronage, or the reluctance of other teachers to become administrators. Circuit inspectors normally have diplomas or degrees, post-graduate training, and five or more years of administrative experience.

The racial backgrounds of principals and academic subject inspectors are normally the same as the students which the education departments serve. For example, of the 450 principals within the DEC (Indian), only two are white males. Of the nine regional superintendents, only one is a white male. However, within the senior executive ranks of the teams in the several departments, the majority are white males.

A 1989 central statistical survey provides some data regarding the gender profiles of inspectors and principals for Whites, Coloureds, Indians, and all Africans. Although it is unclear whether these statistics include private institutions and colleges of education, they indicate substantial gender differences in the administrative ranks, especially for Whites, Coloureds, and Indians. About 65 percent of all South African teachers are women. Of the 3,436 white principals in 1989, 916 or about 26 percent were women. For Coloureds, about 1 percent (18) of the 1,402 principals were women; and for Indians about 9 percent (47) of the 495 principals were women. Conversations with inspectors, education researchers, and a personnel officer indicated that these statistics appeared somewhat high for white and Indian women, unless pre-primary and private schools are included. All respondents indicated that the vast majority of women are principals in primary schools; and in many instances they are administrators in junior primary schools.

In African schools, about 62 percent (8776) of the 13,992 principals are women. The vast majority are principals in primary or junior primary schools, rural areas of self-governing

states, and isolated communities. For instance, in the Johannesburg region in 1991, 162 of the 267 primary principals are women; at the secondary level, 5 of the 64 secondary principals are women. Women represent about 13 percent (131) of the 1,000 inspectors. Discussions with education researchers, principals, and policy-makers indicated that the majority of women are academic inspectors in home sciences, social sciences, English, and the humanities. For the most part, they are not circuit or management inspectors where they have direct supervisory or line responsibility for other administrators. For example, within the DEC, no Indian women are superintendents or circuit inspectors and thus few have line responsibility over principals and schools.

5.3 CHALLENGES AND PROBLEMS

The 1984 Education Act established several key committees to help design general policies and procedures pertaining to all education in South Africa. The most influential is the Committee of Heads of Education Departments (CHED) which is comprised of the Director-General of the DNE, the heads of the DECs and DET, and another member designated by the Committee of Heads of Education. The CHED advises the DNE Minister on general education matters and the Ministers of the respective departments "on any aspect regarding cooperation between the various departments of State responsible for education." In their regular meetings, for example, they make recommendations to the Ministers and provincial education councils regarding the manner in which school instruction and teacher training should be implemented. The CHED was primarily responsible for the "Educational Renewal Strategy" issued in June 1991.

At the regional and local levels, there are statutory forums for parental and local participation via management councils, circuit committees, regional committees, and, for the DET, the Council for Education and Training. These regional and local bodies and national ones such as the CHED identify and address problems in the educational system. The DET, for example, asserts that recent organizational changes were made in the department in response to the need for effective and efficient management and the need for clear distinctions between staff and line functions.

At the national level, the DNE states that there are considerable differences in the provision of education for different population groups regarding "the scope of the provisions as well as the quality of the education." Key administrative problems include:

- shortage of classroom accommodations;

- staff who obtain relatively rapid promotions before they have adequate management skills;
- insufficient subject advisors to assist teachers; and
- inspection circuits which are too large and burdensome.

Restructuring and renewal are means of addressing these problems.

Local principals, education researchers, and others readily recognize these problems and a host of others. According to these groups, additional problems include:

1) the racial basis of education which continues to restrict opportunities for students, teachers, principals, and other administrators;

2) the duplication of services among the fifteen departments;

3) the vast discrepancies in the distribution of educational resources;

4) the absence of substantive input by the majority of educators, parents, and professional educators in tertiary institutions and NGOs;

5) the centralized and top-down approach to decision-making and program implementation;

6) the overwhelming presence of white males in executive positions;

7) the notable absence of women in supervisory and managerial positions; and

8) the centrality of political rationales for policy development and decision-making.

With reference to point 2 above, one leading researcher and former DET executive wrote:

> The duplication of functions and staff and the resultant large number of bureaucrats has meant that many have been appointed to posts beyond their capacity, and particularly in the case of white officials, to posts that they would never have reached

but for the segregationist model of the education system.[2]

Hartshorne further states, with reference to problems four and five above, that although some decentralization has occurred, "the long chains of command without the devolution of any real authority and power, and certainly without any democratic say to the people served by the regional organizations" still exists.[3]

Several townships have refused to recognize the legitimacy of the DET. In Soweto, for example, in 1989, the chairs of the 17 school management councils decided to disavow the management council system because they contended that "DET and the Councils are talking past each other" as witnessed by the DET's failure to establish vital communication with pupils and teachers and the department's continuing efforts to determine school admission policies. A year later, Soweto and Alexandra teachers struck and demanded that school management councils, controlled by DET policies, be replaced by parent-teacher-student-associations.

What effect do these administrative and managerial realities have on the administration of local schools? The scholarly literature indicates that effective schools are characterized by:

- a principal who exhibits administrative and leadership skills and whose authority is respected;
- an administration system that promotes orderly climate for instruction;
- high expectations by educational leaders for student and staff performance;
- relevant and effective models of instructional practices and behavior; and
- effective monitoring and evaluation procedures.

The following case studies highlight differences between effective school environments and the ineffective environments found with frequency in South Africa.

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[2] Ken Hartshorne, "Education Dynamics and the Bureaucracy," Teachers Journal: Special Issue on Education Dynamics and The Bureaucracy. Vol. XVIII. No. 2, July 1988. p.5.

[3] Ibid.

5.4 EDUCATIONAL ADMINISTRATION: CASE STUDIES AT THE LOCAL LEVEL

5.4.1 Alton Primary School

Recently ninety-three percent of the parents of children attending Alton Primary voted for it to become a Model B school. While the principal and parents made this decision to remain a state-funded school, there was considerable debate about the development of criteria for admitting students who had not previously attended the school. Hence criteria for "other race" students attending Alton include the following:

1) Proficiency in English via written and oral examinations if English was not the previous medium of instruction;
2) Students must be within two years of age of the normal age for the particular standard;
3) The student's academic ability must be such that he or she can "cope" with school requirements particularly in mathematics; and
4) Students must live in the area or there must be classroom space to accommodate the student.

As a result, about 10 percent of the 575 member student body (Grade One to Standard V) are non-white.

Although Alton became a Model B school, most structural arrangements and teaching practices remained intact. The 23-member teaching staff consists of 18 women and five men. The principal is assisted by a deputy principal who is responsible for orientation and induction of new staff, staff development, and liaison between teachers and the principal. Three department heads report to the principal and informally to the deputy principal; two of them focus on junior primary matters and the third focuses on senior primary issues.

The male principal delegates considerable autonomy to the three female administrators on daily operations. Interactions with the School Management Council and the suburban community and involvement with student teachers from a nearby college of education are his ongoing concerns. He asserted that the School Management Council has modest input on academic matters. The Council helps to establish school fees and determine their use, as well as to engage in some local fund-raising activities.

According to the principal and several teachers, Alton is an effective school. The indicators include:

- sound communication and team building exist to establish and maintain staff morale;

- most children achieve at grade level;
- most students attend secondary schools and later pass the matriculation examination;
- relatively minor problems associated with integration exist; and
- good working relations exist with the Management Council and the community.

Quality school facilities, ample textbooks and instructional material, and interactive classroom management were observed which also suggest school effectiveness.

When asked if staff from various races taught at Alton, the reply was a quick "no." According to the principal, "Black and Indian staff are not here because there are serious reservations about their ability to communicate effectively in English." Coloured teachers were not mentioned although many are indigenous English speakers; and the failure to include them may still be based on racial criteria. Although students from various races attend the nearby college of education, the principal declared that non-white student teachers would not be assigned to Alton during a transitional period. When asked if the school might be receptive to international student teachers from the United States (including African Americans) or England, the principal replied positively. Certainly, there are different usages of English among South Africans, Americans, and English which he is apparently willing to overlook. Hence, race is still a criterion for excluding teachers who are not white.

5.4.2 **Brown Primary School**

Located on undulating scenic hills in a working-class area of a large city, Brown Elementary School has 603 pupils, over 85 percent of whom are coloured and the rest are Africans and Indians. African students are bused from other areas because the school provides better facilities and instruction than what is available in their own neighborhoods. The principal and senior teachers stated that interactions among Coloureds and Africans were a positive experience for students. Ranging from 5 to 16 years old, pupils attend pre-primary, primary, and special education classes. The principal, deputy principal, two primary lead teachers (department heads), and an infant lead teacher serve in administrative and/or key advisory roles.

Although the physical facilities are not comparable to middle-class white schools due to huge discrepancies in fiscal resources, it was quickly apparent that staff enthusiasm was quite high. Teachers at Brown make extra efforts to produce their own excellent instructional and teaching aids. Of particular

note were the games designed by a special education teacher to stimulate responsiveness on the part of 14, 15, and 16-year olds who would soon leave school and likely not pursue any additional education or training.

Staff morale seemed positive which was due, according to staff, in part to the former principal, a woman. The current male principal, who stated that he was really "acting" seemed fairly non-communicative and unaware of basic school matters. When asked fundamental questions about Brown, he basically did not respond. His leadership skills appeared quite limited. He stated several times that resuming his former position as a department head was his goal. The deputy principal (who was responsive to several questions and is active in the local professional teacher organization) and two of the lead teachers are also male. In fact, three of the four men in the 25 member teaching staff are in "administrative" roles.

Several women teachers contend that the men are in their current administrative positions simply because they are males. According to several senior women, they are requested by the principal to assume tasks which are normally administrative responsibilities such as liaison with parents and interaction with the Parent-Teacher-Association on special fund-raising projects. Yet they felt they would not be seriously considered for the permanent principalship of Brown because men are not keen on working with a woman principal.

5.4.3 **Carey Primary School**

A principal and two head teachers (one man and one woman) are administratively responsible for the 404 students from pre-primary to Standard 5 at Carey School. Since 1986, Carey (originally designated for Indian children) has accepted African students. They now comprise just over 10 percent of the student population. Initial resistance was apparently strong from the Indian community about the registration of "The Blacks" who lived in other parts of the metropolitan area. Their registration and attendance was encouraged by the principal's initiatives to inform African staff in a nearby hospital that their children could attend the school. In every classroom except one, African students are present. Coloureds have attended this school for a considerable time. No apparent social problems seem to exist among the demographic groups.

The principal stated several times that his school was under-financed due to different funding formulas for the DEC (House of Assembly) and the DEC (House of Delegates). In addition, the principal believed that his outspokenness and political stance on educational inequities resulted in a shortage of textbooks and teaching materials from the DEC (House of Delegate). Thus Carey does not receive funding comparable to some Indian schools. The

absence of ample teaching materials and textbooks appeared to support his statements about insufficient funds for regular, remedial, and special education classes.

The principal's soft-spoken and congenial leadership style and his interactions with an Indian College of Education seemed to lessen problems associated with insufficient funds. According to the principal, virtually all students in regular classes complete primary education and about 90 percent pass the matric. Discussions with the principal and some of the twenty staff (fifteen are women and five are men), appeared to indicate that good professional relationships exist within the school.

5.4.4 Kwadori Higher Primary School

Situated in a semi-rural area about forty kilometers from an expansive metropolitan area, Kwadori Primary School has over 1,300 students and one administrator, the principal, who has served as an administrator since 1978. This school includes Sub-standard A to Standard 6, with students ranging in age from six to twenty. The 21 teachers are almost equally divided between women and men. Although the Chief Inspector for the district indicated that Kwadori is a "model" school with the best quality of education in his area, its physical appearance was a far cry from the white and Indian schools which had been observed.

Discussions with staff indicated their keen interest in assisting pupils. The pupils appeared enthusiastic because this was a "safe" school which had been relatively unaffected by political violence in the immediate vicinity. For some unknown reason, there seems to be an informal understanding that skirmishes would not occur close to the school. In fact, students from surrounding areas sometimes appear temporarily at Kwadori to escape the violence. Nevertheless, students are affected by the violence, as seen in their absenteeism, when they are forced to flee their homes and stay with relatives or reside temporarily in white areas.

The principal's major objective is to maintain quality education and the model atmosphere in which students consistently achieve the best primary examination results in the area, and to have select students become finalists in national academic and sports competitions. His other objectives include assisting an exemplary teaching staff and attempting to maintain a working relationship with the nine-member Parent Association. The Association is relatively inactive due to political disturbances which preclude night meetings, the time when parents are likely to be available. If these objectives are achieved, along with disciplined students, the principal asserts that he will be maintaining an effective school.

5.4.5 Mzabu Primary Shack School

In June 1991, Mzabu Primary opened its doors as a shack school to over 300 students in Standards 3, 4, and 5. Eight teachers, including a man who acts as the deputy principal attempt to address the educational needs of children who live in nearby shacks and in rural areas over 10 kilometers away -- a distance walked by over one-quarter of the students. The school buildings, constructed from pre-fabricated materials, have no electricity; one water tap is located near the outdoor toilets for the girls and women teachers. While these problems are daunting enough, the school's location in a war-zone makes this a highly irregular place for instruction. Teachers and students are regularly stopped by soldiers as they attempt to travel to school, thus often arriving over an hour late. Many male students are regularly required to participate in military camp activities by their parents (who want their homes to be safe) and by military leaders who want to maintain and enhance their strength. Female students, who are forced to participate in military camps, are often abused. Six are now pregnant because of sexual abuse in the camps. Tiny students (from a junior primary school in the vicinity) in pre-primary and Substandards A and B are transferred to Mzabu because extensive fighting makes it unsafe for their school to remain open.

The teachers state that they have very little, if any contact, with parents. Parent conferences and Parent-Teacher-Association activities rarely occur since most parents work constantly and/or they find it too unsafe to visit the school in late afternoon or early evening. When asked if any teachers aspire to administrative positions, they quickly responded negatively because schools lack resources and face enormous security concerns.

Essentially, students, parents, and teachers at this school are concerned with survival and coping mechanisms; students are often the victims of social and psychological trauma. Some students simply "disappear" since their one-room tin shacks are quickly disassembled as parents are forced to move for economic and security reasons. There are charts in the school entitled, "Look and Save a Life." The charts depict hand grenades, molotov cocktails, guns, and similar armaments. Hence, teaching and learning often become secondary to these more immediate concerns over physical and psychological survival.

5.4.6 Tswelelo Lower Primary School

In the midst of one of South Africa's largest African townships sits Tswelelo Lower Primary School. Upon entering the grounds, one is struck by the oasis in a desert of poverty. Well manicured lawns and flower gardens are located outside the principal's office and along the perimeter of the campus.

Teaching aids, books, and plants provide the decor for the principal's immaculate office. The principal's educational concerns for the 600 plus students in pre-primary to Standard two and the 17 women teaching staff are the focus of all of her comments.

At present, the school is part of an innovative teaching and curriculum project, Molteno, funded by an NGO. Innovative curricula for English and social sciences are integral components of teachers' pedagogical methods. To help Tswelelo teachers enhance their teaching skills and develop administrative competencies, the principal convened a number of Molteno curriculum workshops at Tswelelo and requested her staff to conduct several sessions. The principal's educational perspective requires that both teachers and students should learn and enhance their skills.

Since the principal is also a regional chair for the Molteno project, she has contact with professionals and organizations engaged in various creative, instructional, and fund-raising projects. For example, by working with an NGO, she obtained a grant from a large department store in the immediate metropolitan area to purchase textbooks. Therefore, each parent paid only R5 for textbooks for their children during that school year. She informed the local Management Council (appointed by the DET) and the PTA of this donation so local fund raising could be directed to other efforts.

In anticipation of future educational challenges under a post-apartheid government, the principal privately hired two white teachers (in 1989) to teach English. The presence of Whites provided an avenue for African and white teachers to relate as equals.

While there are many positive features about this school, the principal and the two department heads must confront problems created by a transient student body and the lack of fiscal resources. The teachers, assisted by the department heads and the principal, must make concerted efforts to accommodate the learning needs of many students who enter in the middle of the year and others who stay only a few months and leave. Some do not enter school until they are nine. Due to transience and the lack of educational readiness of many Tswelelo students, an experimental project in English readiness for Grade "0" is underway for five-year olds who would not otherwise be in school. The aim is to expose preschoolers to English before Substandard A where English is taught as a class.

Although external funds have been donated for school projects, the severe lack of fiscal resources has meant that the principal and some teachers use their personal financial resources to purchase teaching materials. Teachers' time is spent

constructing materials which could be used in class preparation and/or in direct instruction. And while parents are eager to send their children to this model school, their meager resources prevent them from contributing more than R30 to 40 a year for school fees and materials.

5.4.7 **Emanuel Primary and Secondary School**

As violence erupted throughout South Africa in 1976 largely in response to political conditions, Catholic schools reconsidered their discriminatory policies regarding school admissions. Their doors were then opened to all races. At the forefront of this change was Emanuel Primary and Secondary School. After considerable internal racial tensions, exacerbated by community pressures, students and teachers now participate in a pleasant and stimulating learning environment. Today, this school is viewed by the community and parents as one of the best in South Africa as evidenced by the fact that only one-half of the applicants for primary school can be accepted and that parents are willing to place their children on a lengthy waiting list. There is also a lengthy waiting list of teachers desiring positions at Emanuel. What accounts for the changes and the parents' desire to place their children at Emanuel?

One reason appears to be the direction set by the Board of Governors which articulated Christian principles for including students without racial or gender discrimination. Closely related to this was the extended, open debate and dialogue by the PTA and other interested educators. General school procedures, methods of engaging in intergroup activities, and extra-curricular activities were discussed in conjunction with a changing student body.

The headmaster for the overall school and the principals of the primary and secondary schools play key administrative roles. Setting the direction for change, working with teaching staff and students as problems surfaced, facilitating the instructional roles of teachers, sustaining and enhancing the learning environment for students, and communicating with parents are expected administrative roles.

Since the mid-1980s, Emanuel has accepted three-year olds in the pre-primary school so they can begin to acquire developmental skills. Four-year olds and five-year olds enter Grade "O" where they engage in extensive educational readiness programs. The junior primary school includes Grades one and two and Standard I, while the senior primary includes Standards II through V. Twelve women teachers instruct in pre-primary, 12 in junior primary, and 4 men and 17 women in senior primary. The non-racial (white, African, Indian, and coloured) staff is responsible for 180 pre-primary, 250 junior primary, and 370 senior primary students from all demographic backgrounds. About 40 percent of the current

student body is white, while 60 percent are from Indian, coloured, and African backgrounds.

The primary school principal is assisted by a deputy principal, who addresses curriculum and scheduling matters, department heads for senior and junior primary sections, and a superintendent for pre-primary. Discussions with these administrators and the teaching staff focused consistently on the learning needs of the children. Their use of curriculum materials, textbooks, audiovisual materials, computers, and other teaching aids were comparable to those observed in quality schools anywhere in the world. Open and structured classroom activities are undertaken as students, apparently oblivious to race, interact with teachers and other students. An effective school (with innovative administrators, quality teachers, and a stimulating learning environment) seems to be the norm.

5.5 CHALLENGES TO THE LOCAL SCHOOLS

While the preceding description highlighted the variety of conditions which administrators face in local schools, numerous interviews and site observations provided additional insights. Some of the more striking observations include:

- the effect of political conditions on administrative and school practices;
- the problems associated with the comprehensive integration of schools;
- the absence of adequate resources and provisions;
- the prevalence of incompetent principals when competent professionals are available;
- the lack of preparation before assuming the principalship; and
- the inability of students to participate in effective schools largely because of conditions resulting from the preceding factors.

5.5.1 Political Conditions

The conditions influencing Mzabu Primary Shack School highlight the extremely harsh effect of political violence on the ability of principals and students to participate in substantive educational activities. Survival is often the paramount concern. Although students may be physically present in such schools, teachers and others often comment about students' inability to

concentrate and their limited attention span. The shortened school hours also preclude a full day of teaching and learning.

In other cases, demonstrations and strikes limit the time available for schooling. There are numerous examples, particularly since 1976, in which schools have been closed, principals forced to leave, and teachers prevented from teaching. In various incidents, the violence resulted in principals and teachers being physically attacked in schools; their cars and houses burned; and intimidation by students. Principals and teachers are often perceived as the "symbols and agents" of the state and its oppressive, apartheid policies. So, principals, in particular, are attacked and intimidated.

In still other cases, political pressure from parents (in response to DEC and DET policies) impinge upon the principals' ability to carry out their role. Several educators stated that the development and implementation of admission (and retention) criteria for Model B schools required a complacent principal or one who is politically astute. For practical reasons, such as preventing the closing of a neighborhood school, parents opt for a Model B school. However, the criteria for school admission often prevent African children from entering; or they enter in small numbers. Principals may assume a compliant role if they are opposed to integration. Or, if principals support the creation of a nonracial student body, their astuteness is necessary to have local Management Councils develop flexible admission criteria, whether in a white school or in an Indian school. If a school is private, such as Emanuel, the principal and deputy principal must often lobby parents so they understand the positive aspects of school integration.

5.5.2 School Desegregation

Several interviewees stated that no major problems occurred or would occur from integration. To integrate schools properly, however, very deliberate administrative actions must be taken regarding students' learning needs, teachers' and administrators' ability to communicate with a variety of students, rapport and interactions among students and teachers, and the presence of a multi-racial professional staff. For example, at Alton Primary School, students must be within two years of the normal age for any given standard. Several African children were unable to remain at Alton because they did not meet this criterion. The administrative issue for the principal is to ascertain what kind of developmental and support mechanisms could help students achieve at a normal rate. Even with the best of intentions, administrators and staff may simply need assistance from academic and managerial inspectors, who may also be ill-prepared to deal with diverse student needs.

5.5.3 School Resources

Deteriorating physical conditions of buildings and insufficient classroom facilities are symptomatic of inadequate financial resources at numerous coloured, Indian, African, rural, and shack schools. At Brown and Tswelelo, as stated earlier, teachers made special efforts to develop teaching and learning materials since resources were not available to purchase them. In other schools, teachers did not make instructional aids, and consequently students were deprived of such stimuli.

Perhaps talented students might be able to grasp ideas in the absence of instructional resources. For those with average ability or special learning needs, the lack of financial resources for materials and other stimuli is an acute problem. At Brown, for example, despite the tremendous efforts of three special education teachers, the students were not developing skills which would enable them to be self-sufficient adults. One special education teacher stated that she would like to expose her students to a variety of learning and vocational opportunities. Instead this was virtually impossible because insufficient funds are allocated to coloured schools for special needs. In many African schools, there are virtually no provisions for students with special learning needs.

5.5.4 Redress

As observed at Brown School, there was a readily noticeable absence of criteria and mechanisms to ensure that competent professionals, regardless of gender, occupy administrative positions. At this site and throughout the nation, women are under-represented in principalships despite their skills and competencies. Instead, teachers and students must manage with formal and informal norms which place incompetent men from a variety of demographic backgrounds in administrative roles. Educational redress should include gender as well as geographic representation.

5.5.5 Administrative Preparation

In numerous discussions with principals and other administrators, only one stated that he felt qualified administratively when he assumed the principalship. This principal taught for several years in public schools before spending ten years on the faculty of a college of education where he taught, supervised student teachers, and assisted senior college administrators. He then became a principal, albeit certainly not via a typical route. At Indian and coloured schools, principals often serve as a deputy principal or department head before assuming the principalship. At African schools in urban areas, this was also a fairly common practice until the mid to late 1970s, when principals were thrust into their roles because political demonstrations and resulting

activities forced their predecessors to resign. In rural and shack schools, teachers are literally thrust into principalships without adequate training.

In the majority of cases, principals have no formal training in budgeting, planning, instructional leadership, staff development, or similar administrative functions. Although education in management training is urgently needed, there are no current academic training programs that offer diplomas or degrees in administration or management. Colleges have often viewed courses in management as mechanisms to support apartheid because principals, inspectors, and directors were often seen as political functionaries who implemented segregationist policies.

Added to the daily logistics of educational management for ill-prepared principals are the multiple issues that surface in dealing with a racially mixed student body. As mentioned earlier, even principals with a commitment to integration encounter substantial administrative and transitional problems in schools undergoing desegregation. Consequently, seasoned administrators have new roles and challenges confronting them, roles that are as diverse as the populations they will serve.

5.5.6 Effective Schools

In discussing an effective school, one senior principal stated the following:

> How the principal perceives his or her roles is crucial. I see myself in a positive "parental" role for students and teachers. The principal is a teacher-upgrader, and does this in a non-threatening way. She must help develop common purposes in schools. The principal works for students and staff.

A second educator stated that an effective school is one where "learning is occurring in a non-authoritarian environment. The students and teachers are happy to be there. And the principal sets up an environment where teachers have professional support." A third educator stated that an effective school could be gauged by the amount of student learning (particularly those from disadvantaged backgrounds), satisfaction or purposefulness to students, the examination results, the atmosphere in the schools, the relationship between staff and students, the ability of the students and staff to arrive on time and spend a complete day in school, and quality relations between the school and community. Maintaining the appropriate blend of discipline and respect for the school's authority in light of external political pressure is part of an administrator's role in an effective school. Analyzing any of these criteria, it is apparent that effective schools are not the norm. All concur, however, that the principal plays a pivotal role in the effective school.

5.6 POLICY CONSIDERATIONS AND OPTIONS

5.6.1 Principles and Policies for a Unitary System

While there is wide-spread discussion and general agreement about the necessity for a unitary system, differences of opinion exist over the philosophical bases for a new system; the processes or mechanisms for achieving a unitary department; and the rationales and descriptions of functions and purposes at the national, regional, and district or local level.

"Democratic," "nonracial," and "nonsexist" are the terms immediately stated when interviewees are asked, "what should be the overarching policies or principles for a unitary education school system?" When asked to elaborate or provide working examples of these terms, respondents answered with difficulty. In fact, senior officials from the South African Democratic Teachers Union (SADTU), and the ANC stated that a major purpose of the Patriotic Front Conference on Education was to wrestle with such issues. Moreover, they stated that the Joint Working Group on Education struggled with the principles which should be the foundation for a unitary system. "We need input and assistance from professionals like you" was one response.

Considerable debate abounds regarding the concepts of culture and multiculture, "terms that are quite suspect in the South African context," stated a leading educational researcher and former executive in the DET. One argument centers on the view that culture and multiculture are synonymous with race; that is, these terms are subterfuges for racial diversity which will perpetuate apartheid and discrimination. One senior college of education executive stated, "Multiculturalism is a smokescreen for race and discrimination. Instead there should be a fusion or melting pot of cultures." Until recently, the South African Government discussed educational policy in terms of cultural and linguistic distinctions, an approach implying that Africans, Indians, and Coloureds would not be able to participate equally in a unitary school system.

Based upon their experiences in working with multiracial South African student bodies and the practices and research of other nations in school desegregation, others assert that multiculturalism means a fusion of cultures with recognitions of the distinctive attributes of various cultures. Thus, one executive at an African college of education declared, "I prefer the term multicultural instead of nonracial. After all, what does nonracial mean...the absence of a skin color?"

Several education leaders stated that students' ability to understand and be facile in the symbols of various cultural milieux empowers them within South Africa and the international

arena. The blending or fusion of cultures into a common core can contribute to an ethos where students will perceive themselves as "South African." Developing a common citizenship based upon shared cultural views and democratic values (for example, equality, respect, participation, and fair representation) would become guiding principles. In essence, these supporters of multiculturalism within a unitary system contend that the common culture would be the foundation for a national identity -- the glue that binds the society together. In the short and intermediate ranges, diversity would be downplayed. Much of the disagreement over multiculturalism appears to be semantic, based upon how terms are used by the South African Government rather than on a fundamental disagreement on the concepts which can bind South Africans.

5.6.2 Functions of National, Regional, and Local Structures

During various forums, it will be crucial for sustained dialogue to occur regarding the underlying principles and rationale for centralized and decentralized educational structures and functions. A senior official at the Urban Foundation asserted that "centralization and decentralization are not a zero sum game." The crucial issue is to identify a sound rationale for organizing central and decentralized structures and functions. This view is echoed by other South African educators and policy researchers (as well as in the scholarly literature). Centralization often focuses on those responsibilities of the state or national government which affect all people regardless of location. Discussions of decentralization often focus on the devolution of authority and control to a regional and/or local level. What authority and what kinds of control should be devolved?

Overarching policy issues are functions of central government; broad operations and some policy formulation occur at the regional level; and daily operations and logistics with modest policy development are the functions of local or district school systems. Hence the top-down policies of a national education department, which specify daily school practices, should be devolved to the local, or perhaps regional level. Ensuring that comprehensive policies for the equitable distribution of resources and means to redress imbalances should be the centralized functions of a national ministry. Program or school specific monitoring and compliance best occurs at the regional, and in some instances, at the district or local level.

Some policy researchers, former executives in the DET and DECs, and officials in NGOs and political organizations do not believe that issues of centralization and decentralization can be addressed completely by educators. Instead, constitutional and legal processes must come into play so the proper balance between

central and decentralized structures and functions will become a reality in a unitary system. As one stated,

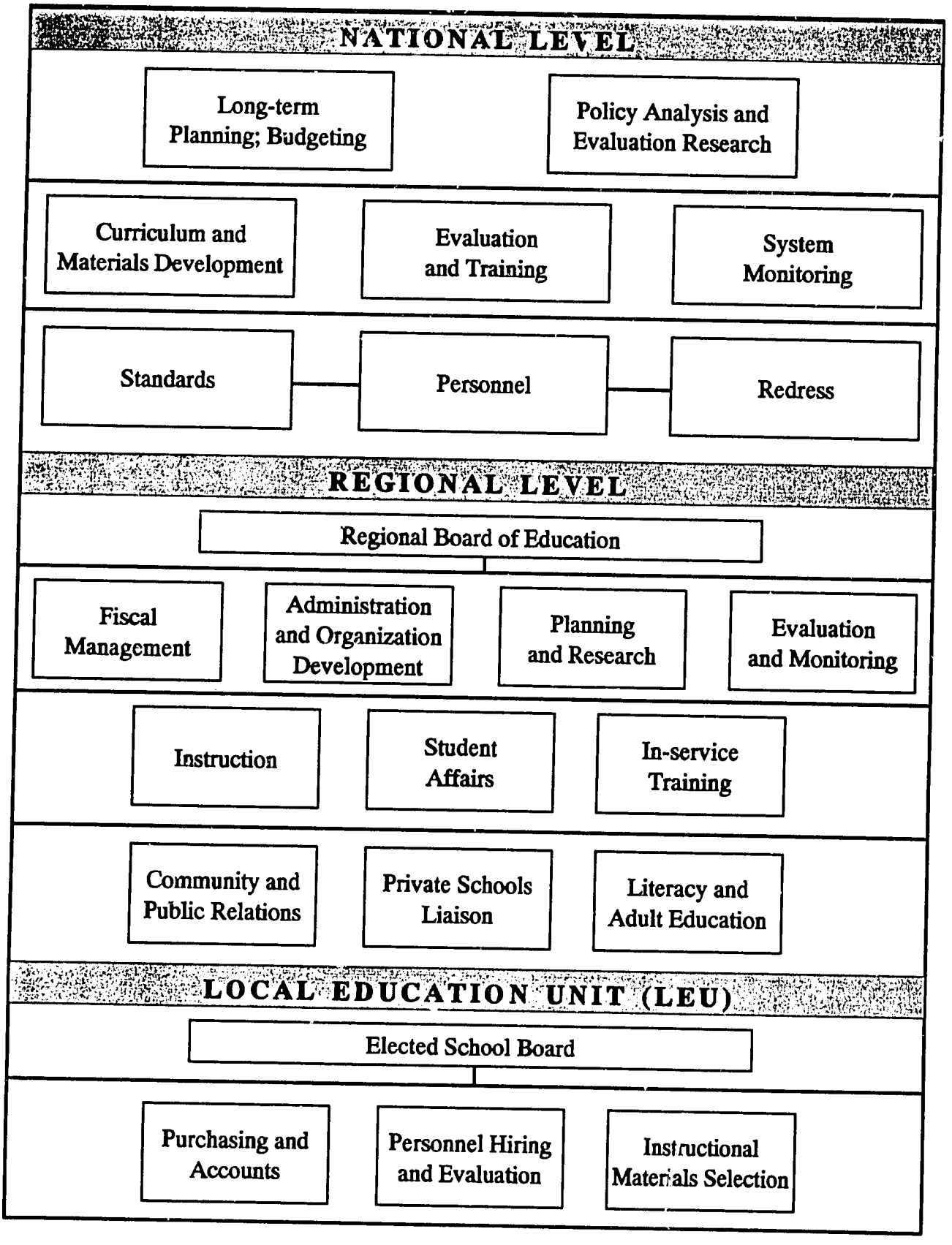
> A change in the Constitution is necessary to change the racial structure of schools. To change the structure of education before this process is to move prematurely. It will then be necessary to introduce legislative and administrative requirements to alter the racial basis.

5.7 NEW ADMINISTRATIVE AND MANAGERIAL STRUCTURES AND FUNCTIONS

Figure 10 depicts an organizational option for administrative structures and functions at the national, regional, and district or local levels. The precise names of offices, departments, bureaus, units, and their internal structures will be determined by South Africans. The ensuing discussion of the components listed in this figure provides an initial response to questions such as "What structures and functions should be located at the national, regional, or local levels? How might the new administrative structure(s) for education administration be organized? And what policies and programs could be implemented to facilitate the role of the individual administrator in moving toward a unitary education system?

FIGURE 10

Organizational Option: Functional Management Roles by System Level



5.7.1 National Level

Discussions with a range of policy-makers and researchers suggest the following functions for a national department for primary and secondary education in a unitary system:

- disbursing fiscal resources in an equitable manner;
- ensuring that the educational infrastructure and professional standards are maintained;
- developing national curriculum and examinations;
- redressing issues of discrimination based on demographic characteristics or gender; and
- conducting applied research and policy studies.

Monitoring overall compliance in these several areas would also be central functions of the department.

The respective offices would be responsible for liaison with other national departments which influence education. For example, policies in the Department of Health and Welfare and Department of Manpower often directly affect education. The Department of National Education would also have responsibility for communication with international and multi-national organizations and ministries of education in other countries. In essence, macro level educational issues would be the hallmark of a national department.

A national board or council of education with representation from professional education organizations (such as teachers and principals, parent and community groups, organizations that prepare professional educators) could have general oversight for the Department of Education. Representatives from the various education regions, a group which must include women, should be part of this body.

5.7.2 Regional Level

In an effort to avoid concentration at a central, bureaucratic level and to provide efficient administrative direction and effective responses to school needs in a geographical region, the regional departments of education would assume some roles and responsibilities formerly held by the national department. "The functions of regional departments may be viewed in innovative terms that reflect school needs and practices," asserted a senior researcher and former DET executive rather than in terms that continue linkages to current structures and roles. Based upon

the discussions in sections 5.5.2 and 5.5.3 (and further elaboration in sections 5.5 and 5.6), the regional departments may have offices or departments concerned with the functions of

- fiscal management
- teachers and pedagogy
- student affairs
- literacy and adult education
- administration and organizational development
- evaluation and monitoring
- planning and research, and
- community and public relations.

Given the nature of these functions, close cooperative linkages would need to be established among the several offices.

A major concern of local administrators and political leaders at present is the lack of opportunity to exercise fiscal and budget management at the regional and local levels.

1. An <u>office of fiscal affairs</u> could focus on disbursements to local school districts, capital for construction, budget auditing, and budget development.

2. An <u>office of instruction</u> could be concerned with teacher certification, in-service education to upgrade teaching skills, evaluation of lead teachers in conjunction with district input and a redefined role for academic inspectors, appointments of teachers -- especially in particular skill categories such as special education, redress of discriminatory practices, and liaison with regional teacher organizations.

3. An <u>office of student affairs</u> could administer examinations, facilitate the entrance to schools of rural youth who have never had access, address the needs of marginalized and traumatized students, develop means to help retain students, and administer social and psychological services. Some youth with limited skills will drop-out of school at the upper primary and secondary levels and could benefit by a literacy and adult education office concerned with alternative education programs, non-formal education, or vocational education.

Numerous problems associated with the administrative and managerial structures and the roles of individual principals and inspectors were discussed in sections 5.2, 5.3, and 5.4. Unanimous agreement was expressed about the vital role that principals, inspectors, and other administrators play in developing effective school and department administration.

4. An office of administration and organizational development could address a range of administrative issues such as evaluation of administrators (perhaps through councils and management inspectors); administrative training in conjunction with colleges, universities and NGOs; organizational development for schools and the department; cooperative arrangements with district education officials in the assignment of principals and inspectors to areas in need of administrative leadership; and assessments and development of alternative managerial structures and practices.

5. An office of school evaluation and monitoring could work cooperatively with the office of teachers and pedagogy and administration and organizational development. The main task of this office would be the assessment of overall school structures and programs, academic subject input and evaluation, and curriculum modifications based on formative and summative evaluations.

6. An office of planning and research would address the range of educational issues; several are stated in the preceding paragraphs. In addition, this office would address planning and research needs such as school mapping that are defined by local regional education authorities.

7. Finally, an office of community and public relations would serve as a liaison with community and civic groups, parent organizations, student organizations, and business groups via cooperative relations with other departments.

A regional director of education would report to a regional board/council of education and to the director of education at the national level. As a senior policy researcher and former DET executive stated, "regional departments of education must be concerned with maintaining professional standards of education and responsiveness to geographical needs." Hence the regional department and the director might have dual reporting roles.

Incorporating representatives from various organizations and groups would help ensure democratic participation on a regional board/council of education. Groups similar to those mentioned for a national board would be included at the regional level. The precise roles for this regional board/council should be developed by South Africans. Among this board's tasks might be the appointment of the regional director and other senior personnel, review of fiscal affairs, counsel on regional

policies, and liaison with other urban or rural bodies with overlapping concerns.

5.7.3 **Local**

A major function of local education units (LEU) or districts and the individual schools therein is management of daily operations and logistics. At the school level, administration would include budget authority, school management and leadership, supervisory responsibility for staff, relations with parent-teacher-student associations, and generation of external funds. Schools grouped into LEUs or districts would help promote the efficient use of facilities for common purposes, facilitate the transfer from primary to secondary school or from one school to another within the district, appoint professional staff, address the types or academic concentration of schools (such as a vocational, science, or special education sites), provide professional training and evaluation, respond to community specific educational needs, and disburse and review budgets.

The LEU or district would comprise primary and secondary schools within a sub-area of the geographic region. At this level, considerable input could be made via a locally elected school council/board. For example, this local board could appoint teaching staff and work cooperatively with the regional level in the appointment of administrators such as the LEU director or superintendent and principals. Again, it would be incumbent upon South Africans to define other roles and parameters for this local board. A fundamental consideration, however, would be to address means for local decision-making, autonomy, accountability, and control through a democratic process.

5.8 ALTERNATIVE AND NEW ROLES FOR ADMINISTRATORS

As new administrative structures and functions are defined by South Africans, so will be new roles and responsibilities for principals, inspectors, and other select administrators. Working with students, teachers, and professionals from various demographic and linguistic backgrounds will likely be a new experience for many administrators. As one principal stated, "After four decades of stringent apartheid, principals and teachers are uncomfortable with changes, with transformation. If administrators are uncomfortable, so will be teachers." A new task for principals will be that of creating racial harmony. Building the confidence of teachers to work with diverse students and teachers would be part of the administrator's repertoire of skills.

For administrators from all demographic backgrounds, but especially Whites, some transfers will be necessary to rural

schools and regions or to those with large African student bodies. Functioning effectively in a different milieu will be a new role that may be enhanced by incentives. A former Secretary of Education for a self-governing territory asserts that administrative expercise may be channeled into rural areas by providing incentives to administrators. Housing allowances and temporary salary increments may be sufficient enticements.

For many white administrators, especially those from the DECs or DET, it may be difficult initially to assume a subservient staff role in relation to African and coloured senior administrators. And for some men, it will also be troublesome to work for women supervisors.

5.8.1 Options for Redress

As noted in sections 5.2 and 5.3, less than 15 percent of the inspectors are women; and fewer than 5 percent of the management or supervisory administrative positions are held by women. Senior executive positions are dominated by white males. What might be done to change this portrait? American, Canadian, and English research is replete with conceptual perspectives and programs regarding affirmative action as a primary means to redress inequities produced by de jure and de facto policies and practices. The literature indicates that equal access to positions, equal chances of being able to perform in the work environment, and equal opportunity to initiate and manage program outcomes are crucial variables. This literature also examines other issues which are central to the changes facing South Africa.

A first strategy may be the convening of workshops, forums, and conferences (such as those convened by SADTU and other teacher organizations) to discuss and document the extent of the problem and to explore reasons for the problem. When women and under-represented groups are in administrative positions, they are primarily concentrated at entry level, rather than senior level, positions. As noted earlier, the overwhelming majority of women administrators are primary school principals. One principal stated "In my experience, women teachers who have children seem to be better teachers than those who do not have children. It is important that married women continue to work with young children." With some frequency one also hears that Africans and Coloureds are not in various administrative positions because they are not qualified, despite the fact that they may have credentials and experience comparable to white males.

A second strategy is to define the criteria and rationale for policies of redress and associated programs. Fundamental questions include:

- What basic qualifications are needed to perform effectively in a particular position?
- What demographic criteria (such as urban or rural, geographical area, ethnicity, or gender) represent spheres for redress in particular posts?
- What is the geographical catchment area for which concerted efforts should be made to identify candidates?
- Over what period of time will policies and programs be implemented?
- What incentives and compliance mechanisms will be instituted?

In reference to question two, for example, women may constitute 60 percent of principals in rural primary schools in a particular geographical region, yet represent only 5 percent of secondary urban principals in that same area. In such cases, policies of redress might be focused at the secondary school level. In other instances, administrators will simply not hire members of some demographic groups and women. In such instances compliance mechanisms based on legislation and national department policies would need to be initiated, particularly at the national (and in some instances regional) level.

A third strategy is the identification of a pool of capable women and individuals from under-represented groups. This might include department heads and lead teachers as potential principals. Equally significant may be the identification of classroom teachers who have indicated an interest in moving into administration or those who have demonstrated leadership skills as shown, for example, by holding office in professional organizations. Within the DEC (Indian), there are approximately 25 to 30 women who are academic subject inspectors. From this pool, management inspectors could be identified. Regardless of the pool, an understanding of administrative structures and organizational dynamics will be needed by new administrators and veterans as part of effective programs of redress.

5.8.2 Administrative Training and Organizational Development

A former secretary of education asserts that "a serious commitment of funds for organizational development and training is necessary" if administrators are to function effectively in a unitary system. Without comprehensive organizational development, individual managers will simply continue to function in their usual fashion. From April 1990 to March 1991, the DEC (Indian) spent approximately R41,682 on training (less than .005 percent of its budget). Within the DET, over 1,700 staff

participated in administrative and management training in 1990 and nearly 1500 participated in 1989. The various funds for training from all current education departments could be pooled. Part of the projected R500 million (over a five-year period) of the Private Sector Initiative (funded largely by international corporations and groups) could be used for organizational development and administrative training.

According to several South African policy-makers and educators, a major problem, however, is the lack of legitimacy of management and training courses offered by the educational bureaucracy. After all, "many current educational bureaucrats have willingly or unwillingly contributed to apartheid," stated an executive from a college of education. Instead, comprehensive organizational development and training will need to be offered cooperatively with NGOs or colleges and universities. Professionals in several NGOs, and universities have administrative experience and have undertaken research in other nations which could be applicable to the South African setting.

Organizational development could be undertaken in several ways. One could involve the identification of administrators who will immediately be interacting with professionals and students from various demographic backgrounds. Another would be to identify administrators, department heads, and senior teachers within a school district. Women and under-represented groups could also participate and prepare for administrative positions. The purposes of this organizational development could include:

- creating and maintaining effective communication;
- working with people from different backgrounds;
- developing an "esprit de corps;"
- resolving crises via dialogue and negotiation; and
- understanding and developing a range of practical administrative skills such as planning, budgeting, evaluating, and delegating.

A culture of management, in short, would be the goal and could later become an integral function of an office of administration and organizational development within regional departments of education.

Some programs from the American Desegregation Assistance Centers regarding organizational development and transitional mechanisms could be applicable in South Africa. These centers were funded by the U.S. Department of Education (and often placed in universities or other educational organizations) to help states and school districts address desegregation from the 1960s to the

present. American, federally-funded, educational laboratories, such as the Northwest Laboratory in California or the Southwest Laboratory in Texas, conducted applied research and assisted states in various geographical regions with training and development as desegregation was initiated and as follow-up problems emerged. Programs offered by American colleges in tandem with state Regional Education Service Areas (RESAs) provide another illustration of how assistance on organizational development and administrative training can be accomplished. Based upon an assessment of local needs or a request by a school district, RESAs within the state of Georgia, for instance, provide assistance (often with university input) based upon a needs assessment or a request by a school district.

A second mechanism for administrative training and management is short-term interventions which address immediate problems -- supervision and negotiation, crisis management, and instructional leadership. Cooperative relations with successful schools could be established. (Some have been undertaken, for example, by the South African Democratic Teachers Union - SADTU.) It was generally acknowledged that the principals at Tswelelo and Emanuel were successful principals in effective schools. Hence new administrators, or those in a transitional phase, could be paired with successful principals for short periods or enter short-term practica supervised by especially effective principals.

A third mechanism focuses on the distinct contributions of tertiary level training institutions. These could include offering in-service courses for administrators within a school district or region. Further Diplomas in Education (FDE) in targeted areas, such as educational administration or teaching administration, could provide an integrated training solution for current and future administrators. The longest pay-off may be via regular diplomas or degrees in educational administration. For example, the University of Witwatersrand is exploring plans to offer a B.Ed. and an M.Ed. in administration. The B.Ed. would be designed for current principals who need a practice-oriented program in administration, while the M.Ed. would focus on policy and research development in administration. The B.Ed. is being discussed in conjunction with Bristol University in England. Cooperative degrees with universities in other nations or what some American universities call "sandwich" master's degrees provide innovative possibilities. In a sandwich program, students could take their course work at an American university and complete their research project or thesis in their home country. The University of Maryland, University of Massachusetts, and Virginia Polytechnic University are known for their cooperative degree arrangements with other nations.

5.8.3 **Mechanisms for Accountability**

As new structures are implemented, new administrative roles are undertaken, and organizational development for new structures and roles are understood, strategies must also be developed for ensuring administrative accountability. Administrative accountability includes responsiveness to the education bureaucracy and to parents and the community. Both types of accountability must be balanced with the need for maintaining professional education standards. Hence, different types of accountability reside at the district or LEU, the regional, and the national levels.

To ensure democratic participation in assessing accountability, the local PTA (with input through the Student Representative Council) or PTSA, could work cooperatively with the elected local school council/board in the evaluation of principals. Several areas of responsibility (listed in section 5.5.3 and 5.5.4) and others could be developed by the PTA and the LEU superintendent. Several principals stated that input from teachers could be garnered from an evaluation instrument or from systematic input to the school council/board. Informal and haphazard evaluation of principals would not be conducive to sound methods of providing feedback. Given the need to assign or reassign principals throughout a district and in some cases the region, local evaluation may be coupled with that at the district or regional level. The purposes of such assessments would be to provide feedback on areas of job performance needing improvement, and, in some instances, to transfer or terminate administrators.

At the local and regional levels, the locally elected school board/council and regional board of education (with representatives from various groups and organizations) should work cooperatively in assessing the superintendent or director of the LEU. Similar procedures would be in place for cooperative arrangements regarding the assessment of regional directors of education.

5.9 OPTIONS, POLICY RESEARCH, AND STRATEGIC MATTERS: A SUMMARY

As a result of a review of the literature on administration, in-depth discussions with South Africans, and observations at education sites, a number of likely issues have been identified that will emerge in the post-apartheid period. The issues are summarized in terms of immediate, intermediate, and long-range strategic options and policy research with the goals of helping to ensure that administrative structures and managerial roles will contribute to effective schools for all students in a unitary system.

The proposed Patriotic Front Conference on Education and the national Forum on Education will provide the venues for a dialogue on a host of educational issues, including those regarding educational structures and administration, an area barely touched upon in many previous forums. Reaching working consensus and then moving toward actual plans to implement change will be an immediate priority of these conferences and several others scheduled during the next year.

Central to these discussions will be several immediate issues such as administrative procedures to distribute equitably fiscal and human resources, to address instructional and learning needs, and to provide quality school facilities. As these immediate issues are addressed, others will also require consideration. Several critical ones identified in the previous sections include:

- organizational development and administrative training;
- cooperative input from international organizations and professionals;
- redress of inequities;
- accountability and evaluation;
- school boards or councils; and
- applied and policy research.

Organizational development and administrative training at the school district, regional, and national levels can help create a climate of management which should increase the prospects for effective schools and efficient bureaucratic structures. The range of management functions (for example, planning, budgeting, evaluating) along with the development of leadership skills to enhance intergroup dynamics are crucial aspects of organizational development. In addition, the continuation and implementation of short-term measures via workshops and courses will be necessary to handle immediate problems such as crisis management. Cooperative practica and diploma or degree programs arranged between successful South African schools and international colleges and universities can be explored in an immediate and intermediate timeframe.

Given the massive problems associated with the consolidation of fifteen departments into a single one, selective input from professionals who have worked with school consolidation and desegregation in other African nations and abroad might result in innovative ideas for the consolidation of departments. These activities could help clarify South Africans' concepts of centralized and decentralized educational functions and

structures. Based upon consolidation procedures in other countries, task forces (with broad representation from a variety of constituents) could work closely on structural alternatives for a new system.

Ensuring that the cadre of administrators represent geographical, regional, and gender diversity in a unitary system is an immediate and intermediate concern. Identifying the pools of prospective personnel and providing viable training options and mentoring are means for moving under-represented groups into administrative positions. Specific policies for redressing inequities and subsequent monitoring and compliance would need to be developed.

In this section, redress has focused primarily on matters pertaining to professionals. However, it will be vital for policy-makers to consider redressing vast inequities in educational provisions for students regardless of locale. In the immediate and intermediate timeframe, special-case students should not be overlooked, namely those with particular instructional and learning needs (for example, learning disabilities, behavioral disorders due to psychological trauma or physiological conditions, and auditory or visual impairments).

Requiring administrative accountability through evaluation is one mechanism to judge leadership and to collect input responsibly from principals, inspectors, and directors of local and regional school districts. Structured instruments, developed cooperatively between administrators and school councils and boards, would be one practical way of gathering input fairly. As administrators are evaluated and school programs are assessed on various measures, it will be crucial for students, parents, and the community to recognize and acknowledge the authority and autonomy that administrators should have in order to function effectively on a daily basis. Accountability, authority, and autonomy should be balanced.

Democratic input into the educational process is an immediate and long-range matter. The key immediate issue is developing sound mechanisms for parental, professional, and student input. The establishment or alteration of school boards and councils at the local, regional, and national level is one viable means for garnering input and participation. Within individual schools, an elected PTA, or other forms of representation as desired by the constituents of a PTSA, could provide the initial level for input.

Finally, the significance of applied policy research is vital in the intermediate and long-range periods. Applied and evaluative research can explore the consequences of new administrative structures and roles, organizational development and management training, interracial dynamics in educational settings. Policy

research could focus on redress and equity throughout the education system (rather than that on individuals per se); the qualitative differences in schooling as observed in magnet schools which cater to middle class, affluent, and exceptional students; and comparative studies (such as the recent decentralization in Australia and England) in relation to decentralization in South Africa.

Endnote

Several caveats should be kept in mind with particular reference to administration since this is relatively unexplored terrain in South Africa. First, no documents were available that provided comprehensive portraits of the different types of administrative positions (for example, principals, inspectors, circuit inspectors, inspectors, superintendents, etc.), demographic profiles of administrators, types of managerial training, and expenditures on administrative training, and organizational structures.

Second, there is some skepticism about American and international consultants, in conjunction with South African educators, being able to assess quickly the multiple political, economic and socio-cultural features influencing education administration.

Third, in this regard, some individuals were reluctant to talk openly with American educators in light of political factors such as the United States' imposition of sanctions and, for others, the lifting of sanctions.

Fourth, while a host of individuals were consulted, time constraints precluded travel to some parts of South Africa to elicit input from individuals regarding education administration.

And fifth, since this assessment concentrates on formal educational structures and schools, the range of primary education programs funded and administered by NGOs are not included in this study.

CHAPTER SIX

CURRICULUM TRANSFORMATION

6.0 OVERVIEW

In South Africa under apartheid, the curriculum development process has been bureaucratic, secretive, and highly authoritarian. It has been dominated by the DEC (HoA), which is only one of fifteen departments of education. There is little participation by other racial groups, and the curriculum is only marginally influenced by the views and needs of those communities it is meant to serve. No explicit and systematic use is made of professional psychologists, sociologists, language experts, and others who should normally enrich the curriculum design process.

Consequently, the curriculum lacks legitimacy in the perception of those for whom it is prescribed. It has a narrow focus, is outdated, and fails to reflect the wealth of professional expertise which exists in the country. It also creates many obstacles for effective teaching and learning, as well as having poor linkage with the real-life situations of most learners.

The state of curriculum development in South Africa results directly from education policies designed to promote white domination, and to constrain the social mobility of other racial groups. These policies have been part of the general social and economic framework created for institutionalizing the ideology of apartheid. As the country moves towards a more democratic and egalitarian society, the transformation of institutions which have underpinned apartheid will be a central challenge.

Against this background, curriculum transformation in South Africa entails more than correcting technical lapses, improving professional competence, and regularizing procedures. Political bargaining will need to be influenced in positive ways, forces engaged in ameliorating the adverse effects of the old system will need to be strengthened, and safeguards will need to be developed to protect evolving democratic structures and procedures. It is important to understand the technical gaps and professional shortcomings of the existing curriculum development process. Equally so, the possibilities for change should be properly understood, just as the limitations on change need to be appreciated. The interplay of historical legacies and current democratic forces needs to be properly analyzed as a basis for determining change strategies.

6.1 PERSPECTIVES ON CHANGE

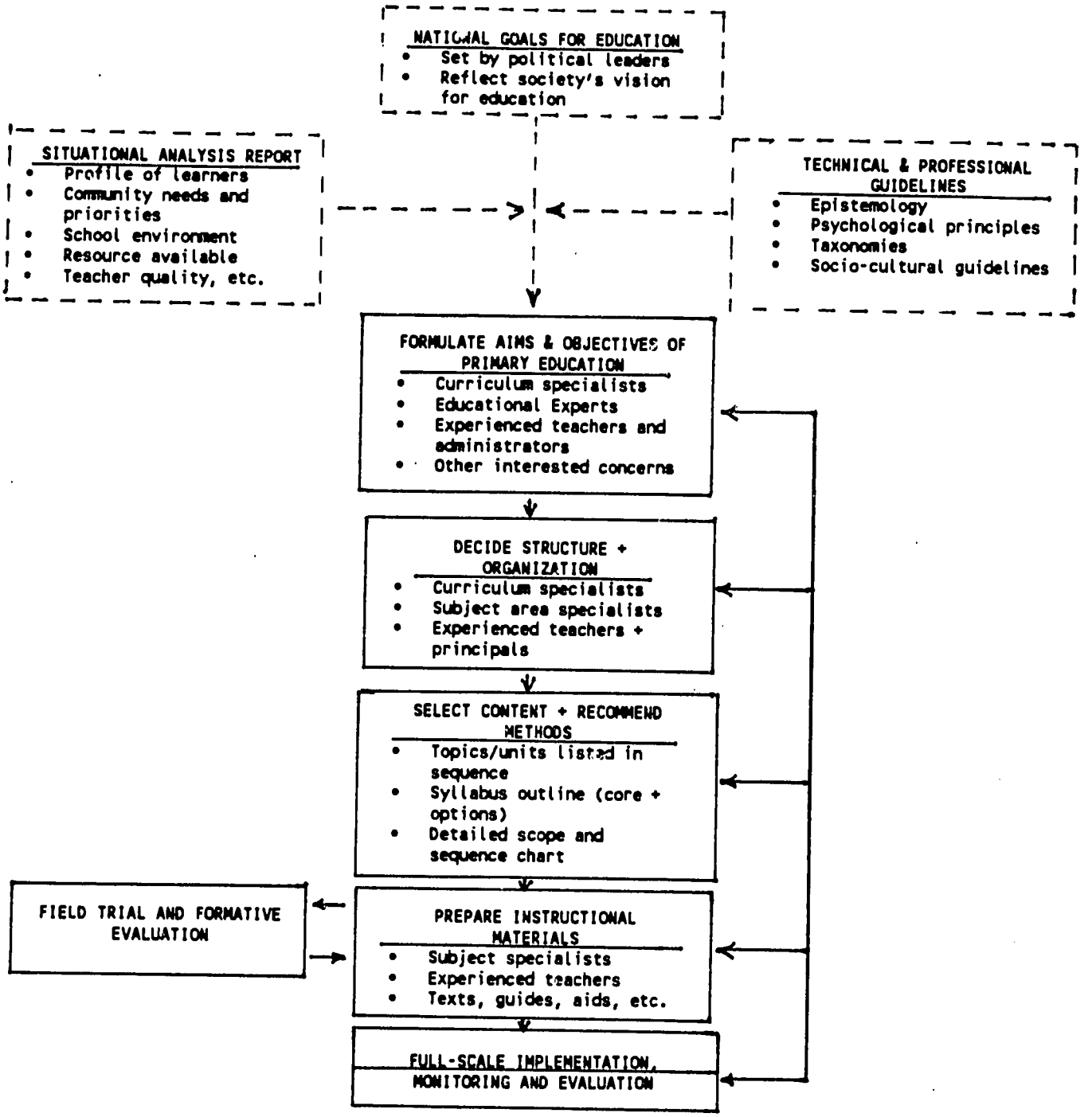
In most societies, education can be a major force in promoting social mobility, as well as an instrument for restricting such progress. Hence the curriculum has great influence on the life-chances of individuals, the prospects of communities, and the way in which a nation develops. Political controversy over education frequently centers on the design and control of the curriculum. This involves questions of what learning experiences should be offered; who should have access to such opportunities; how such experiences should be structured, organized and delivered; what resources should be made available, and who should make key decisions in all these matters. Because of this, curriculum change can be an emotive enterprise, laden with political implications for a wide range of stakeholders. At the same time it is an enterprise which requires substantial technical expertise and sound professional judgement. In a democratic, egalitarian society, curriculum change invariably involves trade-offs, bargaining, conflict management, consensus building, and compromise. In this regard, it is essential to have a shared understanding of what is involved in a curriculum process, so that protagonists can "speak the same language" while engaged in the negotiation process. Although there is considerable debate and a growing literature in South Africa on curriculum issues, the decades of apartheid prevented most educators from having experience in a national curriculum development process.

6.1.1 Curriculum Design and the Change Process

There are numerous variations of the stages in what can be termed the classic curriculum design process. The version shown in Figure 11 is fairly comprehensive, and the main stages involved can be summarized briefly in terms of what happens in an ideal or "clean slate situation."

FIGURE 11

IDEALIZED CURRICULUM DESIGN PROCESS



In attempting to develop a new national curriculum, countries throughout the world have followed some variation of the process shown in Figure 11. However, there is nothing sacrosanct about this process. It is not imperative, for instance, to start at the top and end at the bottom, since curriculum change need not involve all the stages of the process. Similarly, it is not always necessary to keep to strict input requirements. For instance, extracts from presidential or ministerial speeches may be acceptable as national goals in some societies, but in a society like South Africa, with great differences between interest groups, it is essential to have a clearly articulated and agreed upon set of national goals for education.

Ultimately, the greatest value of the idealized process is that it provides a framework for thinking more systematically about the curriculum as a holistic and dynamic entity. It draws attention to the wide range of political, social and professional inputs that may be necessary to produce a relevant, acceptable, and efficient curriculum of high quality. It lays out a logical sequence of steps through which the curriculum can be developed over time. It also helps to define expectations and set standards regarding the output of the curriculum design process.

Against these positive characteristics, the idealized process can be time consuming and intensive in its use of professional expertise. In countries with limited curriculum development capacity, this process can take over three years to get a new curriculum into the schools. Throughout this period, valuable professional expertise may be tied up too long. Moreover, when the process is concentrated at the central level, much slippage can occur by the time a national curriculum reaches the local level, so that it is no longer in tune with a fast-changing situation.

In situations where there are serious time constraints, it is possible to develop curricula in "slices". In South Africa, this might mean dealing first with high priority areas such as the sciences, or controversial subjects such as history and geography can be dealt with under a social studies, humanities or development studies project. In a highly decentralized education system, it is possible to concentrate curriculum development at the regional level, using education goals and broad guidelines agreed upon at the national level. This might not be an appropriate strategy for a country like South Africa, which is moving from a fragmented and segregated society to a unified and democratic society. It is also possible to deal with curriculum development at the school and local district level. This, however, requires that curriculum expertise be available at this level throughout the country. Otherwise serious curriculum-related inequities may be perpetuated. This approach also makes it difficult to talk of a national curriculum. Whatever strategies are adopted in South Africa, the process of curriculum

transformation is not a purely technical-professional matter of rational bureaucratic principles. It has to be understood in the context of apartheid legacies, progressive aspirations, and the current scope for change in the education system.

6.2 HISTORICAL LEGACIES AND CURRENT PRACTICES

Educational changes in South Africa are inextricably linked to the ideology of apartheid and the constant struggle that has been mounted against it over the years. The way in which these changes have unfolded accounts for the climate which characterizes the current education debate and negotiations focused on a single unified system. In turn, this climate has implications for curriculum transformation in terms of what is feasible, how fast change can take place, and what kinds of change strategies might be appropriate.

6.2.1 Authoritarian Domination and Resistance

The early years of education provision for Africans by the government were marked by an uncompromising adherence to the authoritarian principles of apartheid. Between 1652 and 1841, western type education for a few Africans was provided by settler farmers and missionaries who had a vested interest in promoting Christianity and cross-cultural literacy. After 1839, there was some token government involvement through financial aid to mission schools by the provincial authorities. This system of partial funding continued until 1953 and, throughout this period, state-aided mission schools provided the only opportunities for Africans to have a western education. When the state finally intervened in a major way, separate and inferior education for Africans became fully institutionalized through the Bantu Education Act of 1953.

In essence, native education was to be based on the principles of trusteeship, non-equality and segregation. Its aim was to inculcate the white man's view of life, especially that of the Boer Nation, which was regarded as the senior trustee. Starting in 1953, state schools for Africans were established to replace missionary schools. By 1955, resistance to this form of authoritarian state monopoly and subjugation through education resulted in the first mass protest action (boycotts) by school-going Africans. This was crushed by the threat of expulsion, and the government gave an ultimatum of "Bantu education or no education."

Authoritarianism led to increased resentment and resistance and paved the way for future social changes. Its significance for the present report is two-fold. First, pockets of Bantu education ideology continue to exist in South Africa,

particularly in farm schools where land laws mean that the farmer has ultimate authority over such schools. If curriculum transformation is to affect farm schools in any significant way, it may be essential to shift control into less partisan hands. Second, the seeds of Bantu education have polarized attitudes; it may be difficult to reconcile them in negotiations over a unified system of education.

6.2.2 Repressive Tolerance and Expectation Crisis

Over the years, resistance to authoritarian domination produced results in the form of various amendments to the Bantu Education Act. These changes however, were half-hearted and manipulative. The concern was more with ensuring the survival of the Act, than with meeting the demands of those opposed to the Act. For example, the official language policy of the Act was amended several times, but African education continued to have Afrikaans imposed as a medium of instruction for some subjects, (from Standard 5 upwards) and as a compulsory language subject, despite clear evidence that Africans preferred English as a medium of instruction. This kind of manipulative change can best be described as a form of repressive tolerance. It involves the acceptance of criticism in order to neutralize and render it less potent. The danger with such a strategy is that it often leads to an expectation crisis. When changes are made in response to protest, expectations are raised about the outcome of further protest. When changes prove to be cosmetic and manipulative, an expectation crisis develops, leading to even more unrealistic demands for change. This cycle of events is summarized in the expression that an authoritarian regime is never so much at risk as when it starts making concessions. The expectation crisis generated over African education now manifests itself in the negotiations over a new education system. Curriculum transformation is a central aspect of these expectations, and anything cosmetic or potentially manipulative is likely to be rejected by the African majority.

6.2.3 Concessionary Retreat and Fragmentation Threat

The protest actions of 1976, which started with Soweto pupils boycotting schools in protest over Afrikaans as a medium of instruction, proved to be decisive for changes in education. They led to some genuine concessions, and to the Education and Training Act of 1979, which replaced the Bantu Education Act and its amendments. Authoritarian domination finally gave way to concessionary retreat. This process produces a power vacuum which increases the threat of fragmentation. Various groups discover that they can take matters into their own hands without serious challenge from the authorities. For instance, pupils have dismissed principals and teachers, and taken control of schools. More significantly, the DET was forced to abandon

control of education in Soweto to the Soweto Education Coordinating Committee (SECC).

6.3 ANALYSIS OF KEY ISSUES AND PROBLEMS

In its present state, the primary school curriculum in South Africa cannot make its full contribution to the process of developing a modern society that is democratic, economically strong, socially progressive, and rich in cultural diversity. The present curriculum serves to impoverish the nation by undereducating the majority of its citizens and by alienating them from the development process. The primary curriculum should help all children to realize their full potential and make a contribution to nation building in the future. Under apartheid the curriculum has frustrated the majority of children and prompted many to follow patterns of rebellion or servitude. As South Africa strives to build a new democratic society, it is critical to lay a sound educational foundation for society. It is important to have a proper understanding of the key issues and problems which plague the current primary school curriculum. It may then be possible to suggest constructive strategies for curriculum transformation.

6.3.1 Curriculum Machinery

Curriculum development in South Africa is shrouded in secrecy, and appears to be the prerogative of a fairly small network of officials. To the extent that there is a curriculum process in operation, it is generally agreed that it consists of drawing up and revising syllabi for the various subjects in the primary school.

As far as it is understood, the process of syllabus revision is initiated by the head of the white DEC (HoA), usually through one of the white provincial education departments. More recently, some initiatives have been taken by the Director General of the Department of National Education. Once the process has been initiated, much of the work is done by subject committees and coordinated by Departmental Curriculum Committees. The latter are made up of bureaucrats from the white provincial education department. This process results in development of a core syllabus, which is then circulated to the education departments of the four racial groups, so that their own subject committees can make additions reflecting "own interest." In practice such additions are not feasible because the core syllabi are already overloaded with subject content.

After the syllabus has gone through the subject committees of the four racial groups, it is sent to the central book committees of each education department, which then select appropriate

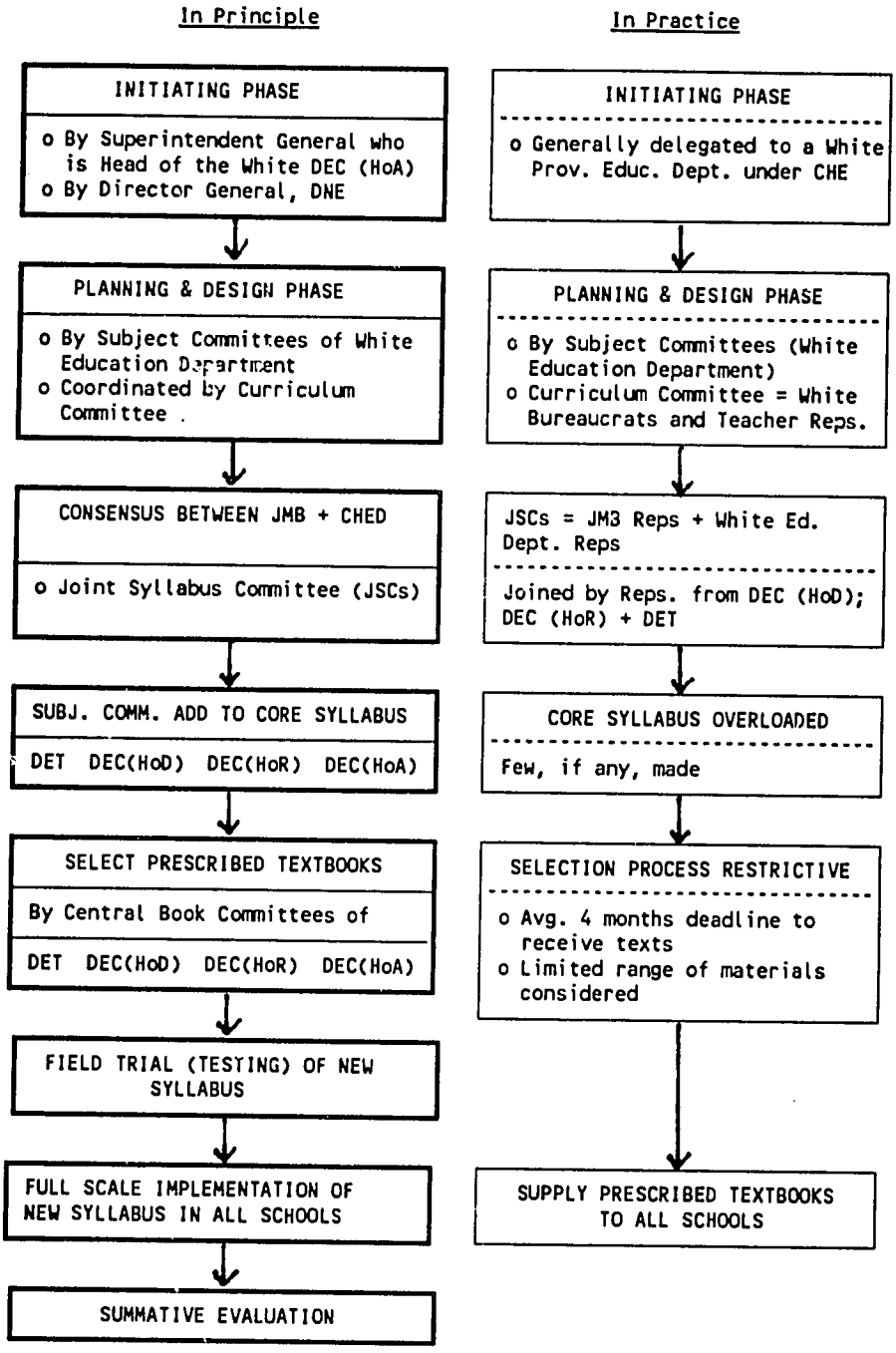
textbooks for their schools. There is some concern that, at this stage, decisions on which books to prescribe are made rather rapidly, and tend to favor authors who have early access to or insider knowledge of the revised syllabus before its official release.

In principle, there is provision for a trial phase in which the new syllabus is tried out and necessary modifications made before full scale implementation. The general opinion is that this trial phase is very rarely used in practice. It also appears that curriculum evaluation takes place mainly through feedback from examinations.

Figure 12 provides a summary of the curriculum process in South Africa as it is intended in principle, and as it happens in practice.

FIGURE 12

THE CURRICULUM PROCESS IN SOUTH AFRICA



There are at least five key points about this process which need to be highlighted.

1) A high premium is placed on control of the process by white departments at the expense of alienating other racial groups;

2) The process is based on a limited perspective which locks the curriculum in a subject-based mode, and precludes innovative possibilities such as integrated disciplines, or the holistic development of learners;

3) Participation in the process is restricted and dominated by bureaucrats, rather than curriculum specialists, experienced teachers, and subject experts;

4) The process is output dedicated, with little provision for inputs from various interest groups and professionals, or even for serious feedback from implementors; and

5) The short timeframe between release of revised syllabi and selection of texts to be prescribed for the schools favors mediocrity. It means that more creative and better quality texts which are carefully prepared can only be recommended as options or supplementary materials for schools.

These deficiencies in the curriculum process cause setbacks in primary education. More importantly, there is a major problem of legitimacy for a prescribed curriculum that is so badly disconnected from those it is meant to serve. For most teachers, the curriculum is embodied by the prescribed textbook which, more often than not, is written by people with little experience in primary schools. The way in which syllabi are designed and textbooks are selected precludes serious attention being given to the needs, interests, and general background of African, Indian and coloured children. Second, because the process adheres so dogmatically to a subject-based structure, there is an efficiency problem for the school curriculum. Syllabus revision is mainly a linear process of adding new topics to the old list. This helps to explain the overcrowding of the core syllabi over the years. It is certainly not the most efficient way of packaging knowledge, skills, and values in a diversified society like South Africa.

6.3.2 Instructional Materials Supply

The supply of textbooks and other instructional materials to schools is currently a very sensitive issue for Africans. Teachers often complain of shortage of textbooks, but these claims are difficult to reconcile with supply figures provided by

the DET. The policy on supplies varies according to department. Within the DET, schools submit their requisitions in March for books to be delivered at the beginning of the new school year. The department aims to provide enough textbooks to meet increases in enrollment as estimated by the principal of every school. The books are supplied on loan to students, and are supposed to be returned at the end of the year. The supply system assumes an estimated four year life-span per book, so that DET writes off 25 percent of all books each year. Between 1987 and 1991, a total of 31,400,000 textbooks valued at R91,900,000 were supplied to schools, according to DET statistics. About 21 million of these text books were supplied to secondary schools, and the rest to primary schools.

TABLE 6.1: DET SUPPLY OF TEXTBOOKS (1987-1991)

School Year	Number of Books	Amount (R)
1987	8,700,000	43,100,000
1988	5,600,000	27,500,000
1989	4,300,000	29,000,000
1990	4,600,000	31,200,000
1991	8,200,000	61,100,000
TOTAL	31,400,000	91,900,000
1992	To be determined	69,700,000

Generally, textbooks are delivered to schools directly by the suppliers. Management of the books rests with the principals and teachers. It is not clear whether the quantities supplied are adequate for the needs of primary schools, but in some of the African primary schools visited, textbook shortage was a major problem. Some schools had been reduced to requesting help from nearby Indian or white schools which had excess supplies or old stocks to be discarded. Possible reasons for these discrepancies include:

- Pupils do not return the books at the end of the year, causing shortages the following year;

- Schools are using different textbooks from those prescribed by the DET, and so report a shortage of their preferred textbooks, which pupils normally have to purchase;

- Schools lose books during civil disturbances in which school buildings are sometimes damaged;

- There is considerable over-enrollment in schools, and principals under-estimate numbers; and

- Books are simply not delivered on time.

Whatever the reasons for shortage of textbooks, it is a serious problem for many African primary schools. It simply adds to the many constraints which already impede the learning process.

At another level, many principals and teachers are concerned about the lack of flexibility in the supply system. Schools are supplied books on a take-it-or-leave-it basis. Many schools would prefer some discretion on how best to use a given financial allocation for instructional materials. With regard to stationery, for instance, HoA schools in Natal are given a monetary allocation to purchase their requirements. HoR schools do not have as many discretionary funds. DET schools have fewer still.

The other area of concern with instructional materials is the inequity in provision for the different race groups. It is estimated that, in 1989, less than R10 per pupil were spent on textbooks, set work books, and consumables for African schools. This compares with almost R64 and R56 per pupil for HoA schools in Natal and Transvaal, respectively. Estimates by RTI on textbook expenditure per pupil for 1990 suggest that an average of R80 is spent on HoA/HoD Indian pupils, as compared with R20 (primary) and R40 (secondary) for the average HoR/African pupil. For other material inputs to education in 1990 (e.g., furniture libraries, sports, laboratory facilities, music, equipment, and incidental supplies), it is estimated that only R32 were spent on the average African pupil. This compares with R206 for the average coloured pupil, R288 for the average HoD (Indian) pupil, and R461 per HoA (white) pupil. Clearly the inequitable distribution of material resources for education is still prevalent in the system.

6.3.3 Quality of Instructional Materials

In general, instructional materials employ language that is usually above the capability of the pupils to understand and too difficult for the teachers to cope with. There are also problems of cultural and political bias in materials, which have led to some teachers refusing to use them in their classes. At a school

in KwaZulu, the two textbooks prescribed for mathematics were found to be inappropriate by the teachers. Pupils therefore had to use another text which a nearby HoD school donated, or purchase the main textbook which the teachers regarded as most appropriate for that class. There are many more claims about poor quality of prescribed instructional materials, but it is difficult to comment on them without a detailed examination of the texts in question. It is recommended that, as an interim measure in the curriculum transformation exercise, a comprehensive study of the quality of instructional materials in primary schools should be carried out. This would make it possible to replace very bad textbooks with more appropriate alternatives.

6.4 OBSTACLES TO LEARNING

Primary schools in South Africa have to contend with a diverse range of obstacles to learning. This is especially true for the schools which serve disadvantaged communities. If these obstacles are not properly understood and seriously addressed, these schools and the communities they serve may gain very little from any new programs resulting from curriculum transformation.

6.4.1 Overcrowding in Classrooms

Because of inequitable provisions of physical facilities in the past, and continuing rapid growth in pupil numbers, there is a serious shortage of classrooms to accommodate the African school-aged population. Consequently, most African schools are overcrowded in comparison with those enrolling other racial groups. The problem of overcrowding manifests itself in two ways. First, and more important as a pedagogical obstacle, is the average class size. Visits to some schools revealed all too clearly the difficulties faced by teachers who have to cope with class sizes of 60, 70, or even 80 to 90 pupils. It is virtually impossible to provide any individual attention to pupils under these conditions, and teachers are faced with difficult choices in their efforts to promote learning. Often, diffused pedagogical techniques, which involve the whole class, have to be favored over more focused styles which could ensure that different groups and individual pupils benefit from the lesson. In contrast to this scenario of large class sizes and pedagogical obstacles, visits to HoA, HoD, and HoR schools revealed smaller class sizes and special provisions for slow learners or pupils with learning difficulties, as well as for gifted children who are academically ahead of their class.

Measures are being taken to provide more classrooms for disadvantaged populations, and the gap between the different race groups is slowly being reduced. These measures include building

new schools and making HoA schools where enrollment has diminished to inefficient levels available to other groups. Despite these improvements, class size is likely to remain a major problem as the large numbers of African children now out of school begin to enter the system. The pedagogical obstacles created by large class size will therefore need to be addressed in any curriculum transformation exercise.

The second indicator of overcrowding is pupil-teacher ratio. This statistic can be deceptive in situations where time-table patterns allow a lot of free time to teachers in South Africa, due to a shortage of classrooms. For most primary school settings, however, pupil-teacher ratios give a reasonable idea of the potential effectiveness with which learning can be promoted in the school. The lower the ratio, the more likely it is that pupils will get close pedagogical attention from the teachers. Table 6.2 repeats the pupil-teacher ratios for schools serving the different race groups in South Africa that were originally presented in Table 3.4, but also gives comparative data on these ratios for various other countries. It shows that African schools are relatively disadvantaged within the South African context, while the white South African schools are highly privileged by comparable world standards.

TABLE 6.2: PUPIL/TEACHER AND PUPIL/CLASSROOM RATIOS, PRIMARY SCHOOLS

Place/Year	Pupil/teacher	Pupil/classroom
S.A. Africans, 1990	49.2:1	51:1
S.A. Africans, Primary & Secondary, 1990	42.7:1	47.8:1
S.A. DET, 1990	40.2:1	39.0:1
QwaQwa, 1990	32.1:1	29.0:1
KwaZulu, 1990	53.4:1	55.9:1
KaNgwane, 1990	n.a.	63.4:1
Bophuthatswana, 1985	39.3:1	48.1:1
Transkei, 1985	64.0:1	47.0:1
Gazankulu, 1990,		
worst circuit	49:1	83:1
best circuit	34:1	45:1
average	43:1	64:1
Zimbabwe, 1985	40:1	n.a.
Botswana, 1985	32:1	n.a.
Thailand, 1985	19:1	n.a.
S.A. Coloureds, 1990	25.5:1	25.6:1
Brazil, 1989	24:1	n.a.
S.A. Indians, 1990	23.9:1	29.3:1
Argentina, 1985	20:1	n.a.
Panama, 1985	25:1	n.a.
Malaysia, 1985	24:1	n.a.
South Korea, 1985	38:1	n.a.
New Zealand, 1985	20:1	n.a.
S.A. Whites, 1990 Primary & Secondary	17.4:1	n.a.

Sources : RIEP (1991): WCEFA background document; Annual Report of the respective Departments.

6.4.2 Medium of Instruction

The medium of instruction is one of the thorniest education policy issues in South Africa, and it has profound implications for the curriculum in terms of efficient and effective implementation. At present, most pupils are introduced to schooling through their mother-tongue or main local language. They are then expected to switch to one of the two official languages (English and Afrikaans) as the medium of instruction. The grade at which this switch takes place varies, but it is increasingly at an early stage.

In African schools, governing bodies determine whether the medium of instruction from Standard 1 is one of the official languages or the mother tongue. Although 56 percent continue in an African language, there has been a tendency for many African schools to switch at the third grade (i.e., at Standard 1) or shortly thereafter. Apart from this, both official languages are studied as subjects throughout the primary cycle.

Within these parameters, it is probably inevitable that most South African pupils will grow up to be bilingual at least. However, for those whose mother tongue is not English or Afrikaans the language burden could be a serious obstacle to learning. Pupils are expected to start schooling in their mother tongue, and make the transition to English or Afrikaans as a medium of instruction, while coping with both English and Afrikaans as school subjects.

There is an additional problem for those pupils who attend schools in which the introductory medium of instruction is different from their mother tongue. These pupils must cope with four languages. With all this happening in the first 3 or 4 years of schooling, it is hardly surprising that schooling should be such a disconcerting experience. Many pupils drop out without acquiring sustainable literacy skills.

Some schools are attempting to reduce the language burden by starting with English as a medium of instruction, beginning with Sub-Standard A. The advantage of mother-tongue instruction in the early years is lost to some extent, but this is partly remedied by an early introduction to English in pre-schools or other "school readiness" programs. The situation in African schools regarding diversity of languages used as medium of instruction, is outlined in Table 6.3.

TABLE 6.3: MEDIUM OF INSTRUCTION IN AFRICAN PRIMARY SCHOOLS

Language	Number of Schools		
	DET	DE (SGT)	Total
Xhosa	1,197	13	1,210
Zulu	1,874	2,153	4,027
North Sotho	513	1,181	1,694
South Sotho	2,640	84	2,724
Tswana	1,066	10	1,076
Tsonga	69	338	407
Venda	43	2	45
Swazi	137	205	342
South Ndebele	6	115	121
North Ndebele	3	6	9
English	5,846	3,150	8,996
Afrikaans + English	75	38	113
Afrikaans	9	0	9

Source: Compiled from data in DET Annual Report 1990, G.P., RSA.

It is clear that there are no easy solutions to the language issue, but it is equally evident that language cannot be allowed to continue being an obstacle to learning for the majority of South African children. At the very least, primary school children should be protected from having to cope with more than two languages in the early years of schooling. One way of doing this would be to opt for a single official language, so that it is not compulsory for pupils to study two languages throughout the school cycle. Schools and local communities would then have to make decisions on the medium of instruction. Schools which opt to use English as a medium, say from the start at Sub-Standard A, might require pupils to concentrate exclusively on English as a medium and as a subject, maybe for the first three years of schooling. After that point, pupils may be free to choose to study any South African language, including Afrikaans, as a school subject. It might well be that many teachers would choose to retain the advantage of introducing children to schooling in their mother tongue, and then switch as early as

possible to the official language as a medium of instruction. There are indications that, given a choice, the majority of South Africans would opt for English as an official language, partly on the pragmatic grounds of its being a "world language."

Whatever decisions are made, the interests of South Africa's children would be best served by a system which minimizes the language burden as an obstacle to learning.

6.4.3 Language Across the Curriculum

One of the most pervasive obstacles to learning in South Africa's primary schools concerns the way in which language affects or obstructs understanding in almost all subject areas. There are several dimensions to the problem as perceived and articulated by teachers and other educators in South Africa:

- Textbooks prescribed for the primary schools are written in a language with which the average teacher finds it difficult to cope. Many teachers, therefore, have difficulty understanding the textbooks which they are supposed to interpret as part of the process of instruction;

- Many teachers, especially in African schools, have a very low proficiency in the medium of instruction (English), and therefore find it difficult to mediate the curriculum to their pupils;

- There appear to be significant conceptual difficulties, partly due to poor language proficiency, which affect the ability of many teachers to understand subjects such as science and math in the curriculum;

- Rote learning has deep roots in African schools. Consequently, teaching to promote understanding requires special effort beyond the norms of "good practice" prevailing in the schools; and

- The primary school curriculum does not encourage pupils and teachers to grapple with concepts, principles and thinking skills, through which understanding and communication can be developed. Most of the syllabi emphasize learning of facts as distinct from acquisition of thinking skills.

Each of these viewpoints has a fair amount of currency among teachers and educators in South Africa. Teachers and pupils are poorly equipped to decode and utilize the content of the curriculum, especially when it must be taught in a foreign language. Knowledge, skills and values are not clearly encoded in the syllabi and accompanying instructional materials. From

seminal work on reasoning skills and the curriculum, carried out under the Threshold Project, Carol MacDonald concludes that there is considerable dissonance among the reasoning skills required by the curriculum, the mediating strategies used by teachers, and the reasoning abilities shown by pupils. Much of this appears attributable to the problem of coping with a second language as a medium of learning. Under the same Threshold Project, van Rooyen investigated the problem of disparity between the English competence of children in Standard 3, and the competence required for them to read and understand a content subject textbook. He used two English as a Second Language schemes, and two Standard 3 general science textbooks in this research. The major conclusion was that:

> The gap between the English subject competence ideally held by the children, and the competence required for meaningful use of the texts is too great for any child to bridge.

Everyday experiences in the school system also tell a story of language as an obstacle to learning. Manifestations of the problem include poor performance in those subjects (e.g., math and science) which require thinking skills rather than memorization of facts. In interviews, secondary school teachers and administrators (e.g., in Cape Town) revealed that substantial remedial work was always required to bring African primary school leavers up to the standard required to cope with science and math at the secondary level. They expressed the view that this was not due to poor articulation between the primary and secondary syllabi, but rather due to poor understanding on the part of primary school teachers and the pupils they produce. This vicious cycle of weak subject knowledge, bad teaching, and poor pupil performance appears to have produced an aversion towards math and science in African pupils (Table 6.4).

TABLE 6.4: NUMBER OF GRADUATES FROM HIGH SCHOOL WITH A PASS IN MATHEMATICS (The 1976 DET Cohort)

Entered Grade 1 in 1976	309,887	100.0%
Reached Grade 12 in 1987	33,943	10.9%
Took Mathematics	12,316	4.0%
Passed Mathematics	1,348	0.4%

Source: Development Bank of Southern Africa

The implications of this problem for curriculum transformation efforts are twofold. First, the design of syllabi and preparation of instructional materials must take greater cognizance of the language proficiency of the average teacher, and also provide encouragement for grappling with concepts, principles and thinking skills. Second, through in-service and pre-service training programs, new and existing teachers must be better prepared to cope with the task of decoding and mediating the curriculum in the process of promoting learning.

6.4.4 Teacher Quality

It is generally agreed that low quality teachers pose a problem for primary education, especially in African schools. In terms of formal qualifications, there can be little doubt that black teachers are fairly disadvantaged, compared with their white, Indian and coloured counterparts (Table 6.5). However, there is more to teacher quality than formal qualifications. Increasingly many countries now emphasize classroom performance (as reflected in pupils' test results), qualities of professional commitment, and pedagogical flexibility as important indices of teacher quality. With primary education there is always the danger of qualification escalation, whereby teachers acquire qualifications well beyond what they actually need to perform their functions.

TABLE 6.5: TEACHER QUALIFICATIONS ACCORDING TO POPULATION GROUP, 1990

Population Group	School Stage	Without Prof. Qualific.	With Prof. Qualific.	Total
Blacks	Primary	18,104	96,629	114,733
	Secondary	4,946	59,586	64,532
	Total	23,050	156,215	179,265
Whites	Primary			
	Secondary			
	Total	-	-	53,101
Coloureds	Primary	921	23,150	24,071
	Secondary	650	11,633	12,283
	Total	1,571	34,783	36,354
Indians	Primary	61	5,872	5,933
	Secondary	115	5,474	5,589
	Total	176	11,346	11,522

Source: Education and Manpower Development, 1990, No. 11, REIP.

There is a great need to improve the quality of African teachers in the primary schools. It should be understood, however, that this is not simply a matter of formal qualifications. The process invclves empathetic training/support to improve the teachers' professional commitment, pedagogical flexibility, and classroom performance. For this approach to work, there should be tangible incentives to motivate teachers. Otherwise, they will simply pursue additional formal qualifications as the only way to improve their benefits. There is a concern among educators in South Africa that many teachers are so intent on gaining formal qualifications (through part-time study), that they are often guilty of neglecting their basic job of teaching children well.

A second point of consideration is the highly unusual circumstances in which African teachers have to work. The tensions created by apartheid resulted in many teachers and school principals losing credibility among the pupils and communities they serve. Teachers who were not openly political and anti-apartheid were branded as collaborators, and found it difficult to gain the cooperation of pupils, or to do much meaningful teaching. These difficult circumstances must be taken into consideration when planning the implementation of a new curriculum. Teachers know they need additional qualifications

and training to cope with curriculum transformation. They also need to know that their plight as cross-fire victims is understood and taken into account by those who are leading the curriculum transformation process.

6.4.5 Alienating Subjects

Another important obstacle to learning is the alienating effect of certain subjects as presently articulated in the curriculum. Many educators in South Africa are concerned about the distortions and biases in such subjects as history and geography. They point out that, in most cases, the syllabi and prescribed textbooks represent a celebration of white history/culture and the propagation of myopic views about land settlement, ownership and distribution. Through these types of instructional materials, pupils are expected to learn about the glories and viewpoints of the white race. The other side of this coin is that non-white pupils are not exposed to their own equally significant history, culture and viewpoints. A recent article in the Eastern Province Herald (August 19, 1991), for instance, highlights the glaring distortions and racial biases in a DET prescribed history textbook, in which the Indian and African populations only receive attention as socio-economic and political problems. This happens to be a Standard 10 text, but the problem starts at the primary level. Teaching with such biased instructional materials must alienate African, Indian, and coloured teachers. Not surprisingly, many teachers confessed that they did not adhere to the prescribed textbooks in teaching these subjects.

On a more political level, rejection of offensive curricular materials has led to the People's Education movement, which provides radically different materials in the social science subjects. These materials are experimental, and have gained no foothold in the state system. More importantly, these materials tend to be radically different in their approach, and so fall into the trap of being just as biased (in a different direction) as the textbooks they seek to replace. In terms of obstacles to learning, subjects such as history and geography are in a state of flux, with a mix of biased textbooks and improvised alternatives being used in the schools. The People's Education movement continues to seek its own legitimacy. It seems clear that social science subjects should be carefully rethought and re-structured in any curriculum transformation process.

6.4.6 Creative Disciplines

Concern has been expressed over the tendency to give low priority to creative areas like art, drama, and music in many African primary schools. Interviews suggest that teachers do appreciate the importance of such subjects in a well-balanced quality education. However, they are often obliged to pay less attention

to these areas because practical difficulties impose hard choices on them. These difficulties include:

- Lack of equipment and material resources;
- Pressure to concentrate on serious subjects such as math and English, in a climate where there is a sense of urgency to make up for academic disadvantages suffered by African children;
- Teachers feel more comfortable using prescribed textbooks rather than having to cope with the kind of improvisation and creativity that these subjects call for; and
- Time constraint is a serious problem, with an overloaded syllabus and loss of school days due to political strikes, stay aways, and other disturbances.

Generally, curriculum transformation should highlight the role of creative subjects in promoting well-rounded, quality education at the primary school level. In conjunction with this, teachers need to be better prepared to handle these subjects, and more resources must be made available for proper teaching.

6.4.7 Culture of Refusal

The climate for learning in African primary schools has been seriously compromised by what can best be described as a "culture of refusal." It manifested itself in the slogan of "liberation before education;" in the rejection of all fees and charges for education; in the banning of inspectors from some schools; and in the take-over of schools by committees of pupils. This is seen as a predominantly post-primary school phenomenon, but it certainly has its effect at the primary level.

Quality education has become impossible in those schools and communities where the "culture of refusal" has become pervasive. However much the creation of such a climate is seen as a legitimate political strategy, its damaging pedagogical consequences cannot be ignored. To some extent, it appears that those who initiate such a climate are capable of reversing the trend. The Soweto Education Coordinating Committee takes pride in the fact that when it called for pupils to go back to school after a long period of boycott, the response was overwhelming. Over 43,000 pupils turned up for school instead of the predicted 39,000.

The challenge for educational and political leaders is to restore respect for legitimate education authority, when authority in general has become so badly tainted in the eyes of pupils and the community.

At the very least, curriculum transformation must address the problem of how schools can best inculcate in pupils values such as respect, accountability, and responsibility. These are critical values which must accompany liberation if a future South Africa is to succeed in its national development agenda.

6.4.8 **Assessment and Evaluation**

Assessment of pupils in South Africa's school system is highly unsatisfactory, and evaluation of the curriculum is virtually non-existent. Regarding pupil assessment, only one school examination provides a valid basis for comparing the performance of pupils from different racial groups. This is the Standard 10 examination, which also enables students to qualify for entry to tertiary institutions. Under the segregated education system, there are no national standards or tests to guide teachers on how much pupils are actually achieving in relation to the curriculum. By the Standard 10 stage when a national examination makes the differences clear, it is much too late for schools to do anything about learning deficiencies. In a sense, the quality of education in any country depends on national tests and accompanying standards, which help to set benchmarks of learning against which pupils' performance can be measured, and which teachers can use to assess outcomes of their efforts. Examinations tend to be used purely for external purposes, i.e., for certification leading to the next stage of education or to some form of employment. It is possible to use national tests and examinations much more constructively to improve the quality of education within the system. For instance, Table 6.6. shows how badly African students perform in the Standard 10 examinations, compared with their white, Indian and coloured counterparts. This phenomenon of inferior performance is not something which suddenly happens at Standard 10. Arguably, then, if there had been similar tests or examinations earlier in the system, it would have been possible to identify deficiencies and to take remedial measures.

TABLE 6.6: PASSES WITH MATRIC EXEMPTION (% OF CANDIDATES)

	African	Coloured	Indian	White
1981	12	15	35	47
1982	10	17	37	46
1983	10	15	42	46
1984	11	15	34	45
1985	12	12	32	44
1986	13	15	33	44
1987	16	19	37	43
1988	16	16	41	42
1989	10	18	41	42
1990	8	20	45	41

Source: Adapted from Bot, M., Fast Facts No. 1, SAIRR, Feb. 1991.

If the transition (pass rate) from grade to grade is compared across racial groups, it is clear that inferior performance and low survival rate start at SSA and get worse throughout the system (Table 2.5).

At SSA, only 76 percent of the African pupils who started school make it into SSB. By the end of the primary cycle, only 50 percent of the African cohort that started at SSA are likely to get into secondary school. The cumulative effect is that only about 29 percent of African pupils starting at SSA stand a chance of getting into Standard 10. Of these only about 36 percent passed the matric examination in 1990. Comparative figures for other racial groups (Table 6.6) indicate that African students are grossly disadvantaged in terms of school performance.

In these circumstances, greater use of tests and examinations is being advocated, not as a mechanism for holding pupils back or denying them access to secondary education, but as a means of identifying learning difficulties requiring remedial action. The existing levels of repetition (average of 15% a year) and drop-out are wasteful enough as it is. If greater numbers of pupils are to benefit from being in the system, schools must have indicators, benchmarks, and early warning mechanisms to measure pupils performance in relation to the curriculum, and to provide help where needed.

6.5 CURRICULAR CONCERNS FOR A UNIFIED EDUCATION SYSTEM

South Africa's education system is at the threshold of major change, with possibilities for the kind of curriculum transformation that is congruent with the momentous political changes currently underway. As the country moves towards negotiating a new education system, a number of key concerns will determine the nature and impact of any curriculum transformation in practice. Leading educators in South Africa frequently voice these sorts of concerns in the notion of a "unified, democratic, nonracial and non-sexist education system." It is important to unpackage and explore these and other concerns as they relate to the curriculum, and so provide further guidelines for the transformation process.

6.5.1 A Unified Education System

Under apartheid, the South African government purported to grant the various racial populations autonomy over their "own affairs" in the area of education. This was ostensibly the rationale for creating fifteen departments of education in one country. Moving towards a unified system is partly a matter of making one department out of the existing fifteen. However, there is infinitely much more at stake than simple administrative rationalization. A unified system implies first an agreed upon set of educational goals common to all pupils and subscribed to by all parties and interest groups in society. Such goals would provide valid guidelines for curriculum design and appropriate criteria for assessing the performance of the system.

Second, a unified system requires explicit commitment to the provision of resources and maintenance of standards for clearly defined levels of education. For instance, a new government might commit itself to providing nine years of compulsory basic education for all children. This would provide at least three important guidelines for the curriculum transformation process.

- Budgetary commitment to a nine-year compulsory basic education can be used to estimate likely expenditure per pupil across the board. The curriculum can therefore be made more realistic regarding resources available for implementation;

- The backwash effect of the Matric Exams (12 years) on the school curriculum can be reduced by designing national examinations for the end of a nine year cycle; and

- Curriculum content for the nine-year cycle can be designed to prepare pupils for diverse post-basic opportunities such as further formal education, self-employment, industrial training, and technical and vocational courses.

A third implication of a unified system is that there must be checks and balances to safeguard unifying elements of the system. In practice, this often means having legislative back-up to ensure, for instance, that all parents send their children to school, and that all children have access to nine years of basic education with guaranteed levels of implementing resources.

6.5.2. Democratization

This is a critical concern for the curriculum transformation process. Presently, the major characteristics of education in South Africa are inextricably linked with the socio-political ideology of racial segregation and white domination which has prevailed in the country for over 350 years. The education system has been shaped through legislation promulgated in a "Whites only" parliament, and key policies formulated by a white-dominated bureaucracy. It is a system by which the white minority has sought to determine and control the life chances of all racial populations in the nation.

This means that, regardless of altruistic claims and pleas of good intentions, South Africa's education system is in essence and in its entirety an undemocratic system. This merely states the obvious, but it also calls attention to the enduring nature of such a system, and to the danger that "curriculum transformation" might simply result in "new clothes for an old emperor!" To date, the system has survived on a tightrope between democratic rhetoric on the one side and autocratic practice on the other. It is, therefore, imperative that democratization of the curriculum process should be manifested more in action and practice, than in pronouncements and documented intentions.

This implies, first, that the curriculum machinery must be controlled by a democratic body with adequate representation of different interest groups in society. Given the distrust of present government control, and similar problems that might beset a new government, it might be best to have a curriculum machinery at arms length from a unified education system. This might mean a semi-autonomous institute with its own governing body.

Second, democratization implies that the curriculum process must be highly participatory. There should be regular consultation with various groups, and the outcome of the process should reflect a balanced and fair approach to the interests of these groups. Importantly also, control of the process must be balanced in relation to the different interest groups. Curriculum specialists and other education experts involved in the process must be drawn from as many interest groups as possible (by race, class, sex, and geographic background.)

A third implication is that the content of the curriculum must reflect knowledge, skills and values judged to be important for a new unified South Africa, as well as those which are important to various interest groups. This again calls for a balance between content elements that are unifying and those that can be potentially divisive. In essence, curriculum content should promote unity and common concerns, while also celebrating the rich cultural diversity of South Africa.

6.5.3 Decentralization

The notion of decentralization is fraught with difficulties regarding its justification, form of implementation, and practical results. In spite of conceptual difficulties and a poor track record of concrete benefits, there is a strong case to be made for a judicious policy of decentralization in a society like South Africa. With specific reference to the curriculum, the purpose of decentralization would be to ensure that local interests and values are reflected in the content, and that monitoring and fine tuning of the curriculum is locally controlled.

In practice, this might mean that the curriculum for subjects such as history, geography, social studies, and development studies are developed locally, using broad guidelines agreed at a central level. Again it might mean that a skeleton curriculum is developed centrally for all primary schools, with regions and districts being responsible for fleshing out the curriculum in line with local interests.

6.6 SUGGESTED STRATEGIES FOR CURRICULUM TRANSFORMATION

These options and strategies are structured in terms of short-, medium- and long-term possibilities. In each case, there is a two-pronged approach which seeks to make an impact on unfolding events and to influence outcomes at both the central and local levels. Recommendations take account of the complex difficulties which often threaten to stall negotiations and political bargaining at the central level, as well as the wealth of sound initiatives and ongoing action that hold out so much promise for solving curriculum problems at the local level. It is a key concern of this report that difficulties at the central level should not impede action or jeopardize opportunities for progress at the local level. Equally so, there is a strong concern that the number and diversity of activities being tried out at the local level should not result in a degree of fragmentation which makes a unified education system impracticable.

6.6.1 Short Term Options/Strategies (2-3 years)

For a politically untenable system, which is in transition and under tremendous pressure from diverse sources, the most useful and practical strategy in the short term would be to protect those forces which promote improvement of quality. In this regard, the first broad strategy suggested is:

Arrest the decline in quality of primary education at the classroom and community level.

The main variables to be considered are the capability and performance of teachers; the availability and quality of instructional materials; the preparedness, ability and attitude of pupils; and the community climate. Not all of these variables can be influenced significantly in the short term. Generally, however, support needs to be selectively targeted to ensure that primary education is given a new lease on life, particularly in the disadvantaged communities. In the short term there is not much to be gained by starting new initiatives in this area. Already there are many agencies and organizations involved in multiple initiatives and projects aimed at improving the quality of curriculum implementation in primary schools. There are over 1,200 NGOs, PVOs, and similar agencies currently working on improving the quality of education in South Africa. An obvious option, therefore, is to provide support to strengthen the work of some of these agencies. It is imperative that the agencies to be supported be carefully selected according to explicit criteria, and that the objectives of additional support be clearly elaborated.

It is suggested that, under this option, agencies and organizations operating in the following areas be supported to extend their work to a greater number of schools and communities.

(a) **Action research work with teachers in their classrooms, aimed at improving competence and confidence through teachers reflecting critically on their practice, participating in the development and trial of improved materials and new techniques, as well as working out possible solutions to their classroom problems.**

These activities are usually facilitated by experienced specialists, who work closely with teachers to define problems, set out a framework for action, and assess benefits in terms of improved classroom performance. A classic example is the Primary Education Project (PREP) of the School of Education, at the University of Cape Town. This is, in fact, described as a form of in-service education, but it represents a radical departure from conventional in-service programs. It involves intensive interaction with teachers in classroom settings, and a constant process of exploration, action, and reflection. Most of all, it

changes the role of the teacher from passive recipient of packaged solutions to an active agent constantly seeking to understand the intricacies of classroom practice, and fully participating in developing solutions.

Through this process, teachers are empowered to cope with the realities of their own classrooms and to effect improvements in their pupils' learning. Experience with action research in the United Kingdom and some African countries (e.g., Lesotho and Sierra Leone) suggests that despite its great potential, expectations regarding action research should be tempered by the many constraints resulting from its intensively participatory nature. The most important of these constraints is that action research projects are restricted in terms of the number of teachers that can be involved. Another is that this approach does not produce a quick fix. However, it does produce change that is genuine and deep-rooted.

There are many other projects which focus on the classroom as center stage, and the teacher as the lead actor in the process of change. Some of these may not use the label action research but they, nevertheless, apply the same principles of democratic participation and collaborative action. Substantial support should be provided to such projects, so that they can reach a much larger number of teachers and help to improve the quality of classroom practice in some of the most disadvantaged schools and communities.

(b) **School-focused activities in the area of English as a medium of instruction, particularly those aimed at easing the transition from an African mother-tongue to English at the lower primary level, and those concerned with improving understanding across the curriculum.**

This is an area in which substantial work has been done in South Africa, and some projects (e.g., Molteno) date back to 1975. More recently, important advances have been made in understanding the problems and trying out solutions, under the Threshold Project. In addition, there are projects which focus specifically on improving the proficiency of teachers in English, so that they can better mediate the school curriculum in their classes. Such projects include Teacher Opportunity Programs (TOPS), English Language Teaching Information Center (ELTIC), and English Language for English Teachers (ELET). Then there are literacy projects such as Read Educate and Develop (READ), which are very active in promoting early (and sustained) literacy in English as well as the mother tongue. These kinds of projects hold the key to improved quality of learning in African primary schools. They are catalysts in promoting teaching for understanding, as distinct from the current rote learning which is predominant in the schools. However, a major problem faced by all these projects is that their impact has been confined to a

very small percentage of schools in the country. Given the critical importance of English as a medium of instruction, and the enormity of the problems involved, it is advocated that support be provided to these projects to expand their scope of operations, particularly in areas with disadvantaged schools and communities.

(c) **Activities concerned with the improvement of science teaching in primary schools.**

Science is a field in which African schools perform very badly, due to lack of equipment and supplies, as well as poorly trained teachers. Because science is seen as an important base for developing modern sector skills, the private sector has been very active in supporting improvements in science teaching. Schools in Johannesburg, Cape Town, and Durban are already benefiting from such projects, with support from the Urban Foundation and others throughout South Africa which receive support from donor agencies. In general, science education has been reasonably well supported by the private sector, although mainly at the secondary school level. More recently, attention has shifted to improving science teaching in Standards 2,3,4, and 5. Schools are provided with science kits and work sheets to implement science much more effectively and efficiently in the schools. The valuable work being done in this area should be strengthened and expanded to benefit more schools.

(d) **Projects dealing with improvement of mathematics teaching in the primary school.**

This is one of the weakest areas of performance for African primary schools yet, in terms of remedial measures, it continues to be neglected. There are a few good programs, such as that of the University of Cape Town, which could reach many more schools in the disadvantaged communities.

Generally, this first option suggests that activities which come under the four broad categories outlined above, should be supported in order to intensify and broaden their scope of operations. There are two important dimensions of this option, which need to be emphasized at this point. First, these activities should be supported in the short term, while macro issues relating to an appropriate school curriculum are being negotiated. Such support will help to ensure that quality enhancing measures are in place in an increasing number of schools to stem the tide of deteriorating performance. Second, these activities should not be perceived as proven solutions which only need to be more widely disseminated. In a few cases sufficient experience might have been gained to talk of a proven solution. Generally however, these activities have an experimental dimension to them in the short term. They are as much about finding out what works best (and what does not work)

in various school/community settings, as they are about disseminating solutions.

It is recommended that in the short term, these activities be supported to reach an additional 2 percent of teachers and their pupils. This means about 4,000 teachers and 200,000 pupils over a period of 2 to 3 years.

A second option through which the decline in quality of primary education can be arrested is to provide teachers with access to resource/advice centers located in nearby colleges. If these centers were well supported, they would enable teachers to:

- Get help from college tutors on classroom problems;
- Develop teaching aids for their classrooms, use materials and equipment at the center, and benefit from the help and advice of tutors;
- Attend remedial workshops organized periodically to deal with specific weaknesses highlighted by many teachers;
- Interact with student teachers and learn about the latest guides, instructional materials, and pedagogical techniques; and
- Provide workbooks for pupils so that they do not have to rely on teachers to the extent that they do at present.

For this option to work, much of the initiative must come from teachers in making use of the resource centers. The colleges would have the additional task of making staff available to give help to teachers when they come to the center. This idea was well received by administrators and tutors in all the colleges visited. Support would be necessary to provide additional equipment and materials, library stocks and other resources in the colleges. It will also be necessary for colleges to dedicate suitable rooms for the resource/advice centers.

It is recommended that, as a short term measure, support be provided to create resource/advice centers in 15 percent of the existing teachers colleges. This would mean about 10 resource centers serving up to 20,000 teachers over a 2 to 3 year period.

Moving beyond the local classroom and community level, an important short-term strategy advocated here is:

Contribute to the on-going dialogue and negotiations at the national level (EDUCATION FORUM), by providing support for preparation of briefing documents.

One option would be to support the preparation of briefing documents relating to a limited range of specific issues which are regarded as critical for moving the Education Forum forward in its work. These might include:

- A briefing document that draws on existing studies and consultations with interested parties to provide detailed outlines of the kinds of national goals that could be set for education in a new South Africa; and

- A briefing document that outlines the various scenarios, interpretations and implications of such controversial concepts as reconstruction, decentralization, integration, democratization accountability, etc.

Another option would be to nurture a think tank, capable of preparing a wide range of briefing documents as and when requested by the parties involved in the Education Forum. It is estimated that in the short term, such a think tank might be in operation for about nine months, to provide assistance for the key macro decisions of the Education Forum. The first option of a team which prepares a limited range of specific policy background documents, might involve a total of five professionals and their support staff over a period of six months.

The main idea underlying both of these options is to encourage the major parties to move forward with the Education Forum, and not be bogged down with technical uncertainties or conceptual confusion. Much concern exists over what educational laws may be enacted by the present government, or by a future government. Curriculum transformation cannot simply be legislated into being at the central level. It seems quite feasible that agreement on broad national goals for education can be reached without too much reference to constitutional or legislative matters. An important obstacle is that opposition groups feel the Government has an unfair advantage with a vast information machinery at its disposal, churning out position papers and discussion documents. These documents are naturally treated with suspicion and often rejected out of hand. It might well be that if briefing documents are prepared by an independent team of key specialists that are acceptable to all parties, progress can be made on these critical areas of education. Institutions such as Edusource, Edupol and NEPT could assist in this process.

Still, on short-term strategies, it is essential at the earliest possible stage that support be provided to:

Facilitate the groundwork for institutionalizing Curriculum Development and Testing (Examinations) in South Africa.

Two possible options might be explored. The first option would be to prepare for establishing an institute of education (South African National Institute of Education--SANIE), (preferably to an existing institution) with responsibility for curriculum development and examinations. This would be an autonomous body funded by the government and governed by a board. The board would naturally have strong government representation, but must not be dominated by government. Other stakeholders should be able to elect/select their own representatives to the board and not have them chosen by government. These and other similar safeguards will be essential for maintaining the autonomy of the institute. Without such autonomy, the whole curriculum machinery is likely to be plagued with problems of credibility and legitimacy similar to those currently experienced by DET. This problem does not apply only to the present government, as any future government might well encounter distrust from various groups. The education of South Africa's children is much too important to be continuously frustrated by issues of distrust, legitimacy, and credibility.

If it is decided to go ahead with this option, the main groundwork will be to select and, if necessary, provide appropriate training for key staff in the areas of curriculum development and examinations. It will also be necessary, at this stage, to prepare working papers and a comprehensive situational analysis report for curriculum development. Although it has been suggested that there are not many curriculum specialists in South Africa, there is much going on in the area of curriculum debate within the country. There is a fairly extensive body of literature dealing with various aspects of the current inadequacies in what passes for a curriculum process in the present system. Some analysts have gone beyond critique and set up structures to address the key issues of curriculum in a new education system. For instance, the IEB has established a Council for Curriculum Development to deal with the development of curricula appropriate to the needs of a non-racial society. Similarly, various policy study units (e.g., NEPI) are deeply involved in curriculum considerations. However, what will be most important in the new institute is the technical capacity to handle the practicalities of a democratic curriculum development process. It might well be that the specialist staff selected could benefit from intensive short courses or study visits overseas. It would be important to ensure that the pool of candidates include some from disadvantaged groups so that there is balance in staffing at the institute. Similar considerations will need to be used in the selection of staff for the examinations function of the institute.

A different option would be to prepare a curriculum and testing division within a unified department of education. Apart from the obvious problems of credibility and legitimacy already discussed, this option puts the curriculum machinery at risk from

bureaucratic overloading and political fallout within a government department.

6.6.2 Medium-Term Strategies (3-5 years)

After two to three years, the quality-enhancing measures would have been in place at the classroom and community level for a reasonable period. The macro issues relating to curriculum at the central level hopefully will have been resolved in the education forum or similar body. Much of the groundwork for institutionalizing curriculum development would also have been completed. In general, the stage would have been set for gearing the curriculum machinery into action. The most important and urgent strategy in the medium term would be to:

> **Facilitate the whole curriculum development process at the national and regional levels, up to the field trial stage. The development and trial of tests/examinations should also be supported as part of this medium term strategy.**

At this stage, the institute of education would have been established, or a curriculum and examinations division would have been set up within a unified department of education. The major focus should then be on supporting the process of curriculum development, as well as the development of related tests and examinations.

First, support should be provided for a series of workshops at the national level to develop the core curriculum for the new education system. These will involve the participation of a wide range of education specialists, interest groups, and classroom practitioners. They will formulate aims and objectives for primary education, work out appropriate ways of structuring and organizing the curriculum, and develop core content with recommendations on methods, resources, and assessment of learners.

Second, support should be provided for a series of workshops at the regional level, to modify and adapt the core curriculum in line with local needs, priorities, and peculiarities. These would be organized by the regional offices of the institute of education, or by regional education authorities. However they are organized, these workshops must provide for adequate representation of regional authorities and local community associations.

As part of the support for these workshops, provision should be made for preparation of working documents, preparation of new syllabi, development of instructional materials, conducting training workshops for teachers in pilot schools, and carrying out formative evaluation of the new curriculum. Parallel with

all this, support should be provided for the development and trial of tests/examinations related to the new curriculum.

Still in the medium term, another strategy suggested is:

> **Evaluate the quality enhancing measures that were supported at the classroom and community levels during the short-term phase.**

The main purpose of this evaluation would be to judge what projects, practices, and activities have been successful and are worth disseminating widely in a new education system. This evaluation should also be timed to provide feedback into the curriculum development process so that those involved have a better sense of what seems to be working in the schools.

A third medium term strategy is:

> **Disseminate proven good practice (from the evaluation results) to reach a larger number of schools in the system.**

This involves providing support for those projects, practices, and activities that have been judged as sufficiently successful to justify being disseminated more widely in a new education system.

A fourth strategy worth considering in the medium term is:

> **Strengthen the newly established Institute of Education at the central and regional levels.**

This involves providing short intensive overseas courses or study visits for central and local staff, as well as some in-country training workshops on curriculum and test development.

6.6.3 Long-Term Strategies (5-10 Years)

At this stage, the most important thing is to get the new curriculum into the schools. Hence the obvious strategy for this long-term phase, is that of

> **Facilitating full-scale implementation of the new curriculum.**

Assuming that instructional materials have been produced through normal commercial channels, the main requirement is to provide support for a series of workshops to train all teachers in the new curriculum and instructional materials.

In line with full-scale implementation, a second strategy suggested for this long-term phase is:

Facilitate monitoring and evaluation of the new curriculum.

This would mainly involve training workshops for inspectors and subject advisers who are responsible for monitoring the system and helping teachers cope with the new curriculum.

ANNEX TO CHAPTER SIX

THE IDEALIZED CURRICULUM DEVELOPMENT PROCESS

The various stages in this process can be discussed briefly in terms of what happens in an ideal or "clean slate" situation.

6.A.1 SETTING AIMS AND OBJECTIVES

The first step is usually the formulation of aims and objectives for primary education. This however presupposes three major inputs. First, there must be national goals for education, from which some aims and objectives can be logically derived for primary education. These goals may be quite explicit or simply implicit in various official documents/pronouncements. The greater the differences between interest groups in a society, the more essential it is to have a clearly articulated set of national goals for education in general. It is usually the prerogative of political leaders to articulate such national goals, which are meant to provide a vision of what a society hopes to achieve through its education system. It is assumed that political leaders represent the views of society at large. National goals tend to be stated in fairly broad terms with a minimum of controversy. For instance, most South Africans would agree on such goals as developing pride in nationhood, respect for authority, appreciation of local culture, dignity of labor, etc. The ERS discussion document suggests four broad "aims to which the curriculum should answer." These could in fact serve as national goals, except that they are simply suggestions from one constituency without discussion among the other parties in the negotiation.

National goals represent one set of guidelines which must be used in formulating aims and objectives for primary education. These should however reflect more than a vision of what society wants from the education system. They must also take account of the realities which characterize the society being served by an education system. At the very least, this means that the formulation of aims and objectives for the primary education sub-system must be guided by such factors as:

- Profiles of various categories of learners;
- The quality of teachers and capacity of teacher training facilities;
- The needs and priorities of the various communities;

- The extent and state of materials and facilities available;
- The status of schools and classroom practices;
- Prevalent attitudes to education;
- Availability of financial and material resources; and
- Requirements of the world of work.

This information is usually marshalled from a wide range of studies and surveys, into a situational analysis report. The scope and intensity of studies usually depend on how much information is already available; what sorts of things can be taken for granted; how much time, manpower, and money is available for the exercise, etc. A situational analysis report should provide an important range of guidelines, which must be used by those who formulate aims and objectives for primary education.

Finally, the aims and objectives of primary education must be under-pinned by a view of knowledge, and guided by appropriate psychological principles. In practice, this means that it should be made clear whether knowledge is regarded as being strictly divided into fixed subjects which have to be studied in line with the wisdom contained in textbooks. This is only one way of looking at knowledge. There are others who believe it is possible to deal with knowledge as what people experience in their everyday lives as well as what exists in textbooks. It is also argued that knowledge can be divide up in ways different from traditional subjects. For instance, some private schools in South Africa have implemented integrated areas of knowledge such as environmental studies. The kinds of aims and objectives formulated for primary education can differ radically, depending on the view of knowledge which informs the exercise.

It is worth noting that the ERS discussion document outlines nine areas of experience which could be used to evaluate the learning content in the curriculum. This is based on a particular view of knowledge. Also, considerable international work has been done in preparing universal listings (so called taxonomies) of education objectives, covering a very wide range of knowledge, skills, and values. This can be very useful as a checklist, to ensure that there are no serious omissions in the aims and objectives set for primary education, and that there is a reasonable balance between knowledge-type objectives -- those involving skills, and those pertaining to values.

With regard to psychological principles, it is necessary to ensure that the aims and objectives set are appropriate for the

primary age-group in question, and in tune with the socio-cultural background of learners.

From this brief outline it is clear that the formulation of aims and objectives for primary education requires input from a wide range of sources including political leaders, local communities, and various categories of educational experts/practitioners. The task for curriculum design, at this stage, is to use much sound judgement and prudent decision-making, to orchestrate inputs into a coherent set of aims and objectives acceptable to all. In addition, such aims and objectives must be seen as appropriate, pragmatic, and feasible in relation to the realities prevalent in society.

6.A.2 STRUCTURE AND ORGANIZATION

Once aims and objectives have been formulated, the next step is to decide on the structure and organization of the curriculum. This involves deciding on the way that knowledge, skills and values are to be packaged and offered to learners. The form of packaging determines the nature of the elements selected for curriculum content. For instance, South Africa currently uses a subject-based structure. Hence, the curriculum is comprised of a number of standard subjects and content is simply a list of the usual topics pertaining to these subjects. Within this framework, a number of key subjects may be specified as a core curriculum (e.g., math, science and English). Schools may then be in a position to select from other subjects to complete their curriculum complement. Similarly, each subject could have a compulsory core of topics, with schools selecting from a list of additional topics.

In contrast to this approach, the primary curriculum could have a theme-based structure. This means that, instead of subjects, there will be broad themes reflecting the aims and objectives set for primary education. These themes are usually broken down into a number of sub-themes. Units can then be developed for each sub-theme, with such units serving as curriculum content. Some of the advantages and disadvantages of themes and subjects are summarized in Table A-1.

TABLE A.1: SUBJECT-BASED VS. THEME-BASED CURRICULUM STRUCTURE

SUBJECT-BASED STRUCTURE	THEME-BASED STRUCTURE
Advantages • Content can readily be selected from traditional list of topics. • Wide range of established materials (textbooks) usually available. • Teachers likely to be more familiar with subjects in the curriculum. • Easy to follow an established hierarchy of topics (Easiest --> Most Difficult). • Usually fits in with standard examination patterns. • Promotes in-depth learning for each subject area. Disadvantages • Choice of content restricted to traditional topics. • Content can appear remote from pupils' everyday life. • Danger of overloading curriculum as new interests are added. • Some areas of interest may not fit easily into any subject. • Usually requires teachers to be trained in only one or two subjects. • Could produce difficulties, with too many subjects competing for limited timetable space.	Advantages • Non-traditional concerns/interests can readily be included in content. • Curriculum can be more closely related to pupils' everyday life. • Can stimulate teachers with new approaches/possibilities. • Lends itself more easily to a child-centered teaching style. • Flexible enough to avoid overloading of the curriculum. • Requires teachers to be broadly multi-disciplinary. Disadvantages • Teachers not likely to be familiar with themes in the curriculum. • Very little established materials likely to be available. • Requires very creative and flexible teachers. • May be difficult to fit in with existing examinations. • Could result in superficial learning across several subjects. • No clear hierarchy from easy to difficult themes.

Decisions on structure and organization are based largely on what is judged to be the most efficient way of packaging content elements for effective learning, given the amount of time and other resources likely to be available. These decisions should also take into account what the system is most likely to be good at implementing or coping with, and the cost of any radical change in what the system is comfortable with. This stage of the curriculum process usually requires inputs not only from curriculum specialists, but also from experienced practicing teachers.

6.A.3 SELECTION OF CONTENT

Once structure and organization have been established, the next step is usually the selection of content, and this is normally accompanied by suggestions on teaching/learning methods. The active participation of experienced teachers is critical at this stage to ensure that decisions on what should be taught in the classrooms (and how) are pragmatic and feasible. Content is a

series of topics, for each subject, arranged in some logical sequence. It could also be a number of units under various sub-themes and themes, again arranged in some sequence. Depending on the approach taken, content could be linked at this stage with alternative suggestions on teaching/learning methods, and ways of assessing the learners. Normally this process results in the production of a syllabus for each subject or each grade or indeed for the whole primary cycle. Essentially a syllabus gives a listing of topics/units to be taught, with some degree of elaboration to guide teachers on how widely/deeply the topic or unit should be handled. In its most detailed form, a syllabus could effectively serve as a scope and sequence chart. This not only lists topics/units in the order in which they should be taught, but also gives objectives for each topic, suggests teaching methods, recommends resources, outlines assessment styles, and even suggests how much time should be spent on each topic/unit. There is considerable controversy in curriculum design over how detailed and prescriptive a syllabus should be, and how much should be left to the initiative, creativity, and professional judgement of classroom teachers. Much depends on the quality of teachers, as well as the quality and availability of instructional materials and other support resources/services.

Once a syllabus has been produced, it is time to embark on the preparation of instructional materials. These may be specially commissioned to ensure materials are closely tailored to the syllabus. It is also possible to select from existing materials which already meet the syllabus requirements or need only some degree of adaptation. This alternative often offers considerable economies in the cost of instructional materials. Where materials are commissioned, they may be prepared by experienced individuals with expertise in the subject area. Increasingly however, it is more common to use writing teams which include classroom teachers and subject experts. It is also important to note that materials are not limited to pupils' textbooks, but also include teachers guides and supplementary materials, as well as audio visual aids.

Generally, when materials have been developed or adapted, trial copies are prepared and used in the field trial stage of the curriculum process. This involves selecting a representative sample of schools, providing short in-service training for some of the teachers, testing the suitability of the materials for the pupils, finding out how well teachers handle the materials, and deciding what modifications need to be made to the materials. The field trials should also reveal deficiencies in some schools or communities, so that compensatory measures can be recommended to ensure that the curriculum works in such schools. Ideally, it is only after successful field trial that the curriculum goes into full-scale implementation. This normally involves in-service training for teachers, focusing on the use of the instructional materials in implementing the curriculum. This is

also the stage at which all schools acquire the complete curriculum package, comprising the syllabi, pupils books, teachers guides, audio-visual aids and other supplementary materials.

In conjunction with full-scale implementation, a monitoring and evaluation process is also put into operation. Essentially, the concept of monitoring entails re-tracking and trouble shooting to ensure that the new curriculum is not derailed and that the teachers develop confidence and competence in using the materials available to them. The process of monitoring also lays the groundwork for long-term evaluation, which is aimed at determining how well the curriculum has worked in practice, and what changes (if any) need to be made in the light of lessons learned during its implementation.

CHAPTER SEVEN

TEACHER EDUCATION AND TRAINING

7.0 INTRODUCTION

The purpose of this chapter is fourfold:

1) To examine the role of the primary school teacher in providing quality education for the children of South Africa;

2) to describe the major problems and constraints in the primary education system that have an impact on teachers;

3) to assess the current in-service and pre-service primary teacher education and training programs; and

4) to suggest courses of action to alleviate these problems and contribute to a more relevant, efficient, and effective primary education system.

The focus of this chapter will be on the African (DET) primary school system and teachers. Although problems also exist in schools serving the coloured, Indian, and white populations, presently it is African primary children and teachers who are particularly disadvantaged. They will require substantial assistance in the near term to close the quantitative and qualitative gap that exists between them and the other groups.

7.1 THE ROLE OF THE PRIMARY TEACHER

Primary school teachers in South Africa are expected to provide professional instruction in the basic subjects of language, math, science, and social studies. They also are expected to serve as appropriate adult role models and to guide pupils in understanding values and practicing approved social behaviors of the community.

In the first three years of lower primary school (SSA, SSB and Standard 1) the principal aspect of the curriculum is language arts, with a strong emphasis on reading. Second in importance and attention is elementary math. In the higher primary grades (Standards 2, 3, 4, and 5) these core subjects are repeated, and science and social studies are added as principal subjects. The teacher, therefore, is expected to have subject matter mastery in

these core subjects -- especially reading -- and have sufficient skill in organizing and managing the learning process.

The preceding description of the role of the teacher and the nature of primary schooling assumes that teachers and resources will be adequate to achieve the learning objectives. In African schools, however, this is relatively uncommon.

7.2 PROBLEMS IN PRIMARY EDUCATION

7.2.1 Overcrowding

Although teachers are not responsible for the severe overcrowding that adversely affects both pupils and teachers in primary classrooms, they must cope with this problem. For pupils, the measurable results are distressingly high levels of dropout and repetition, which have grave effects on the external and internal efficiency of primary schooling. The hidden effects are not as noticeable, but equally pernicious in their results. Pupils who remain in school in overcrowded classes often take refuge in the anonymous, non-challenging environment. They become lost in the crowd, unmotivated, and content to avoid having to demonstrate learning skills on a personal, regular, or public basis. School eventually becomes mainly a social experience, not a stimulating, intellectual adventure. Over time, pupils subjected to this environment tend to become apathetic followers who are easily influenced by other more aggressive personality types and less able to demonstrate active, problem-solving types of behavior.

For teachers, overcrowding often forces the use of authoritarian teaching behaviors that are characteristic of a teacher-centered learning environment. Partly it is a matter of teacher survival behavior, owing to the difficulties of orchestrating a pupil-centered program within extremely large sized classrooms; it is also partly a matter of the teacher's lack of academic and professional qualifications to handle large classes. Dealing with from 50-75 pupils daily in overcrowded classrooms can be a demoralizing experience, even for the most proficient instructor.

7.2.2 Insufficient and/or Inappropriate Materials

Insufficient instructional materials in the form of textbooks, teachers guides, and other published reference materials adversely affect both teachers and students. The teacher must provide the content of these materials either by dictating or by writing the material on the blackboard. Pupils must then copy this material into notebooks. Both procedures are an inefficient use of time which could be devoted to more productive activities.

Instructional materials prescribed for teachers may present another problem as they are often inappropriate for pupils.

7.2.3 Insufficient Mastery of Math and Science and Languages

Insufficient mastery by the teacher of the content and teaching methods in math, science, and languages is a problem for which the teacher must assume responsibility.

Poor performance in these key subjects by African pupils is demonstrated by the unsatisfactory results of their matric exams, as reported earlier.

Because most African children have not attended pre-primary school programs, they enter the first year of formal schooling without experiences in school socialization processes and their motor skills in small muscle movements are not well developed. Developing these skills is an additional teaching requirement placed on the teacher.

7.2.4 Under-Qualification of African Primary Teachers

The minimum qualification set by the government to classify a primary school teacher as "qualified" is the attainment of the "matric" certificate (Standard 10 and matric exam passing scores) plus three years of professional education studies. The following table shows the qualifications of African primary teachers.

TABLE 7.1: THE QUALIFICATIONS OF THE TEACHING STAFF AT COLLEGES OF EDUCATION UNDER THE CONTROL OF THE DET AND THE SGTs IN 1985 and 1990

	DET		SGTs		Totals		Percentage	
Qualifications	1985	1990	1985	1990	1985	1990	1985	1990
1. Without Teacher's Diploma								
Tech. Certificate	5	8	13	0	18	8	1.3	0.3
Standard 10	4	2	4	5	8	7	0.6	0.3
Degree	12	7	39	43	51	50	3.8	2.0
Subtotal	21	17	56	48	77	65	5.7	2.6
2. With Teacher's Diploma								
Standard 8	1	0	8	2	9	2	0.7	0.4
Tech. Certificate	14	21	3	1	17	22	1.3	0.9
Std 10 + PTC	23	5	87	22	110	27	8.2	1.1
Std 10 + STC	33	3	144	25	177	28	13.2	1.1
Std 10 + 3-yr. Diploma	48	162	7	183	55	345	4.1	14.0
Part Degree	8	8	46	31	54	39	4.0	1.6
Degree	337	609	450	1,251	787	1,860	58.5	75.2
Special Tr. Certificate	26	41	34	44	60	85	4.5	3.4
Subtotal	490	849	779	1,559	1,269	2,408	94.3	97.4
Totals	511	866	835	1,607	1,346	2,473	100	100

Source: Annual Reports of the Department of Education and Training, 1985 and 1990.

Many educational leaders and teachers believe that the present educational qualification standard is not sufficiently high to guarantee that the teacher possesses the qualifications to be an effective teacher. Some feel that a higher level of academic and professional attainment is now necessary to discharge the professional duties of a primary school teacher in South Africa.

Some educators believe that a more equitable teacher qualification system would grant credit for classroom teacher experience to substitute in part for the new academic standards, but this concept has not yet received official approval.

Earlier mention was made of the effect of overcrowding leading teachers to use an authoritarian teaching style. Thought must be directed now by teacher trainers to the implications of new curricula and teaching styles that will be required when more democratic processes begin to appear in primary schooling. It becomes increasingly clear that the continued use of authoritarian teaching styles will pose more of a problem in modern primary schools than is currently the case. These shifts also have implications for new and, perhaps, increased training requirements.

7.3. Pre-Service Teacher Training Programs

7.3.1 Distribution

Universities and technikons generally are not involved in the pre-service education and training of primary school teachers. The colleges of education historically have assumed this responsibility. As a result of the apartheid system, the colleges of education created for Whites have better physical facilities, equipment, trained faculties, and other resources. Moreover, their entering students have been better-educated and, therefore, possess a stronger foundation of general education on which to build their future higher studies.

At present, approximately 67,000 students are involved in 96 Teacher Colleges throughout South Africa. As shown in Table 7.2, over seventy percent are colleges primarily designed for African students. A list of the names and geographic areas of the African teacher training colleges is appended at the end of this chapter.

TABLE 7.2: ENROLLMENT IN TEACHER COLLEGES[5]

	Number of Colleges	1991 Enrollments
White[1]	12	6,546
Indian	2	734
Coloured	13	7,445
African	69	
(DET 15		9,393[2]
SGT 27		22,309[3]
TBVC 27)		-- [4]

(1) Sometimes given as (5), but this includes four INSET colleges.

(2) Of these, 6,415 were doing Primary teachers diplomas. (1990 Figures)

(3) 1990 figures. About 14,500 in primary diploma courses.

(4) A realistic estimate would be about 21,000.

(5) Source: Hansard, 1991. Parliamentary Questions.

A breakdown of enrollments by gender was not readily available except for the DET and SGT. In the former, 6,138 of the 9,393 students are female. In the SGT, 13,811 of the 22,309 students are female. Of special note is the fact that in the 12 colleges for white teachers, there are an estimated 4,180 vacant spaces. On the other hand, overcrowding and insufficient seats prevail in the African colleges. Five years ago there were 15 teacher colleges for Whites with a total capacity of 13,330. By the end of 1992, five of the existing white colleges will be closed down and their facilities lost to teacher education despite the shortages noted earlier for Africans.

At the primary and secondary level, there are nearly 285,000 teachers employed. Sixty-five percent of those are African, twelve percent are Coloured, four percent are Indian, and nineteen percent are White. Although white teachers are estimated to be nearly evenly divided between the primary and secondary levels, the same is not true of coloured teachers where the primary to secondary ratio is 2:11 and for Africans for whom the ratio is 2.3:1. These ratios reflect the system bias that restricts the educational attainment of African children.

TABLE 7.3: NUMBER OF TEACHERS BY SCHOOL LEVEL

	Primary	Secondary	Total
White	?	?	53,493[1]
Indian	5,740	6,065	11,805
Coloured	23,902	12,104	36,006
African	126,910	56,352	183,262[2]
Total	--	--	**284,566**

1 Will be divided almost equally between primary and secondary.

		Primary	Secondary	Totals
2	Made up of DET:	40,393	14,616	55,010
	SGT:	51,694	23,469	75,163
	TBVC:	--	--	53,089

Source: Hansard, 1991.

Differentiation in teacher preparation programs is further manifest in per capita expenditures by type of college. Expenditures per white student in 1930 averaged R 15,500; for Indians R 8,500; for Coloureds R 9,540; and the estimate for Africans is R 7,000.

The DET projects a need for an additional 13,000 teachers by the year 2000 to accommodate a one-half million person increase in the school-age population, a pupil-teacher ratio of 40:1 and parity between the numbers of teachers and numbers of classrooms. These estimates place the needed annual percentage increase in teachers at about 4.25 percent. Achieving this growth will require either the construction of new training facilities or greater utilization of under-enrolled facilities that have been the reserve of white teachers-in-training.

In general, the African teacher training colleges provide three years of full-time study programs for primary education teachers at two levels: junior primary (Sub A and Sub B and Standards 1 and 2) and senior, or higher, primary (Standards 3 and 4).

African teachers colleges served 6,515 teachers in 1990, distributed as follows:

TABLE 7.4: COLLEGES OF EDUCATION - DET ENROLLMENTS - 1990

Course	First Year	Second Year	Third Year	Total
Primary Teacher Diploma (Jr.)	1,255	1,014	777	3,046
Primary Teacher Diploma (Sr.)	1,539	999	931	3,469
Total	**2,794**	**2,013**	**1,708**	**6,515**

Source: DET Annual Report, 1990, pg. 120.

7.3.2 Pre-Service Structure

According to the 1990 DET Annual Report, newly redesigned primary teacher curricula, now being implemented on a pilot basis for first year students, have two levels:

1) The Primary Teachers Diploma (Junior Primary) is an integrated pre-primary and junior primary (Sub-Standards A and B and Standard 1) teacher training program with an emphasis on school-readiness and the administration of the bridging period in Sub-Standard A; and

2) The Primary Teachers Diploma (Senior Primary) is a higher primary level (Standards 3, 4 and 5) teacher training program with an emphasis on further subject matter mastery, teaching methodology, and academic training in other subjects and themes offered in the senior primary phase. A student must pass four subjects (english, math, science, and social studies) at Standard 10 level to be admitted to the program.

7.3.3 Administrative and Academic Control

All African colleges of education, except one (and excluding those in the homelands), are under the control of the government Department of Education and Training (DET). The exception is a private college, PROMAT, which has obtained official government recognition and which is affiliated with the University of Witwatersrand. PROMAT is very active in advancing the cause of under-qualified African teachers.

The Colleges of Education established for the white, Indian, and coloured students are under the control of their racially separated departments of education. In recent years all three of these types of colleges have been permitted to accept African students. The programs are presently modest in scope and in coverage. Each of the white colleges of education is affiliated with a university, which means that the university participates in some college decisions (e.g., appointment of senior staff, approval of curricula and syllabi, and monitoring of external examinations).

7.3.4 Problems and Constraints

Almost all aspects of African pre-service teacher training highlight the critical, profound, and pervasive problems confronting colleges of education in general. Compared to the HOA and DEC systems, DET teacher training programs are sub-standard. Physical facilities are generally inadequate with a serious shortage of equipment, laboratories, libraries, and related reference materials. Administrative policies and procedures, reflecting a bureaucratic, top-down management style, do little to foster modern concepts of democratic planning and management. The professional qualifications of the administrative and key teaching staff hover at the lower end of the scale, and the commitment to service so critical for effective teaching seems to be in scarce supply. Partly this is the result of an inadequate academic and professional foundation, and partly the result of a career system that is long on responsibilities but short on security and rewards.

The nature of the selection and management system also works against the colleges of education. The primary teacher education program is designed for committed professional educators, but it is well-known that many students in these programs have no serious intention of becoming primary teachers. For them, the college program provides an inexpensive, close-to-home, general education. Teaching is viewed as something to fall back on should other career options fail to materialize. Those students who are urban dwellers balk at the prospect of teaching where most of the beginning opportunities are: in rural, often remote rural, areas. The present curriculum is considered by most prospective teachers to be irrelevant to their needs and aspirations. It is an imposed, white-value dominated curriculum that is very academically oriented and bereft of African values and themes. All social groups have complained that their respective curricula are not as relevant to their social realities and aspirations as they should be.

Almost all thoughtful educational leaders in South Africa agree that a radical revision of all school curricula -- including pre-service teacher education and training -- is a high priority for educational initiatives under a new government.

The practice teaching component of teacher training merits early revision. Currently, practice teaching occurs near the end of the three-year academic program. The theory has long been that before entering the practice teaching phase, students had to have a good general education, strong subject matter mastery, and a good grounding in child development and teaching methodology. Only then could they comfortably take responsibility for teaching individual classes of children. Worldwide research questions the efficacy of this approach to pre-service teacher preparation. Increased attention is being given to how the practice teaching component can best be programmed into the pre-service system.

7.4 IN-SERVICE TEACHER TRAINING PROGRAMS

One generally accepted definition of In-Service Teacher Education and Training (INSET) in South Africa is as follows:

> ...the whole range of activities by which serving teachers and other categories of educationalists may extend and develop their personal education, professional competence, and general understanding of the role which they and the schools are expected to play in their changing societies. INSET further includes the means whereby a teacher's personal needs and aspirations may be met, as well as those of the system in which he or she serves.[1]

The importance being directed to INSET in South Africa is growing rapidly as the nation becomes more aware of the great disparities that exist between the working conditions and the academic and professional qualifications of white teachers compared with other disadvantaged groups, especially African primary teachers.

The most comprehensive survey of INSET in South Africa was performed in 1986 by Monica Bot for the Urban Foundation (See Footnote 1) and is extremely useful for its treating INSET in several interesting categories:

1) Curriculum-related INSET;

2) INSET for new roles;

3) INSET for un(der)-qualified and qualified teachers; and

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[1] Monica Bot, "An Overview of Teacher In-Service Education Training (INSET) Programs in South Africa," Urban Foundation, Durban, 1986, p. 1.

4) academic/professional upgrading of under-qualified and qualified teachers.

Each of these categories is then treated by the following areas:

1) The self-governing territories; and

2) the independent homelands and programs in the Cape, Orange Free State, Natal, and Transvaal.

Bot's review will not be repeated here, but an analysis of the major types of INSET programs follows.

7.4.1 Non-Government Organizations (NGOs) INSET

In general, compared to governmental programs, NGO INSET programs are innovative, practical, activity-centered, experimental, and well-designed and implemented. Because they are relatively new on the education scene, they are not as well-known as the traditional government INSET programs. Because they sometimes charge fees, they must compete with other, less effective but less expensive government programs. The number of places available in these private projects and programs is limited at present, but this handicap may be overcome in time as funds are found to expand services.

A recent listing of non-profit organizations identified 1,225 organizations involved to some extent in supplementing government efforts in education, health, and other social services. Some of these entities are quite small and their total impact on the society is relatively slight. Others, however, have national networks and substantial programs and offer the potential -- with supplementary funding by donors -- to make a significant contribution to improving formal education, including primary education, over the coming years. Of particular interest to this discussion is the number and type of programs focused on primary teachers as shown in Table 7.5.

TABLE 7.5: NGO PRIMARY INSET PROGRAMS - 1985

Type	Number of Programs	Annual Participants
Teacher qualifications	29 *	10,000
Teacher support - general	18 **	10,000-10,500
English language	11	3,000-3,800
Math & Science	5	1,000-1,700
Total	63	24,000-26,000

* Includes TOPS with 3,000 annual participants

** Primary Education Upgrading Programs claim 6,000 teachers annually in Bophuthatswana

Several of these programs merit special note because of their impact and large number of participants.

The Primary Education Upgrading Program (PEUP) is an innovative attempt to create a learning environment involving principals, parents, teachers, and pupils. Pupils, however, take much more responsibility for their own learning, and are helped to become independent, to enjoy learning, and to lose their fear of adults. Over 6,000 principals and teachers participate annually. Circuit teams are established composed of inspectors, principals, and model schools (each model school may have approximately eight satellite schools) to provide demonstration lessons and to lead group discussions and activities. Financing is shared by the private sector, government, participants, parents, and communities.

The Teacher Opportunity Programs (TOPS) now consist of 68 centers in 7 regions (Eastern Cape, Southern Transvaal, Northern Transvaal, QwaQwa, Orange Free State, Natal, and Western Cape). The 1991 programs have reached nearly 4,000 students and have three main thrusts:

1) Academic upgrading for teachers working for the Standard 10 matric certificate: 2,960 students;

2) Methodology courses in English, science and math: 745 students; and

3) Management courses for principals and senior teachers: 221 students.

Classes are held after hours in TOPS centers, which are classrooms in a local school or community building. Teachers take 3 subjects annually, 3 hours weekly per subject. Rural teachers are served through correspondence courses, with meetings once or twice a month with tutors. Periodic workshops and seminars are held for the tutors. The Independent Development Trust is assisting TOPS with a R4 million grant to expand to approximately 70 centers and to further develop a distance learning component and a materials development project.

PROMAT Colleges, operating now on five separate campuses, are assisting under-qualified African teachers to obtain their matric (Standard 10) through an intensive one-year program that covers two years of materials in reduced time. Over 450 teachers are currently enrolled. Since its initiation, PROMAT has served over 2,000 teachers.

PROMAT also operates the only independent college for teacher education in South Africa. This four-year program is unique in that it is affiliated with and accredited by the University of the Witwatersrand. In 1991, 115 students were enrolled in the program.

7.4.2 Governmental (Departmental) INSET

7.4.2.1 Department of Education and Training

Specific information on INSET training programs from the DET is difficult to obtain. In the 1986 Urban Foundation report for Bophuthatswana, the Minister of Education and Development Aid described the status of DET teacher INSET programs as follows:

1) More than half the department's 45,000 serving teachers were in some form of in-service training;

2) 8,000 others were receiving INSET at Soshanguve College;

3) 11,500 teachers were registered for post-matric teachers courses at Vista University; and

4) 13,600 teachers were involved in a teacher management course run by experts from the private sector.

Five universities, colleges, or centers of education under DET conduct what may be considered significant INSET programs:

1) Vista University;

2) Bloemfontein Adult Education Center for Teachers;

3) University of Zululand (Umlazi);

4) Soshanguve College for Continuing Training; and

5) St. Francis Adult Education Center.

Most are offering programs to upgrade the teacher's performance in the classroom through classes emphasizing pedagogical theory. The combined enrollment for Bloemfontein, the University of Zululand, and the St. Francis Center approaches 1,000 teachers annually. The other two, Vista and the Soshanguva College for Continuing Training, merit special note because of the numbers of teachers involved and the nature of the programs. Vista University's total annual enrollment is approximately 12,000 teachers, most of whom possess Matriculation + 1 year or Matriculation + 2 years and seek upgrading. Study manuals are sent to students, with specific assignments (correspondence courses). Periodic contact visits are made by trained tutors. The average time to complete the course is two years, based upon devoting five hours per subject weekly, and taking three subjects yearly. The Soshanguve College for Continuing Training claims to enroll over 10,000 teachers annually in one week courses held from two to four times a year. The program boasts that it is a competency-based modular written course supplemented by an interactive video micro teaching system. The program, financed by Government, the Urban Foundation, and participant fees is reported to be very successful, with pass rates (20%) that compare favorably with other adult education centers and based upon student feedback interviews.

7.4.2.2 Independent Homelands

Venda - The University of Venda provides a full range of courses, including a B.Ed, a University Education Diploma for degree teachers who need a professional diploma, a diploma in School Librarianship, and a diploma in Educational Management. Reportedly 500 teachers enroll annually. The Ramaano Mbuhlaheni Training Center provides INSET for approximately 500 teachers annually with qualifications ranging from Standard 10 pupils to qualified teachers.

Bophuthatswana - The Teachers' Academic Upgrading Program (TAUP) reaches over 500 teachers a year in classes lasting two hours daily over the year. INSET is provided to under-qualified teachers. Over 500 teachers participate annually.

Ciskei - Hlaziya INSET Center trains over 500 secondary school teachers annually.

Transkei - The private sector constructed an INSET Center in 1987 for senior qualified teachers and hopes to provide courses in school management and curriculum development.

7.4.2.3 **Self-Governing Territories**

KwaZulu - Umlazi In-Service Training Center, Umlazi College for further Education, and Madadeni College of Education. Approximately 600 under-qualified teachers annually are provided self-study courses at Umlazi College and Madadeni, and the Umlazi INSET Center attracts 500 teachers annually in one- to two-week full-time workshops. Evaluations of the Umlazi INSET Center indicate the programs are not well received by the teachers because attendance is mandatory and because they have little say in determining course content.

KaNgwane - The Mgwenya College of Education provides full-time in-service upgrading courses for approximately 200 teachers annually.

KwaNdebele - The Rand Afrikaans University and the Transvaal College of Education provide full-time upgrading courses for approximately 300 teachers annually.

Lebowa - The University of the North provides one day courses for approximately 500 African secondary school teachers in English. The Lebowa INSET Center provides a varied program ranging from one week to one year for an unspecified number of post-primary and remedial education teachers.

QwaQwa - The Boityhorisong INSET Center annually serves over 500 teachers who are attempting to reach the Standard 10 qualification. Each session lasts 12 days and is divided into three terms per standard.

Gazankulu - The only primary education project reported was at the Molteno Project, but specific data were not readily available.

7.5 TOWARDS SOLUTIONS: RECOMMENDATIONS FOR ACTION

Previous sections of this chapter described briefly the school environment in which African teachers perform their daily activities. Also highlighted were the serious problems and constraints, which result in a primary education system for disadvantaged groups that is generally conceded to be inadequate and irrelevant.

The status of pre- and in-service teacher training programs in South Africa by government and non-government organizations was then discussed. Each of these sections revealed that the primary school system, especially for African children, is in a state of

crisis. Physical facilities, curricula components, instructional materials, teaching methods, and pupil evaluations are either in extremely short supply, or are inappropriate to the needs of primary age school children.

The following sections deal with short-term and medium-term strategies to revitalize the primary education system so that it can better serve the aspirations and needs of individual pupils, professional educators, and the larger communities and society of which they are an integral part.

Inequalities in the primary education system are the result of many years of calculated, systematic efforts by the state to deny educational access, equity, relevance, and quality to the largest segment of the population. Redressing these inequities will require enormous quantities of goodwill, cooperation, financial and human resources, and time by the numerous stakeholders in South African primary education. Some innovative strategies for dealing with many of the problems facing South Africans, however, have been tested in other developing countries. Some of these and their importance to South Africa are discussed below.

These strategies deal with the following primary education problem areas pertaining to the performance of teachers: overcrowding (including repetition and dropouts); language; instructional materials; redeployment of teachers; math and science; teacher training for new curricula; distance learning; learning resource centers; farm schools and multigrade teaching; and in-service teacher training.

7.5.1 Overcrowding

The most obvious solutions to overcrowding include building additional classrooms and shifting African children into classrooms that have become available as a result of declining white enrollments. Other innovative measures that can be considered over the short and medium term include:

1) Using volunteer teachers' aides;

2) Involving peer teachers as teachers' aides, and forming cooperative learning groups among pupils in each class; and

3) Double-shifting schools by extending the school day/week.

7.5.1.1 Volunteers

Local community residents (such as parents, older children, retired persons, and retired educators) can sometimes be persuaded to serve as volunteers (or for modest pay) to assist teachers in handling large classes. Various types of short-term in-service training programs can be arranged during school vacation periods, or Saturdays, to provide the aides with the minimum knowledge and skills necessary to serve as teachers' aides. These recruitment programs can be conducted under the leadership of the school principal or by the classroom teachers working with organized community groups. Actual training can be provided by the local primary school principal, classroom teachers, staff at nearby colleges of education, or by volunteers from the local teachers associations or subject societies. Local churches often act as suppliers of effective school volunteers.

The range and depth of services that can be provided by volunteers can often be determined by a local school needs assessment, designed by the local school staff or nearby colleges of education or teachers associations.

7.5.1.2 "Peer Teachers" and Cooperative Learning Groups

The concept of providing overburdened classroom teachers with help in the form of teachers' aides is not new to South Africa. The Transkei Employment Creation Program, funded by the RSA government starting in 1986, placed 1600 Standard 10 school leavers as teachers' aides in primary and junior secondary schools. In many cases, these aides taught subjects for which under-qualified teachers were not prepared. Besides helping regular teachers by relieving class loads, the program served as an excellent pre-training experience for potential teachers.

The use of students as teachers' aides has also been initiated with some success in several developing countries (e.g., Project Impact in the Philippines, Thailand and Indonesia). Sometimes older children from higher grades tutor children from lower grades, and sometimes children from the same grade are involved as peer teachers. The proper use of students as peer teachers is somewhat complicated and requires careful planning and monitoring by the regular classroom teacher. Classroom teachers are advised to seek help in conducting such programs from the school principal. Involvement of professional education groups (e.g., colleges of education, teachers associations) is highly recommended in organizing and managing such activities.

At the upper elementary level, successful experiments have been attempted with respect to organizing small groups of students to work cooperatively without the constant presence of the classroom teacher. After initial guidance from the teacher in approaches to solving the problem posed by the assignment or in studying a

specific amount of material, the pupils combine efforts; usually a natural leader emerges from the group, but sometimes it is a totally shared experience. Periodically, the teacher monitors the group, sometimes during school recess or immediately after school.

7.5.1.3 Double-Shifting of Schools

A frequent cause of classroom overcrowding is the inefficient use of existing physical facilities. Commonly, schools are open only for part of the day and accommodate usually only one shift of pupils and teachers. Lack of financial resources to pay teachers for extended teaching hours (i.e., double shifts) or extended teaching weeks in the school year are often cited as the main reason for this phenomenon. It is certainly a valid concern, but in some cases (e.g., El Salvador) school authorities, with the active cooperation and support of the teachers union, were able to negotiate compromises with teachers. For example, teachers agreed to teach two full shifts for an additional 40 percent of their normal pay. Their reasoning was that the additional pay, while not double, was a substantial increment to their income and increased their social standing in the community and nation. The press widely praised them for their "unselfish devotion" to the welfare of Salvadorean children.

7.5.2 Language

There are indications that a growing number of citizens and educators are encouraging the introduction of English as the official medium of instruction from the beginning of Standard 1. If adopted, there will be an urgent need to introduce into all pre-service teacher training programs an efficient and effective English language program as soon as possible. In-service training programs likewise will have to include intensive courses in English as soon as practical for all primary school teachers. Priority attention should be directed toward English language mastery for lower primary teachers, including special courses in the teaching of English to lower primary pupils. Once this program is under way, attention can be directed to the upper primary teachers.

In-service English language training via videotaped lessons showing trained teachers conducting lessons in actual primary classrooms is an option that should be considered by education officials responsible for the in-service teacher training programs. Leadership in developing, recording, and distributing these videotapes should be assumed either by the teachers associations or the colleges of education, or through a collaborative effort of both.

Radio cassettes can also serve an extremely useful purpose in improving the English comprehension and speaking abilities of

primary school educators and pupils. Radio instruction is well established in many countries and has a proven effect on improving student achievement scores in language, math, and science.

The use of modern technologies is growing rapidly worldwide, including in the developing countries. They are cost-effective, extremely well-received by users, and efficient and effective. The flexibility possible in the utilization of both videos and audio cassettes makes them ideal, complementary teaching aids for wide use in education. Another noteworthy feature of using videos and audio cassettes is the high quality of the final product. After all, teaching practices can be repeated indefinitely until the right images or sounds are captured on video or audio tape. Once recorded, they can be available in copies and circulated nationwide to large groups of users. Being able to use the tapes repeatedly -- at the convenience of the user -- is a highly desirable feature of these technologies.

7.5.3 **Instructional Materials**

Substantial international research findings confirm that, next to highly motivated and qualified teachers, the availability of good instructional materials is the most significant contributor to high quality primary education. Effective instructional materials include commercially printed textbooks, teachers guides, and pupil workbooks; printed reference materials (e.g., maps, charts); and teacher and student-made classroom learning aids.

African primary schools, particularly in the homeland rural areas, contain few of these essential learning aids. The likelihood is remote that sufficient quantities of these commercially prepared materials will be available in African classrooms within the near future.

The alternative approach, therefore, is to prepare large quantities of inexpensive, locally-produced learning materials. A priority, especially in lower primary school, should be on the preparation of wall charts in English language areas. Once produced in larger quantities by local school districts or more probably by individual classroom teachers (sometimes with the help of older students), these materials can be used for an extended period of time. Another priority should be consumable, teacher-prepared work sheets for individual pupils. Each primary school should be provided with at least one large capacity, low technology duplicator (mimeograph machine) where electricity is present, or teachers can be taught to make and use simple "spirit duplicators."

Since many primary school teachers are unskilled in the preparation and use of these locally-made materials, special

short-term workshops will have to be arranged, probably with the cooperation of instructional materials specialists at the universities, teachers colleges, or technikons. Other good sources of workshop assistance for materials preparation are the technical subject societies and the local teachers organizations. Principals and teachers should also be encouraged to seek donations from local businesses, which may be able to respond to modest requests for funds for instructional materials.

An innovative, primary textbook project in Jamaica may be relevant in South Africa. Confronted with a serious shortage of textbooks, a joint project was mounted by the Ministry of Education, the private sector (33 firms), and USAID to produce and distribute basic textbooks and teachers guides in all primary subjects to all pupils in the country.

Within six months of the start of the project, the goal was met! Several factors contributed to this startling success:

1) All books were produced by the local newspaper publisher, on double-thick newsprint, with cardboard covers, and only in black and white;

2) Copyrights for many of the books were already held by the Ministry; negotiations were successfully conducted with other authors and publishers for use of copyrights; and

3) Production costs were shared by the Ministry, private sector firms, and USAID.

Follow-up studies revealed that teachers, parents, and pupils were delighted to have the materials. Books intended as one-year throwaways lasted for more than one year. Parents, maids, and other siblings used the textbooks at home; and attendance and school retention rates improved.

A longer-term goal should be the preparation of new-type instructional materials for the learner that are self-instructional, self-paced, modular, and inexpensive. Over-reliance on textbooks as the principal material source should diminish as classroom teachers and other specialists become proficient in producing these flexible materials, through in-service training and practical experience.

7.5.4 Redeployment of Teachers

In the near future, when a single, non-racial education system becomes a reality, decisions will be required regarding the redeployment of teachers. As the number of school spaces for Africans rises to accommodate the needs of a policy of compulsory, free primary education, and the need for white

classes decreases, adjustments will be required in the assignment of both African and white teachers.

Several major activities can be initiated, especially for those teachers who will be instructing in schools with large populations of children with racial backgrounds different from their own, in the near future to prepare for this anticipated change in staffing, including the following:

1) Sensitivity training for all teachers in the cross-cultural implications of the new non-racial education system. Special units dealing with the characteristics, values, and aspirations of different children can be developed through print, video and audio media, and incorporated into pre-service and in-service training programs for principals, teachers, and other educational specialists.

2) Special TV and radio programs, as well as press articles, for the general public to help build bridges of understanding and cooperation among all segments of the new South African society. Copies of these programs can be made available for the use of civic and educational organizations (e.g., teachers colleges, teachers associations, social, political, and cultural groups) for repeated local use.

3) Presenting cross-cultural materials and issues on the popular new talk shows on radio, and the audience participation shows on TV.

4) Providing English language training to all teachers requiring upgrading in reading, writing, and speaking skills.

5) Creating new programs to identify and train specialists in various aspects of redeployment. Specialists from various disciplines (e.g., anthropology, sociology, political science, economics, and education) may be required to prepare culturally sensitive and accurate information and services to assist in conducting the redeployment process.

6) Forming working committees of government education officials, representatives from colleges of education and teacher associations, and prominent private-sector and civic officials to identify redeployment issues and to develop cooperative action plans for their resolution.

7) Selecting highly-skilled, surplus white primary school teachers and assigning them as lecturers in pre-service teacher college programs or as regional resource specialists to help provide in-service training to the large numbers of under- and unqualified African teachers.

7.5.5 Achievement in Major Subjects

Math and science programs in African primary schools have recently come under severe scrutiny because of a widely held belief that these are the two subjects in which African pupils perform most poorly. As noted earlier, unsatisfactory results in matriculation exams in math and science seem to confirm the poor status of instruction and performance.

Among the initiatives that can be undertaken to help alleviate this problem are the following:

1) Improved pre-service and in-service teacher training programs which place special emphasis on helping teachers develop both their subject matter mastery and their teaching skills in math and sciences;

2) Developing a strategic curriculum in primary math and science, with clearly stated objectives, improved syllabi, better instructional materials (including consumable math and science practice materials and learning kits), and better diagnostic and evaluation techniques for classroom teachers; and

3) Raising the status of math and science performance by conducting math contests and science fairs, and appropriately awarding pupil performance through public recognition and prizes.

7.5.6 New Curricula Emphasis

An important function of both pre-service and in-service teacher training programs is preparing principals and classroom teachers to introduce revised or entirely new curricula in the lower and higher primary education programs.

Several options are available in this regard:

1) Preparing special video, audio, and print materials describing the objectives and teaching methods, instructional materials, and evaluation techniques and instruments that may be used in the new curricula. These materials, developed cooperatively by state education officials and educational professionals from colleges of education and teachers associations and

subject societies, may be copied and distributed for use nationally, regionally, and locally;

2) Developing and using specific learning units in pre-service and in-service teacher training workshops, conferences, and seminars;

3) Developing and using special new curricula materials in both pre- and in-service teacher training workshops. Such subject matter areas as social studies are likely to become increasingly important with the introduction of a new, restructured education system; and

4) Developing radio programs, video short-features, and print materials to explain the nature of the new curricula to parents, teachers, and the general public. This aspect of a larger social marketing strategy could be cooperatively prepared by the state education agency, the colleges of education, and the teachers associations and subject societies.

7.5.7 Distance Learning Services

Still largely an untapped resource, the provision of "distance learning" services may offer excellent opportunities for reaching large audiences in a cost-effective manner. This delivery service has extensive possibilities for improving African education at all levels.

Several examples follow:

1) In-service teacher training. The extremely large number of under-and unqualified African primary school teachers cannot all be accommodated adequately in teacher training college classrooms or in regional and local workshops. Distance learning is an excellent way to supplement the work of these formal group sessions and even of substituting for them. The latter may be necessary to reach remote rural principals, teachers, and other school specialists. In order for distance learning to reach its full potential, needs assessments will have to be conducted, special materials prepared, cadres of tutors and monitors trained, and delivery systems developed. In most current applications, students enrolled in distance learning programs receive packages of lessons to be completed, textbooks and reference materials, and means to mail in completed lessons to trained tutors for grading and comments. Approximately once a month, students go to a regional center or local school to meet with a small team of tutors for approximately 3 hours of face-to-face discussions related to the lessons or the general

subject. Besides special training in teaching and advising students in this system, tutors are often required to prepare special supplementary learning materials.

2) Distance learning programs for students at all levels, in a variety of school subjects and personal interest courses. Once the mechanism for establishing and using distance learning programs is initiated, tested and refined, the long-range possibilities for the wider application of this technology are almost limitless. The system can reach students in both formal and informal school settings and the general public who can pursue courses in career enhancement or personal fulfillment.

7.5.8 Resource Centers

The creation of Education Resource Centers (ERCs) is an idea that is enthusiastically being advocated by colleges of education, teachers associations, subject societies, and some NGOs. Little disagreement exists that these centers will assume increasing importance over time as a truly integrated national system of basic education becomes a reality. What is very much in dispute, however, is who will manage these centers and where they will be located.

Colleges of education base their case for control and location of the ERCs on their campuses on their position as principal providers of pre-service teacher training, their generally central location in cities and towns, their capability to provide the physical facilities most inexpensively, the availability of experienced staff to manage the centers, and their belief that their role in in-service teacher training programs will increase over time.

Teachers associations argue that ERCs should be under their control because they are less bureaucratic than colleges of education, closer to schools, teachers, and pupils than colleges of education, and more dedicated to the production and use of the various materials and services of the ERCs.

As presently conceived, ERCs will provide a full range of educational services to a variety of participating groups. Central to the operation will be the library and reference collections, which will contain textbooks and related materials regarding the professional education of teachers, samples of curriculum guides, instructional materials including textbooks, teachers guides, workbooks, video and audio materials, and collections of educational research.

Ample provision will be made for large and small groups meeting rooms, model science laboratories, and reproduction facilities. The ERC is seen as the focal place for professional educators and any other interested community groups and persons who seek a stimulating, facilitating environment in which to share ideas. The ERCs could also serve as a modest publication and distribution center for scholarly papers, books, articles, and magazines. In time, they could become centers for the production of professional videos, audio cassettes, and other emerging technologies.

In sum, the ERCs, wherever they are located, can serve as useful networking places for cooperative efforts among colleges of education, teacher associations, and other educational organizations.

7.6 SUMMARY OF FINDINGS

7.6.1 Pre-Service (PRESET)

1) Colleges of education, the principal providers of pre-service training for African primary school teachers, require substantial additional funding to provide a comprehensive PRESET program (physical facilities, equipment, libraries, laboratories);

2) The curriculum is outdated and out of balance. Too little emphasis is placed on general education and on content mastery while too much emphasis is placed on professional education courses;

3) Practice teaching activities are introduced too late in the pre-service program; and

4) Faculties in the colleges of education need further education and training to assume new roles as teacher trainers in a changing primary education system.

7.6.2 In-Service Teacher Training (INSET)

1) An urgent need exists for high quality, continuous primary INSET, especially at the lower primary grades (SSA SSB, and Standards 1 and 2) and for African teachers. Lower primary grades are stressed because this is where most of the major learning/teaching problems occur (e.g., overcrowding, repetition, dropouts, poor start on learning). African teachers are especially in need of upgrading because they are the least qualified (general and professional education) of all primary teachers;

2) Many INSET programs are currently operating in South Africa, run by departments of education and NGOs. A wide range of subjects are covered, and the number of participants and the duration and quality of programs vary widely. The NGO programs are more innovative, practical, better planned and delivered, and are better accepted by the participants than are the programs offered by the Departments;

3) Little systematic coordination occurs among the various major providers of INSET (NGOs, departments, colleges of education, teachers associations, and subject societies); and

4) Principals and teachers want and approve of INSET, but with conditions: Programs should not be imposed by others; teachers' inputs are needed in planning INSET; courses should be practical, close to home, free or inexpensive and, most important, should be a vehicle of career advancement.

In view of the current status of pre- and in-service teacher training, and in light of the projected, urgent needs in the system for the provision of many more qualified teachers, it is clear that teacher training efforts must produce not only more teachers, but also a different kind of teacher. The emergence of democratic processes in all aspects of South African life, now well under way, should be encouraged throughout the planning, management, and evaluation activities of all educational institutions. Teachers must be taught to develop their critical, problem-solving skills throughout their pre- and in-service teaching experiences for use not only in their classrooms, but in their professional and personal lives as well. Only in this way will South Africa produce a child-centered rather than a teacher-centered school environment, and only through the more active participation of teachers in their own professional training will their needs be accurately identified and addressed in planning and operating appropriate and relevant pre- and in-service teacher training programs.

7.7 SUMMARY OF RECOMMENDATIONS

The following suggestions are offered to educational decision-makers for improving pre- and in-service teacher training programs:

7.7.1 **Pre-Service**

1) Structure of Pre-Service

- Consider changing the current minimum three year academically-focussed program to a 3-year program which introduces practice teaching components earlier. One possibility:

- Year One: Emphasis on academic courses to improve the general educational development of the student and subject matter mastery. During the second half of the first year, introduce professional methodology and child development courses;

- Year Two: Assign the student to a specific primary school, under the supervision of a master teacher, to first observe and then to progressively become more involved in the actual teaching and management of a classroom. Periodic visits from the college of education faculty mentor should be made to observe the student and to discuss progress being made with the master teacher and the student; and

- Year Three: Return the student to the college of education for more academic and professional education. Periodic, short practice teaching sessions can also be arranged in the primary school.

Currently, students contemplating a teaching career are subjected to more than two and a half years of academic preparation before assuming an internship. In many cases, students cannot appreciate the relevance of the academic and professional courses until they are required to use these understandings and skills in practice. An earlier introduction to actual classroom experiences will make further academic learning more meaningful. Earlier classroom experience may also serve as a self-selection process, as some students will decide early that they do not want to pursue the teaching profession.

2) Colleges of education should solicit more systematically and thoroughly the opinions of experienced classroom teachers, principals, and

inspectors, members of teacher organizations and subject societies regarding the nature, scope, and content of pre-service teacher training programs. Perhaps a totally new pre-service teacher training curriculum will emerge from these.

3) Adequate opportunities should be provided in the colleges of education for students to improve their general educational backgrounds; their understanding of child development processes; their subject matter mastery of English, math, science and social studies; and their professional skills in planning, managing, and evaluating classroom learning activities.

4) Professional staffs of universities and colleges of education responsible for pre-service education should be highly qualified and should have opportunities for improving their personal and professional backgrounds through further observation, and through substantial support provided for long and short-term education and training programs in-country and abroad. Assistance to create these opportunities for staff should be provided (e.g., released work time, financial assistance, and supplementary materials).

5) Colleges of education should constantly examine their roles in education and foster closer cooperative links with the local communities and regional areas which they serve. Closer cooperative relations should also be established with other professional educational organizations (e.g., teacher organizations, subject societies, non-governmental organizations).

6) Comprehensive educational resource centers should be created at some of the teachers colleges to serve as demonstration and research centers where all professional education groups (e.g., teachers associations, subject societies, private sector education organizations, and local community groups) can meet to discuss and cooperatively plan and manage educational improvement projects.

7.7.2 In-Service Teacher Training (INSET)

Many experienced South African specialists in INSET are convinced that future INSET programs will be cooperatively planned, managed, and evaluated through projects involving government agencies, universities, colleges of education, teachers associations, subject societies, non-government organizations (private and charitable), national and regional leaders, and local community groups.

This is partly the result of new organizational and administrative structures and policies, and partly the result of new views on the purposes of education in a modernizing society.

Collegial, collaborative efforts should be encouraged at all levels. The new government, the South African private sector, and international donors might well be disposed to provide means and funds to start or continue these cooperative efforts.

Meanwhile, several guiding principles need to be stated, reviewed, and perhaps debated by South Africans committed to improving the quality of teaching:

1) INSET programs should be part of a larger strategy dealing with educational improvements at all levels and in all areas;

2) INSET programs should be a permanent aspect of teacher education and training, and should receive adequate amounts of financing from the state to provide at least minimum levels of professional and support staffing, physical facilities, instructional materials, and other supporting services;

3) INSET programs need to be developed and coordinated at the national, regional, and local levels, but major emphasis should be at the local school level, to meet local teachers' needs;

4) Appropriate roles exist for different groups of INSET providers, and close cooperation should prevail among them (e.g., state government, universities and colleges of education, teachers associations and subject societies, and non-government organizations);

5) INSET programs have to be revised to emphasize the changing role of the teacher from authoritarian instructor to democratic learning guide, and the change of the classroom environment from teacher-centered to pupil-centered;

6) Comprehensive INSET programs should provide a network of support services, preferably at the local school level, to assist under- and unqualified classroom teachers to achieve their personal and professional goals and to better serve their pupils;

7) INSET priorities within primary education should focus on the teachers in the lower primary grades (SSA and SSB and Standard 1), because class sizes are larger, repetitions and dropouts are higher, and teaching of

basic reading and numeracy is currently below standard for teachers; and

8) Ample opportunities should be made available to key INSET planners and practitioners (especially college of education teacher trainers and principals) to further their professional education in advanced training in-country and abroad.

ENDNOTE

TEACHER TRAINING - COLLEGES OF EDUCATION

African - 1987

Area	Name of College
Department of Education and Training	
Johannesburg	Soweto College of Education
	Molapo College of Education
Natal	Indomiso College of Education
Northern Transvaal	Transvaal College of Education
	College of Continuing Training
	Technikon Northern Transvaal
Orange Vaal	Mphohadi College of Education
	Sebokeng College of Education
Cape	Cape College of Education
	Good Hope College of Education
	Algoa College of Education
Highveld	East Rand College of Education
	Kathorus College of Education
	Daveyton College of Education

Area	Name of College
Lebowa	Dr. C.N. Phatudi College of Education
	Kwena Moloto College of Education
	Mamokgalake Chuene College of Education
	Mapulaneng College of Education
	Modjadji College of Education
	Mokopane College of Education
	Sekhukhune College of Education
	Setotowane College of Education
QwaQwa	Bonamelo College of Education
	Sefikeng College of Education
	Tshiya College of Education
Independent States	
Transkei	Cicitq College
	Butterworth
	Arthur Tsengiwe Training College
	Bensonvale Training College
	Maluti Training College
	Clarkebury Training College
	Mt. Arthur Training College

Teacher Training - Colleges of Education, cont'd.

Area	Name of College
Orange Free State	Phatsimang College of Education
	Kagisanong College of Education
Self-Governing States	
Gazankulu	Hoxane College of Education
	Tibumbeni College of Education
	Giyani College of Education
KaNgwane	E.C. Mango College of Education
	Mgwenya College of Education
KwaNdebele	Ndebele College of Education
KwaZulu	Amanzimtoti College of Education
	Appelbosch College of Education
	Eshowe College of Education
	Esikhawini College of Education
	Kwagqikazi college of Education
	Madadeni College of Education
	Mpumalanga College of Education
	Ntuzuma College of Education
	Umbumbulu College of Education
	Umlazi College of Education
	Umlazi Inset College of Education

Area	Name of College
Transkei	Shawbury Training College
	Sigcaw Training College
	Bethel Training College
Bophuthatswana	Hebron College of Education
	Moretele College of Education
	Strydom college of Education
	Taung College of Education
	Tihabane College of Education
Venda	Makhado College of Education
	Ramaano Mbulaheni Training College
	Tshisimani College of Education
	Venda College of Education
Ciskei	Dr. W.B. Rubusane College of Education
	Masibulele College of Education

APPENDICES

ANNEX A

PERSONS INTERVIEWED

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REFERENCES CONSULTED

Anon. "CPI: Now you see it ...," *Financial Mail*, Oct. 1991, p. 36. 1991a.

-------. "Shock Figures on Unemployment," *Sunday Star* [Johannesburg], Finance Section, p. 3. 20 Oct. 1991.

African National Congress. "Discussion Paper for the ANC on Education Policy." Johannesburg, South Africa: ANC, 1991, pp. 1-38.

Ajam, M. "The Purpose of the Bureaucracy and its Effects on Education." *Teachers Journal*. Special Issue on "Education Dynamics and the Bureaucracy." 18.2 (July 1988): 10-13.

Alexander, N. *"Sow the Wind."* (Contemporary Speeches). Johannesburg: Skotaville Publishers, 1985. 180 pp.

Archer, S. & P. Moll. "Education and Growth Issues in the South African Economy." Paper presented at the Cape Colloquium, 2-4 Nov. 1990.

Ardington, E.M. *The Crisis in Rural Education*, CSDS, University of Natal, Natal, South Africa, 1991.

Ardington, L. "Education for All: Spatial Dimensions." *Indicator SA*, Vol. 8.2: 79-82. Autumn, 1991.

Ashley, M.J. & M.C. Mehl. "INSET in South Africa, Issues and Directions," Teacher Opportunity Programs, Johannesburg, 1987, 104 pp.

Behr, A.L. *Education in South Africa: Origins, Issues, and Trends: 1952-1988*. Pretoria, South Africa: Academica, 1988.

Bot, M. *The Blackboard Debate: Hurdles, Options and Opportunities in School Integration*. Johannesburg: South African Institute of Race Relations, 1991, pp. v-150.

-------. "Special Issue on Education Renewal." *Social and Economic Update 15* (July 1991): pp. 1-11.

-------. *An Overview of Teacher In-Service Education and Training (INSET) Programs in South Africa*. Urban Foundation, June 1986. 138 pages + attachments.

220

Carstens, P.D. & A. Du Plessis. "Education and Manpower Development, 1987," No. 8, Research Institute for Education Planning, University of the Orange Free State, May 1988. 25 pp.

Christie, P. *The Right to Learn: The Struggle for Education in South Africa*. Braamfontein/Johannesburg: Ravan Press/SACHED Trust, 2nd Edition, 1991.

Christie, P. & M. Gaganakis. "Farm Schools in South Africa: The Face of Rural Apartheid." *Comparative Education Review* (Feb. 1989).

Cobbe, J. "Economic Policy Issues in the Education Sector." Conference Paper, 29 Sept. - 2 Oct. 1986. Center for Southern African Studies University of York.

Committee of Heads of Education Departments, Government of South Africa. *Educational Renewal Strategy: Discussion Document*. Cape Town, June 1991.

"Constituent Assembly and Interim Government." *Fast Facts* 2. (Mar. 1991). South African Institute of Race Relations.

Cooper, C. et al. *Race Relations Survey, 1989/90*. Johannesburg: South African Institute of Race Relations, 1991, 895 pp.

Cosser, E., ed. "Education for Life: The Challenge of Schooling for All." Christian Research, Education, Information for Democracy (CREID). Johannesburg, 1991. 138 pp.

Crain, R.L., R.E. Mahard, & R.E. Narot. *Making Desegregation work: How schools create social climates*. Cambridge: Ballinger Publishing Company, 1982.

Cross, M. "A Historical Review of Education in South Africa: Towards an Assessment."

Dachs, T.E. "The School Curriculum: A Survey of Opinions of Natal Teachers Society Members." Pinetown, May 1991.

de Graaf, J.D., W. Louw & M. van der Merwe. *Farm Schools in the Western Cape - A Sociological Analysis*. Stellenbosch University, Apr. 1990.

de Klerk, F.W. "South Africa in Transition, Update V." 1 Feb., 1991. Lawyers Committee for Civil Rights Under Law. Washington, D.C.

Department of Economics University of Pretoria. "Financing of Education in South Africa," *Senbank: Focus on Key Economic Issues* 46. Pretoria: Senbank, June 1990.

Department of Education (Bophuthatswana). *Annual Report 1989*. South Africa: Department of Education, 1990.

Department of Education (Gazankulu). *Annual Report 1990*. South Africa: Department of Education, 1990.

Department of Education (KaNgwane). *Annual Report 1990*. South Africa: Department of Education, 1990.

Department of Education and Culture (House of Assembly). *Annual Report*. Pretoria: Department of Education and Culture, 1990.

Department of Education and Culture (House of Delegates). *Annual Report*. Durban: Department of Education and Culture, 1990.

Department of Education and Culture (House of Representatives). *Annual Report*. Pretoria: Department of Education and Culture, 1990.

Department of Education and Culture (KwaZulu). *Annual Report*, 1990.

Department of Education and Training. *Annual Report*. Pretoria: Department of Education and Training, 1990.

-------. *Annual Report 1990*. Pretoria: Government Printer, 1991, pp. iii-390.

-------. "Position Paper 1: Textbooks and Prescribed Books." 13 May 1991.

-------. "Position Paper 3: Stationery." 1991.

-------. "Position Paper 4: Classrooms." 13 May 1991.

-------. "Syllabus for African Languages, Standard 1." 1984.

-------. "Syllabus for Music, Substandards A and 3." 1981.

-------. "Syllabus for Religious Education, Standard 1." 1983.

-------. "Syllabus for Religious Education, Standard 2." 1983.

Department of National Education. "National Education Policy." Johannesburg: Department of National Education. Sept. 1988, pp. 1-26.

-------. "Preliminary Education Statistics for 1990."

-------. "The Structure and Operation of the South African Education System." Pretoria: Department of National Education. pp. i-26.

Development Bank of Southern Africa. "Education Sector Analysis." Unpublished Document, 1991.

--------."South Africa: An Inter-Regional People." Oct. 1991.

--------. "Human Resource Development Education for Black People." Halfway House: Development Bank of Southern Africa. 1991.

-------. "South Africa: An Inter-Regional Profile." DBSA, 1991.

Development in Southern Africa: An Assessment and Directory. Prodder's Annual, 1989-90. Published by the Program for Development Research (Prodder).

Donaldson, A. "Financing Education." Forthcoming in McGregor and McGregor, (eds.) *Education Alternatives*, Cape Town: Juta, 1991.

-------. "Restructuring Social Services: Competition, Cooperation, and Regulation." Forthcoming in R. Schrire (ed.) *The Economic Debate*. Cape Town: Oxford University P. 1991.

-------. "The Political Economy of People's Education." Presented at a Workshop at the University of the Western Cape under the auspices of the NECC. Grahamstown: Rhodes University, Department of Economics and Economic History, typescript. 1990.

-------. "Economic Development and Human Resources Needs." Presented at a Workshop of the Bursary Council of South Africa, 1 July 1991. Grahamstown: Rhodes University, Department of Economics and Economic History, typescript. 1991.

-------. "Growth, Congestion, and Efficiency: Problems in the Restructuring of Social Services." Paper presented for a Colloquium on 'Redistribution and Growth in the Future South African Economy', November, 1990. Grahamstown: Rhodes University, Department of Economics and Economic History, typescript. 1990.

-------. "Towards Progressive Education: Five Awkward Features of the Future," pp. 15-43. Education Policy Unit, 1989.

Donaldson, A. & A. Roux. "Education, Employment and Incomes of Black South Africans in 1985," in *Proceedings of the Conference on Literacy and Basic Adult Education in Southern Africa*. Pretoria: HSRC. 1991.

Dostal, E., ed. *Education for South Africa's Future*. Bellville: University of Stellenbosch, Institute for Futures Research. Educational Paper No. 16. June, 1991.

-------. "The Long-Term Future of Education in South Africa." Bellville: University of Stellenbosch, Institute for Futures Research, Occasional Paper No. 15. June, 1989.

Driver, P. "Second Language Learning through the Writing Process: A Proposed Integrated Curriculum for Senior Primary Teacher Training," M.Ed. Thesis, Faculty of Education, University of the Western Cape, June 1991.

Du Pisani, P. et al. *Education and Manpower Development, 1990*. Research Institute for Educational Planning (RIEP), Faculty of Education, University of the Orange Free State. Bloemfontein. Aug. 1991.

Du Plessis, Du Pisani & Plekker. *Education and Manpower Development*, 1989, No. 10. Bloemfontein: Research Institute for Educational Planning (RIEP), University of the Orange Free State. 1990.

Edgewood College of Education. Contact: Bulletin of the Research Committee, No. 4, June, 1987.

The Education Authorities Directory and Annual, 1991, Redhill, England, The School Government Publishing Company, Ltd., 1991, 1280 pp.

Education Development Trust. "Education for Transformation." Johannesburg.

Education Policy Unit, University of the Witwatersrand. "Financing of Education: Proceedings of a Conference held by the EPU at the University of the Witwatersrand on 1 June 1988. Johannesburg: Publications Unit, EPU, University of the Witwatersrand. 1989. 73 pp. Workshop Series No. 1.

Education Yearbook, 1991, London, Longman, 1991, 00. 684.

Engelbrecht, S.W.H., *Demography and the Provision of Education*.

Eyer, J., V.J. Cook & L.E. Ward. (1983). Resegregation: Segregation within desegregated schools. In: Rossell, C.H., & Hawley, W.D., eds. *The Consequences of School Desegregation* (pp. 126-162). Philadelphia: Temple University Press (1983).

Flanagan, W., ed. *Teachers and Their Work: Case Studies of In-Service Education in African Primary Schools*, Primary Education Project, School of Education, University of Cape Town, 1991.

Fullan, M. *The Meaning of Educational Change*. New York: Teachers College, Columbia University, 1982, pp. v-326.

Gordon, A. "South African Farm Schools - The Neglected Sector." Paper presented to the Farm School Networking Conference. Broederstroom, July 1991.

-------. *The Transformation of South African Farm Schools: Opportunities and Constraints*, Ph.D. thesis, March, 1991.

Government of Namibia, Ministry of Education, Culture, Youth & Sports. *Basic Education in Namibia: Sector Review Report*. Dec. 1990. IEES Project, Florida State University, USA.

Gqubule, D. "Experts stumped by jobless crisis," *Sunday Star* [Johannesburg], Finance section, p. 7, 20 Oct. 1991.

Harding, T. *Land, Local Government and Education in the New Nation*, Sept.-Oct. 1991.

Hartshorne, K. "African Primary Schooling in 1990," H.S.R.C. Threshold Project Working Party, May 28-30, 1990.

-------. "The Current Situation." Unpublished paper prepared for the Primary Education Sector Assessment (PESA), Oct. 1991, pp. 1-4.

-------. "The Present System of Education: An Analysis and Assessment." (Unpublished draft). 1991. 27 pages.

-------. "African Primary Schooling in 1990." Threshold Project Working Party, 28-30 May 1990. Human Sciences Research Council. 10 pages.

-------. "Education in the Homelands," Etheredge Commemoration Lecture. Center for Continuing Education, University of the Witwatersrand, Johannesburg, June 1989. 23 pages.

-------. "Education Dynamics and the Bureaucracy." Teachers Journal. Special Issue on "Education Dynamics and the Bureaucracy." 18.2 (July 1988): 3-6.

-------. "National Education Policy Investigation." Unpublished paper prepared for the Primary Education Sector Assessment (PESA), Oct. 1991, pp. 1-12.

Hawley, W.D., R.L. Crain, C.H. Rossell, M.A. Smylie, R.R. Fernández, J.W. Schofield, R. Tompkins, W.T. Trent, & M.S. Zlotnik. (1983). *Strategies for Effective Desegregation.* Lexington, MA: Lexington Books.

Healey, F. & L.A. Crouch. "Trip Report: Development of South African Policy Options Model (Version 1.0)." Research Triangle Park, N.C.: Center for International Development, RTI, processed. 1991.

Healey, F. & J.E. Spratt. Trip Report: TDY to South Africa. Research Triangle Park: Research Triangle Institute, July 29 - Aug. 30, 1991.

-------. "Trip Report: STA to South Africa, July 29 - August 30, 1991." Research Triangle Park: Center for International Development, RTI, processed. 1991.

Henry J. Kaiser Foundation. "Progress: Reports on Health Development in South Africa." Washington, D.C., Spring/Summer, 1991.

Hochschild, J.L. (1982). "Local control of school desegregation through citizen monitoring." In: Monti, D.J. (ed.). *Impact of Desegregation* (pp. 67-82). San Francisco: Jossey-Bass, Inc., Publishers.

Human Sciences Research Council. Report of the Main Committee of the HSRC Investigation into Education: *Provision of Education in the RSA.* Pretoria: HSRC, July, 1981. pp. 1-221.

-------. Statistical Data (by personal arrangement).

Hughes, L.W., W.M. Gordon, & L.W. Hillman. (1980). *Desegregating America's schools.* NY: Longman.

Independent Development Trust. "Survey of Education Strategy." 1991.

Independent Examinations Board. "Colloquium 5." Primary Schooling and Basic Education, held on May 6-7, 1991.

Jaddin, H.J. "Informal Settlement Monitoring Project," Education Report, Unpublished, Urban Foundation, March 1991.

Jammine, A., T., C., T., T. Jammine, & M. Addleson. "South African Economic Analysis and Outlook." Braamfontein: Econometrix (Pty) Ltd. July, 1991.

Jenkins, E.R. "Language and Education in South Africa." Paper delivered at the LICCA Conference, Pretoria, 7 Apr. 1991.

Jooma, A. "Social and Economic Update: 11 August 1990, 24 August 1990." South African Institute for Race Relations.

Jordaan, K., R. Stewart, T. Gilfillan, & L. Ardington. "Memorandum to Deputy Minister of Education and Training on Rural Education for Blacks on the North Coast of Natal," December 1989.

Kelly, J. "Update 10 January - June 1990." *Update*, 2 July 1990. South African Institute for Race Relations.

-------. "Social and Economic Update 12 July - December 1990." *Update*, January 1991. South African Institute for Race Relations.

King, M. & O. van der Berg. *The Politics of Curriculum: Structures and Processes*, Centaur Publications in association with the I.E.B., Pietermartsburg, 1991.

Krige, D. "The Basic Needs Approach to Development: The Question of Education for Black People in Natal," *Development Southern Africa*, Vol. 6, No. 2, May 1989.

Lee, R.H. "No Coups d'Etat: Education Policy Change in the 1990s." *Policy Issues and Actors*, Vol. 3, No. 4. Nov. 1990. Center for Policy Studies, University of the Witwatersrand, Johannesburg.

Le Roux, A.L., ed. "CORDTEK, A Strategy for Change." Edgewood College of Education, Pinetown, Natal, 1990. 95 pages.

-------. "The Walters and ERS Reports: The Nature and Structure of Schooling for the New South Africa," in The Curriculum: Subject to Change, *Mentor*, Vol. 73, No. 3, 1991.

Lindsay, B. "Educational Equity in Cross-National Settings," in *International Comparative Education*, M.R. Thomas (editor), Oxford/New York, Pergamon Press, 1990, pp. 197-224.

-------. "Public and Higher Education Policies Influencing African-American Women," *Higher Education: The International Journal of Higher Education and Educational Planning*, Vol. 17, No. 3, 1988, pp. 563-580.

Lockheed, M.E. et al. "Improving the Quality of Primary Education in Developing Countries." Education & Employment Div. Pop & Hd.R. Department, World Bank, 1989, (draft, 4/89), pp. v-168.

Lockheed, M. E. & A.W. Verspoor (1990). Improving Primary Education in Developing Countries: A Review of Policy Options. Washington, D.C.: World Bank.

Lyons, P.J. "Education in South Africa: It's Time to Turn to Technology." Unpublished paper. Edgewood College of Education, Ashwood, Natal, undated.

Mabia, A. "Struggle for the City: Urbanization and Political Strategies of the South African State."

Macdonald, C.A. "Ballpoint Pens and Braided Hair: An Analysis of Reasoning Skills and the Curriculum." Report SOLING-18 1990. Human Sciences Research Council, Pretoria, 1990.

-------. "Crossing the Threshold into Standard Three" (Main Report of the Threshold Project), Report SOLING-16 1990. Human Sciences Research Council, Pretoria, 1990.

-------. "English Language Skills Evaluation." Report SOLING-17 1990. Human Sciences Research Council, Pretoria, 1990.

-------. "Reasoning Skills and the Curriculum" (a Final Report of the Threshold Project), Report SOLING-18, 1990. Human Sciences Research Council, Pretoria, 1990.

-------. "Standard Three General Science Research 1987-1988." Report SOLING-21 1990. Human Sciences Research Council, Pretoria, 1990.

-------. "Swimming Up the Waterfall: A study of school-based learning experiences." Report SOLING-19 1990. Human Sciences Research Council. Pretoria, 1990. 112 pages + addendum.

Mackay, S. "Quarterly Countdown Nineteen July 1991." *Countdown*, 31 July 1991. South African Institute for Race Relations.

Marx, A.W. Consultant Report to the United Nations Development Program on the Education Sector in South Africa. Columbia University, 1991.

McGurk, N.J. "Privatization as Community Initiative," pp. 91-105 in Dostal, T. du Pisani, S.J. Plekker, C.R.Dennis, and J.P. Strauss, *Education and Manpower Development*, 1990, No. 11. Bloemfontein: University of the Orange Free State, RIEP, 1991.

Mdaldlana, S. "Presidential Address." Johannesburg, South Africa: South African Democratic Teachers' Union (SADTU), First National Congress, Oct. 10-12, 1991, pp.1-8.

Metcalf, M. "Desegregating Education in South Africa: White School Enrollments in Johannesburg, 1985 - 1991," University of the Witwatersrand, Johannesburg, 1991.

Moll, P.G. "Be r Schools or More Schools? The Equity/Growth tradeoff in South African Education." *Journal of Studies in Economics and Econometrics*, 15(1):1-9. 1991.

-------. *The Great Economic Debate* (particularly Chapter 7, "Economics of Education"). Braamfontein: Skotaville Publishers, 1990.

Moulder, J. "Unequal Inequalities: Teacher:Pupil Ratios," *Indicator SA*, 8(2):76-78. Autumn, 1991.

-------. "Undoing the Past. Index of Educational Need." *Indicator SA*, Vol. 8, No. 3, Winter 1991.

Mphahlele, E. "Alternative Institutions of Education for Africans in South Africa: An Exploration of Rationale, Goals, and Directions." *Harvard Education Review*, Vol. 60, No. 1, Feb. 1990.

Nasson, B. "Bitter Harvest: Farm Schooling for Black South Africans." *Perspectives in Education*, 10(1): 13-41. 1988.

National Education Policy Branch. *Education Realities in South Africa, 1990*. Pretoria, South Africa: Department of National Education. June 1991. pp. iii-51.

Noblit, G.W. & B. Johnston, eds. (1982). *The School Principal and School Desegregation*. Springfield, IL: Charles C. Thomas, Publisher.

O'Donovan, M. "Unit Labour Costs in Education," revised draft. Johannesburg: The Urban Foundation, typescript. 16 Nov. 1990. [Do not quote without Simkins' permission.]

Orbach, E. "The Education of Urban Blacks in South Africa," paper delivered at the conference on education in the urban context, Comparative and International Education Society, Western Region, November 1991. Halfway House: Development Bank of Southern Africa.

-------. "A development perspective on the role and function of Black Colleges of Education in South Africa," Halfway House: Development Bank of Southern Africa, 1991.

Osborn, E. "South Africa Must be Wary of Carpet-Baggers Bearing Foreign Aid." *Business Day*, 16 Aug. 1991.

Pigozzi, M.J. & V.J. Cieutat. "Improving the Efficiency of Educational Systems." *Education and Human Resources Sector Assessment Manual*, Aug. 1988.

Pillay, P. "Earnings and Education," Chapter 4 of draft doctoral thesis, Cape Town: UCT, typescript. 1991.

-------. "Reassessing Strategies for Financing Education in South Africa," Social Dynamics 15(2):25-39, 1989.

"Policies for a New Urban Future. Population Trends: Demographic Projection Model." *Urban Debate 2010*. The Urban Foundation.

READ Educational Trust, *Annual Report 1991*.

"Rer rt on the Activities of the Joint Working Group on Education." Established at a meeting on 25 February 1991 between delegations led by the State President and the President of the African National Congress, 17 July 1991. Cape Town, 26 May 1991. 32 pages.

Report of the Work Committee. "Education Management: Investigation into Education." Pretoria, South Africa: Human Sciences Research Council, July 1981, pp. i-159.

"Republic of Bophuthatwana," Department of Education. *Annual Report*, 1990.

Republic of South Africa, Central Statistical Services. *South African Labour Statistics 1991*, Pretoria: CSS, 1991.

-------. Central Statistical Services. *Bulletin of Statistics 25:2*, June, 1991.

Republic of South Africa, Department of National Education. *Education in the RSA, 1988*. Report NATED 02-215, Pretoria, Government Printer 1991.

-------. Department of National Education. *Preliminary Education Statistics for 1991*. Report NATED 02-214 (91/08). Pretoria: Government Printer. 1991.

Response by the Education Delegation led by the President of the African National Congress to Report on the Activities of the Joint Working Group on Education. (undated)

Riordan, R. "Of Returning Exiles and History Texts." *Eastern Province Herald*, 19 Aug. 1991.

230

Sadie, J.L. "The South African Labour Force, 1960-2005." Pretoria: UNISA, Bureau of Market Research, Research Report No. 178, 1991.

"SAIRR Race Relations Survey 1989/90," SAIRR, 1990.

Samoff, J. & J. Jansen. "Decentralization in Africa: Specifying Who Rules." Palo Alto, California: Stanford University, School of Education. Unpublished paper, 1991, pp. 1-23.

Samuels, P.C. "Presidential Address." *Teachers Journal.* Special Issue on "Education Dynamics and The Bureaucracy." 18.2, (July 1988): 7-10.

Sapire, H. and L. Schlemmer. "Education and Informal Settlement in the Pretoria Witwatersrand Verenigen Region," Unpublished Document, Urban Foundation, 1990.

School of Education. "Education Management Program for a Post-Apartheid South Africa: Proposal." Bristol, England: Bristol University, July 1991, pp. 1-14.

Scotaville Educational Division for the NECC. *What is History: A New Approach to History for Students, Workers and Communities.* Johannesburg, 1987.

Sebokeng College of Education, Interviews conducted with Mr. Z.A. Ngwenta, Rector, Ms. Susan Gou, Vice Rector & and Mr. J. de Kock, Senior Head of Department, Sebokeng, Nov. 4, 1990.

Seekings, J., J. Graaff, & P. Joubert. *Survey of Residential and Migration Histories of Residents of the Shack Settlements of Khayelitsha.*

Simkins, C. *Population Trends: Demographic Projection Model.* Johannesburg: The Urban Foundation. n.d. (1990?)

Simon, A. "Black Students' Perceptions of Factors Related to Academic Performance in a Rural Area of Natal Province, South Africa." *Journal of Negro Education*, Vol. 55, No. 4, 1966.

"Social and Economic Update 13, Perspective: 1987-1990." *Update*, May 1991. South African Institute for Race Relations.

"Social and Economic Update 16, July 1991." *Update*, July 1991. South African Institute for Race Relations.

South African Communication Service. "The Education Renewal Strategy. Document and Critiques." Aug. 1991.

South African Democratic Teachers' Union. "Empowerment of Women in Education." SADTU Conference, Durban. Johannesburg, South Africa: South African Democratic Teachers' Union. 5-7 July 1991, pp. 1-8.

South African Democratic Teachers' Union. "First National Congress." Johannesburg, South Africa: South African Democratic Teachers' Union. 10-12 Oct. 1991, pp. 1-43.

South African Reserve Bank. *Quarterly Bulletin*, No. 181. Sept. 1991.

Syncom. "Towards a Community Based System of Education," Privatization Position Paper, No. 3, Sept. 1986.

Taylor, N. Falling at the First Hurdle: Initial encounters with the formal system of African education in South Africa. Education Policy Unit, University of the Witwatersrand, Research Report No. 1. 1989.

Trotter, G.J. "The Social Costs of South African Education." Commissioned by The Urban Foundation. Economic Research Unit, University of Natal, Durban.

Trotter, G.J., assisted by A.J. Shave. *The Social Costs of South African Education*. Durban: Economic Research Unit, University of Natal 1988, pp. vi + 123. "Commissioned by the Urban Foundation."

Tygesen, P. "The ABCs of Apartheid." *Africa Report*, May-June, 1991.

The Urban Foundation Annual Review 1990.

U.S.A.I.D. "A.I.D.'s Current Program of Assistance to Disadvantaged South Africans." Washington, D.C. 1991.

U.S. Department of State. "Background Notes: South Africa." Bureau of Public Affairs. Mar., 1990.

-------. "Foreign Economic Trends Report - SPR 0004." Pretoria: U.S. Embassy, typescript. 3 July 1991.

Urban Foundation. "Informal Housing: The Current Situation," Urban Foundation 1990.

-------. "Policy Overview: The Urban Challenge," Urban Foundation, 1990.

-------. "Regional Development Reconsidered," Urban Foundation, 1990.

-------. "Rural Development: Towards a New Framework," Urban foundation, 1990.

USWE. *Annual Report, 1989/90*. Cape Town, 1991. Teacher Opportunity Programs. Annual Report 1990. Johannesburg, 1991.

van der Berg, S. "The Informal Sector: Shadow Boxing over Size," *Indicator SA*, 7(3):37-41, Winter 1990.

-------. "Towards an Alternative Budget: Reallocating Social Expenditure," paper delivered at the Cape Colloquium on Redistribution and Growth in a Post-Apartheid South Africa. Somerset West, 2-4 Nov. 1990. Bellville: University of Stellenbosch, typescript. 1990.

van Rooyen, H. *The Disparity Between English as a Subject and English as the Medium of Learning*, Report SOLING-20, 1990, Human Sciences Research Council, Pretoria, 1990.

van Niekert, M.C. "Manpower Training in the Agricultural Center," *Department of Manpower National Symposium*, Vol. 1, Oct. 1991.

"Violence and Intimidation." *Fast Facts*, No. 5, June 1991. South African Institute for Race Relations.

Wasson, B. "Bitter Harvest: Farm Schooling for Black South Africans," *Perspectives in Education*, Vol. 10, No. 1, June 1988.

The Weekly Mail. "Review/Education: Education in Rural Areas." *The Weekly Mail*, 4-10 Oct. 1991.

-------. "The Road to One Education System. The Convoluted Structure of Education in South Africa." *The Weekly Mail*, 15-21 Feb. 1991.

World Conference on Education for All (1990). World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. Working Documents, Jomtien Thailand, 5-9 Mar. New York: WCEFA, Draft C.

-------. "Meeting Basic Learnings Needs: A New Vision for the 1990s." Background Document. Jomtien Thailand, 5-9 Mar. 1990. New York: WCEFA, Draft B, Conference Version.

Young, D., ed. *Bridging the Gap: Between Theory and Practice in English Second Language Teaching*, Maskew Miller Longman, Cape Town, 1987.

Young, M., T. Dodds, and G. Rumble. "Development of Adult Basic and Secondary Adult Education in South Africa." Report from the International Extension College of London and Cambridge, U.K. Sept. 1991.

ANNEX C

ADDITIONAL ECONOMIC ISSUES

C.0 Basic Structure of the Economy

Modern economic growth in South Africa began with the discovery of diamonds over 120 years ago, and was greatly accelerated by the discovery of gold in the Witwatersrand 20 years later. This growth was furthered by conscious government economic policy in the 1920s favoring industrialization as means for import substitution. The Second World War stimulated mining, manufacturing, and commercial agriculture and, three decades after 1945, South Africa saw continued strong growth fueled by mineral and agricultural exports and import of private capital.

Throughout this period, official policy and commercial practice discriminated against Africans and, to a slightly lesser extent, Coloureds and Asians. These groups were discriminated against in levels of and access to government services, and in all forms of economic opportunity in the modern economy. To a large extent, the economy went into a prolonged period of stagnation following the 1973 oil price increase and the 1976 Soweto uprising, which accelerated foreign economic sanctions and discouraged private capital inflows.

In the 1980s, the South African economy came more and more to resemble a typical, semi-industrialized, middle-income developing country in terms of its industrial structure, albeit one in which mining was more important than in comparable economies. Table C-1 shows the percentage sectoral contributions to GDP for selected years from 1983 to 1990. Based on current price data, the table shows only a few minor trends. Mining tended to decline in importance as gold output levels fell, and as the relative prices of gold and other minerals declined. Increases in other outputs did not sufficiently offset these declines.

TABLE C-1: SECTORAL ORIGIN OF GDP, SELECTED YEARS, %

	1983	1985	1987	1989	1990
Business Enterprises of which:	86.5	85.1	84.4	84.3	83.9
Agriculture, forestry & fishing	4.9	5.8	6.3	6.1	5.1
Mining	14.1	14.8	12.9	11.4	10.7
Manufacturing	24.7	23.1	23.8	25.3	25.6
Electricity, gas and water	3.8	4.3	4.6	4.5	4.6
Construction	4.1	3.7	3.3	3.2	3.2
Commerce, catering and accommodation	13.4	11.8	12.7	13.0	13.5
Transport and communications	8.8	8.8	8.8	8.1	8.2
Finance etc. services	13.1	14.0	13.2	13.9	14.5
Community, social and personal services	1.7	1.7	1.7	1.7	1.7
Less imputed financial services charges	-2.3	-2.8	-2.9	-2.8	-3.1
General Government	11.1	12.4	13.1	13.4	13.7
Other producers	2.4	2.5	2.5	2.4	2.4
Total	100.0	100.0	100.0	100.1*	100.0

* Rounding error

Source: Based on current price data in South African Reserve Bank Quarterly Bulletin, No. 181, Sept. 1991

Manufacturing constituted approximately 25 percent of total GDP, about average for a country of South Africa's level of GDP per capita. Utilities increased slightly in importance, but

construction fell, reflecting declines in investment, particularly in the public sector. Agricultural output comprised a remarkably low 5 percent to 6 percent of GDP, fluctuating with relative prices and weather conditions. The share of GDP arising from the enterprise sectors fell steadily from 86.5 percent in 1983 to 83.9 percent in 1990, while general government's share increased from 11.1 percent to 13.7 percent. The remaining 2.5 percent is allocated to "Other Producers," basically non-profit organizations and subsistence activities in the homelands.

One should also note that the national income accounts do not fully reflect the size of the informal sector in South Africa. The employment data in Table C-2 is based on van der Berg's interpretation of surveys carried out by the South African Reserve Bank and Central Statistical Services (CSS). The employment data indicate that the informal sector employs between 2.65 and 3 million persons, and may have added as much as 50 percent to the recorded average per capita income of Africans in 1989.[1] Impacts on Coloured and Indian incomes were estimated to be respective increases of 5 and 9 percent. These impacts are probably smaller because of lower levels of participation in informal economic activity, and higher levels of recorded income. Whites were not included in the study.

TABLE C-2: AGGREGATES AS A PERCENTAGE OF GDP

Year	Govt Deficit	Govt Revenue	Govt Expenditure	Govt Debt	Exports	Imports	Balance on current account	GFCF	Public Sector Inv.
1983	-2.8	20.6	23.5	31.8	28.4	23.4	-0.5	n/a	11.2
1984	-4.4	20.1	24.5	32.1	29.4	26.7	-2.4	n/a	n/a
1985	-3.4	21.2	24.6	32.8	32.5	23.1	4.1	23.3	9.8
1986	-3.2	23.5	26.7	32.4	31.9	22.5	4.3	19.1	n/a
1987	-4.3	23.4	27.7	32.3	31.7	23.1	3.6	18.2	6.7
1988	-5.6	22.4	28.0	33.6	31.6	26.6	1.4	19.1	n/a
1989	-3.3	24.0	27.3	33.2	33.9	26.2	1.5	19.7	7.1
1990	-0.6	27.5	28.1	34.1	35.3	25.6	2.2	19.6	6.1
1991*	-6.1	23.8	29.9	36.4	35.5	27.0	1.3	19.0	n/a

* 1991 - first half

Government Deficit, Revenue, Expenditure, Debt, and Balance on current account in current price terms. Export, Imports (both of goods and non-factor services), and GFCF (Gross Fixed Capital Formation) in real terms.

Source: South African Reserve Bank Quarterly Bulletin, No. 181, September 1991

[1] van der Berg, 1990a:39.

The South African economy is relatively open, and the country has had in place an official policy of liberalization and deregulation. Nevertheless, there is still a good deal of protection for domestic manufacturing. Currently, exports amount to about 35 percent of GDP and imports 25 to 27 percent. Since 1985, investment has effectively collapsed, not rising as high as 20 percent in any year, and falling below 19 percent in 1987. Given South Africa's level of population growth, these levels are far below what is required for satisfactory growth. Investment difficulties stem from lack of investor confidence and foreign sanctions.

Ever since the development of its capital-intensive gold mines, South Africa has relied heavily on foreign capital. Foreign capital not only financed physical investment, but brought with it skills, technology and new products. The combination of political uncertainty, foreign sanctions, and recession have resulted in a net drain of private capital out of South Africa over the last several years.

Political uncertainty, recession, pressing recurrent expenditure needs and fiscal constraints have all conspired to depress public sector and domestically financed private investment. In recent years, South Africa has had to run a current surplus on its balance of payments account in order to service its foreign capital and permit outward capital flows. A two-tier foreign exchange market is in operation, with a commercial Rand for current transactions, and a financial Rand for capital transactions. In October 1991, the commercial Rand exchange rate fluctuated around US$1 = R42.80, and the financial Rand rate around US$1 = R3.10.

Despite a rise in government revenue from 20 percent to about 24 percent of GDP, the South African government has run a fiscal deficit since 1983. Expenditure has been on a steadier increase, however, approaching 30 percent of GDP in the first half of 1991. These persistent deficits, a relatively accommodating monetary policy, and considerable militance on the part of organized African labor have been associated with rapid inflation, generally 12 to 17 percent annually. On the positive side, this inflation has meant that the total outstanding government debt has grown only slowly as a percentage of GDP, and is still at a manageable level of about 36 percent. Foreign debt and interest payments thereon are also at quite comfortable levels, about 24 percent of GNP and 7 percent of export earnings, respectively. The bulk of foreign investment in South Africa is either direct or in equity form.

The modern sector in South Africa is highly capital-intensive. Renewed growth will depend on resolution of political uncertainties to bring about higher levels of domestically-

financed investment, and the relaxation of foreign exchange constraints on growth through renewed inward capital flows, and/or a restructuring of manufacturing to permit rapid export growth. The latter possibility is unlikely in the short to medium term, given the likelihood of strong political resistance to reduced real incomes for urban wage workers.

C.1 Recent Trends in the South African Economy

TABLE C-3: PERCENTAGE CHANGE OVER PRECEDING YEAR FOR SELECTED AGGREGATES

Year	Volume of Production			Real Retail Sales	Wage Employment Outside Agriculture		
	Gold Mining	Other Mining	Manufac-turing		Public Sector	Private Sector	Total
1985	-1.5	4.8	-5.1	-4.6	-0.5	-0.6	-0.6
1986	-4.8	-0.1	-1.4	-6.7	1.7	0.1	0.5
1987	-5.7	-2.5	2.5	-0.4	1.7	0.6	0.9
1988	1.8	1.8	7.6	7.1	1.4	1.6	1.5
1989	-1.8	-0.7	0.4	2.9	1.0	0.5	0.7
1990	-1.2	-2.7	-1.4	3.1	-0.1	-0.6	-0.4
1991QI	-0.1	-2.2	-2.3	-2.3	1.0	-1.4	-0.7

Source: South African Reserve Bank Quarterly Bulletin, No. 181, September 1991

Table C-3 summarizes recent trends in industrial production, real retail sales, and wage employment outside agriculture. The volume of gold output has fallen every year except 1988 since 1985, and output of other mines fell in all except two years. Manufacturing was falling until 1987, boomed in 1988, but then went back into decline. Real retail sales, one of the best indicators of private consumption levels and economic well-being, were falling from 1985 through 1987. They rose strongly from 1988 through 1990, but fell again in the first half of 1991. As this is an economy whose population grows about 2.4 percent per annum, it is important to remember these are gross figures, not

per capita. The overall wage employment trends do not match output trends all that well; normally one would expect employment to reflect output, with a lag of perhaps half a year. Consistent with the increasing share of government in the economy, public employment grew quite strongly throughout the period, apart from small falls in 1985 and 1990. However, the private sector appears to have tried to hold on to its labor in the early part of this period, only starting to shed labor in response to the downturn after 1989. However, one must also remember that agriculture is excluded from these data, and white agriculture in South Africa has been shedding African labor consistently since at least the early 1970s.

TABLE C-4: ANNUAL % RATE OF CHANGE IN NATIONAL INCOME ACCOUNT AGGREGATES, 1985 PRICES

Year	Real GDP	Real GNP	Real GFCF	Real GDP per capita	Real GNP per capita
1985	-1.2	-1.0	-7.0	-3.8	-3.6
1986	0.0	0.2	-18.2	-2.2	-2.0
1987	2.1	2.7	-2.4	-0.1	0.5
1988	4.1	5.2	8.9	1.8	2.9
1989	2.1	-0.7	5.4	-0.1	-2.8
1990	-0.9	-1.7	-1.4	-3.2	-3.9
1991*	-0.6	3.0	-5.5	n/a	n/a

* 1991 first half at reasonably-adjusted annual rate

Source: South African Reserve Bank Quarterly Bulletin, No. 181, September 1991

Table C-4 reproduces South African Reserve Bank data on rates of change in national income aggregates since 1985, as measured in constant 1985 prices. The dismal growth record over the period is clear, with real GDP per capita falling in five years out of six, and real GNP per capita falling in four years out of six. One of the proximate causes is evident in the behavior of Gross Fixed Capital Formation (GFCF) (i.e., investment), which fell in five out of seven periods, and from which growth has not yet recovered.

C.2 South Africa's Tax Structure

South Africa's tax structure has undergone a number of changes in the past few decades. The tendency has been to move away from direct taxes toward more broadly based indirect taxes. Corporate taxation, although nominally at a relatively high rate, in practice contains so many concessions and incentives that the actual effective rate paid is quite low -- around 10 percent.[2] Income tax is mildly progressive, and is relatively complex. Payroll taxes are extremely low, and the average effective income tax rate is about 17 percent. Mining taxes are highly sophisticated, and the gold mine tax in particular is highly geared to profitability.

The gold tax can even result in temporary subsidies to loss-making mines. A strong source of revenue in the 1970s, the gold tax has produced little revenue in recent years because of the relatively depressed gold price and gold mining profits. The General Sales Tax (GST) is collected on most consumption items other than necessities. Introduced in the early 1970s, it generated a great deal of revenue. The GST was replaced as of the end of September 1991 with a very broad-based, single-rate Value Added Tax (VAT) at a 10 percent rate. When fully implemented, this should be a relatively elastic tax, provided not many additional exemptions or zero-rated items are added. The VAT has, however, been introduced on such a broad base (e.g., almost all food is included in the base) that it must be regressive in its effect.

As might be expected, given the distribution of income and political power in South Africa, the indirect tax structure is not very progressive. Customs tariffs are used mainly for protection of domestic producers, although they do currently provide about R2.2 billion a year in revenue, at an average effective rate of about 20 percent. Domestic producers also receive about another 5 percent of protection through an import surcharge, and a further 20 percent from the undervaluation of the Rand, reflecting the political pressure on the exchange rate.

Excise taxes on tobacco, alcohol, and petroleum products are all relatively low by world standards. There are no luxury taxes, and there almost certainly is some scope for increasing total revenues by higher indirect taxes on items that enter into higher income consumption patterns but are not consumed by the poor. There is also room for higher taxes on social bads such as alcohol and tobacco. It is noteworthy that South Africa reputedly has a higher proportion of motor car sales accounted for by luxury models than any other country. This largely stems

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[2]Jammine et al, 1991.

from the fact that 70 percent to 80 percent of new car sales are to corporate fleets for their employees' use. The fringe benefit tax on company cars is identical regardless of the value of the vehicle provided.

There is probably some scope to increase taxation somewhat as a proportion of GDP, but this would probably be met with resistance from the business community and the better off. Moreover, this scope is limited given the level of revenue to GDP already achieved. If inflation is to be reduced to a more normal level and interest payments on government debt contained, it will be desirable in the future to hold down the government budget deficit to a lower level than its average in the 1980s. Roughly speaking, given South Africa's level of GDP and economic structure, approximately 27 percent of GDP for revenue and 30 percent for expenditure would probably be reasonable.[3] Unfortunately, on the expenditure side, this level has already been reached in 1991 on Reserve Bank figures, and exceeded since 1985 on Department of Finance figures.

[3]van der Berg suggests the deficit be held to 26% and 29% of revenue and expenditure, respectively (van der Berg, 1990b:12).

C.3 Capital Formation in South Africa

TABLE C-5: INVESTMENT AND ITS FINANCING AS PERCENTAGE OF GDP, CURRENT PRICES, SELECTED YEARS

	1983	1985	1987	1989	1990
Gross domestic investment[1]	25.8	20.3	19.4	21.2	19.3
of which Public Sector[1]	11.2	9.8	6.7	7.1	6.1
Private Sector[1]	14.7	10.5	12.7	14.0	13.2
Depreciation	15.6	16.0	17.0	16.5	16.4
Savings by households[1,2]	1.0	3.5	2.7	0.9	0.8
Corporate saving[1,2]	8.6	5.8	5.7	5.5	3.7
Saving by general government[1,2]	0.3	-0.8	-2.4	-0.4	0.6
Net capital inflow from rest of the world	1.7	-5.1	-2.5	-0.7	-1.9
Change in gold and other foreign reserves[3]	-1.1	1.0	-1.1	-0.6	-0.3

1. After inventory valuation adjustment
2. After provision for depreciation
3. An increase is -; a decrease, which has helped finance investment, is +

Source: South African Reserve Bank Quarterly Bulletin, No. 181, September 1991

Table C-5 shows investment in South Africa and its financing in terms of percentage of GDP in current prices. A number of worrying points stands out. First, public sector investment has declined considerably since the early 1980s. In fact, in some recent years, public sector net investment has been negative, depreciation being larger than gross public sector investment. In general, South Africa has a good basic public infrastructure, and compared to most of the continent, its roads, railroads, harbors, mail and phone systems are of good quality and function effectively for those with effective demand. However, the distribution of this infrastructure is very unequal both geographically and among population groups. There is a large backlog of demand for infrastructure in African areas -- roads, water, electricity, housing, and physical infrastructure for social sectors, health, education, and other social services. At

the same time, much of the same types of infrastructure in white areas are underutilized.

Private sector investment has fluctuated between 10.5 percent and 14.7 percent of GDP in the 1980s. This is not really an adequate level for a country with a population growth rate of 2.4 percent, particularly given South Africa's notoriously high modern sector capital intensity and capital/output ratio. Investment is still very heavily dependent on depreciation flows and foreign capital. It is noteworthy how closely correlated private sector investment and net capital flow from the rest of the world are, and that this flow has been outward since 1985. Household saving is also low, and corporate saving has declined substantially since early in the decade, reflecting both low profitability and the low level of business confidence resulting in low retained earnings ratios. It is abundantly clear that the government of a new South Africa will need to put a high priority on both increasing gross investment, and improving the productivity of capital.

C.4 Private, Community, NGO, and Foreign Contributions to Education Costs

The most comprehensive and careful survey made on contributions to education was that made by Trotter for 1985. Donaldson has attempted to update the estimates involved to 1990, but without new primary data gathering. This is problematic because there is considerable anecdotal evidence to suggest that all these categories of contribution have in fact increased since 1985. However, the sheer numbers of potential and known community, NGO, and foreign contributors to educational costs precluded new data collection for this assessment, and it has been necessary to rely on secondary sources to give a sketch of what is known. An attempt was made to get a wide range of views on private contributions, but at best this only represents a handful of informed guesses.

For 1985, Trotter surveyed large business corporations and foundations, and foreign official donors. He estimated average levy (informal fee) and other out-of-pocket expenses by population group and school level. He estimated opportunity costs using earnings derived from the 5 percent sample of the 1980 Census, employing a variety of assumptions about the elasticity of demand for labor. Trotter's estimate of contributions to education costs follows in Table C-6.

TABLE C-6: CONTRIBUTIONS TO 1985 EDUCATION COSTS

Source	Percent
Government	63.8
Pupils and Students (indirect)	19.1
Pupils and Families (direct)	12.1
Other Contributors (University costs)	3.4
Private School	0.7
Foreign Government	0.2
Private Sector (to non-formal education)	0.2
Catholic Schools	0.2
Correspondence Schools	0.2
Private Sector (to formal education)	0.1
Total	100.0

At the primary level, Trotter did not calculate opportunity costs, although for the higher standards in African and coloured schools he clearly should have. Omitting opportunity costs, the distribution of the 1985 burden of primary school costs was as follows in Table C-7.

TABLE C-7: CONTRIBUTIONS TO 1985 PRIMARY SCHOOL COSTS

Government	82.4
Families (private direct cost)	16.1
Private Schools	1.1
Catholic Schools	0.4
Private Sector Contributions	0.1
Total	100.0

Trotter estimated that the average annual levy at primary schools was about R80 for Whites, R3 for Coloureds and Indians, and R10 for Africans in 1985. His estimated private direct costs per pupil per year in 1985 primary schools were R160 for Whites, R100 for Coloureds, R120 for Indians, and R60 for Africans. Adding levy and direct costs and multiplying by enrollment, total private costs were more than twice as much in aggregate for Africans (R337.4 million) as for Whites (R137.1 million).

It is important to realize that this is very much a lower bound estimate for Africans; no allowance is made for opportunity costs although it is widely assumed that they account for much of the

African primary school dropout rate. According to RIEP, in 1990 over half of African primary school pupils drop out before completing Standard 5. Analysis of Table 2.5.2.1 suggests that, allowing for repetition and later completion, as many as 60 percent of those Africans who enter primary school eventually finish Standard 5.

Donaldson's rough updating of Trotter's calculations to 1990 money terms suggests that, in that year, direct costs to students and households totaled R4,100 million, 20.7 of total education spending at all levels, ignoring opportunity costs. R1,450 million of this is attributed to primary schooling, being 20.3 percent of total government and household direct costs of primary schooling. Donaldson estimates contributions to formal schooling costs at all levels by business, trusts and foundations, NGOs, investment income of universities, and foreign aid at R800 million, about 4 percent of the total direct costs. He offers no breakdown by level, but most foreign, business and trust, and foundation assistance goes to secondary and tertiary levels. Many NGO resources are, however, devoted to improving African primary education, as have been some prominent (but quantitatively small) foreign donations (e.g., from foreign embassies to self-help shack settlement private schools).

C.5 Illustrative Cost and Rate of Return Estimates

Several South African academics have estimated rates of return to education for different groups of South Africans. These include Hosking (1990), Pillay (1991), Donaldson and Roux (1991), Archer and Moll (1990), and Moll (1991). Earlier studies included Louw (1979), who used data from income and expenditure surveys in large metropolitan areas to estimate Mincerian rates of return to education in the late 1970s for Africans, Coloureds, and Indians. He found the private return to a typical year of schooling to be over 8 percent for Africans and much higher for Coloureds and Indians at that time.

The more recent studies, except for the two involving Moll, use different data sources and different methodologies, so it is perhaps not surprising that on the surface they appear to produce very different results. There are always great inherent difficulties in estimating rates of return to education, particularly when data sources are very far from perfect and the proportions of the labor force with given levels of education are changing rapidly. Nevertheless, this group of studies is interesting and, on balance, supportive of the hypothesis that investment in quality and quantity of African primary education in South Africa should yield a worthwhile economic return.

Archer and Moll use the 5 percent sample of the 1980 South African census to estimate an earnings function of the type "log income is a function of education in years, experience, and experience squared." They find the Mincerian rate of return to an additional year of schooling to be 10 percent for Whites, 5 percent for Africans. The private rate of return to completed primary school is estimated, incorporating estimates of the private costs of schooling, at 35 percent for Africans (no calculation was possible for Whites because there were insufficient Whites with no education to use as reference group). Including the publicly borne costs of primary education on the cost side, they estimate the social rate of return to completed primary school for Africans at 19 percent.

Moll (1991) uses the same data set to estimate a more complex earnings function for African men aged 16 to 30 in 1980 that includes, in addition to years of school, experience, and experience squared, whether urban or not, a city size variable, and whether married. He then adds two more variables, a proxy labelled "school quality," and the same proxy squared. This proxy is defined as the fraction of African teachers with post-school qualifications in each individual's statistical region of birth. The second equation works slightly better than the first in statistical terms, and the private rate of return to years of education (at the sample means) is 6.17 percent in the first equation and 6.21 percent in the second.

Moll then makes some fairly heroic assumptions to derive estimates of social returns to quantity (years) of primary education and to quality, as defined by teachers' teaching qualifications. In this analysis, benefits are defined as the expected additional future earnings of the pupils that result from an additional teacher being trained. Costs are defined as cost to the pupils of the teacher's absence while being trained, plus the direct cost of the teacher training. Rather obviously one could question both the validity of this procedure and the numbers used, but the estimate produced is a 7.9 percent social rate of return to quality as opposed to a 6.0 percent social rate of return to quantity. Moll concludes from this that there is a problematic trade-off between quantity and quality. However, this overlooks the key point that African primary education is currently characterized by massive repetition and dropout, and if improving the qualifications of teachers really does improve quality (a major assumption), this can confidently be expected to reduce repetition, if not dropout, and thereby increase the quantity of education delivered.

Donaldson and Roux (1991) carry out an exhaustive investigation of the information available in the May 1985 South African Current Population Survey subsample of 26,588 African persons between the ages of 15 to 64 with incomes greater than zero. To their surprise, they found the mean incomes of those with

schooling up to Standard 1 significantly lower than the mean incomes of persons with no schooling (this is in contrast to Moll (1990) who reports positive impact on earnings from even SSA alone, using the 1980 Census).

Donaldson and Roux segregated their samples by gender, age group, sector, and occupation in a variety of permutations, and produced some interesting results. One graphically displays age-earnings profiles for different educational levels by economic sector, and shows very clearly that in South Africa, greater education in Africans is much better rewarded in some sectors than in others. They conclude that primary education up to Standard 4 has little impact on earnings prospects for either men or women in most, although not all, occupations. Above Standard 4, most occupations do show rewards for more education, but some much more than others. At most levels of education, the bulk of the observed rise in income associated with increased education is linked to a shift of occupation; income does not necessarily improve without this shift. The age-earnings profiles are most nearly of the stereotypic shape in government, presumably reflecting fixed salary scales that place much emphasis on education and experience.

Donaldson and Roux then estimated direct student costs of school attendance, per student government spending, and the opportunity cost of not working. These calculations were made separately for men and women, and for a variety of ages. They then calculated internal rates of return to various levels of education after making adjustments for expected unemployment probabilities. For men, they found the overall internal rate of return 6.9 percent to basic primary (up to Standard 4), 8.7 percent to senior primary (taken as Standard 5 through 7), and 7.1 percent to total primary. For women, the rates are 4.7 percent, 14.0 percent, and 7.6 percent, respectively.

When their sample is segregated into separate subsamples by type of location, namely metropolitan areas, towns, farms, homelands, and hostels, the pattern that emerges is very far from uniform. For men, the return to basic primary is highest in the homelands, at 12.3 percent; in towns it is substantially negative. Hostels and metropolitan areas give returns at 2.2 percent and 2.1 percent respectively, whereas on farms the rate is 4.1 percent. At senior primary level the pattern almost reverses with an internal rate of return of 27.7 percent in towns, negative in metropolitan areas, and 11.7 percent, 8.0 percent, and 5.5 percent on farms, in the homelands, and in hostels. For women, oddly enough, after disaggregation at basic primary level, none of the subsamples shows an internal rate of return of more than 1.4 percent. At senior primary level, the returns are better, in the range 9 percent to 11.5 percent, except in metropolitan areas where they are only 4.3 percent. They interpret these results as

reflecting the considerable barriers to geographic mobility of African women that existed in South Africa in 1985.

Hosking (1990) uses a sample from the 1980 census to calculate social rates of return to African primary and secondary education. He finds an exceedingly high marginal rate to completing primary school, i.e., Standard 5, namely an internal rate of 63 percent for men and 24 percent for women. His internal rate of return for SSA through Standard 1 is 8 percent, and for Standard 2 through Standard 4, 16 percent for men and 4 percent for women. His secondary rates of return are higher.

Pillay uses a sample restricted to a survey of employees in manufacturing in 1987. He also uses a Mincerian earnings function to estimate the rate of return to a year of schooling. He finds much higher rates for Whites (12.6 percent) and Coloureds (11.2 percent) than for Africans (4.2 percent) and Indians (7.2 percent). For African women the rate is actually negative. Separating by level, he finds a very low rate to primary education for Africans, namely 1.2 percent. The reason for this appears to be that the Africans in his sample are heavily concentrated in unskilled manual occupations, and the return to education in those occupations is very low -- 1.1 percent.

A different segmentation indicates that the private return to schooling for Africans in his sample is 1.5 percent in manual occupations, but 11.9 percent in non-manual occupations. Having data on both standard attained and years spent in school, he also shows that calculating the return on the basis of years spent in school rather than standard attained also lowers the return substantially -- from 4.22 percent to 2.45 percent for Africans who, in his sample, spent an average 10.28 years attaining 8.35 standards of education, reflecting the repetition characteristic of African education. He interprets his results to show first, that employers have a perception of very low quality of African education below complete matric level, and second that occupational distribution limits the returns to African education under 1987 labor market conditions, which largely confined Africans in this sample to unskilled manual occupations.

To what extent can these diverse results be reconciled and summarized? Given the different data sources and methods used, they are not, in fact, too contradictory. Unfortunately, South Africa has, until recently, been characterized by extraordinary barriers to geographic and occupational mobility for Africans. Most of these barriers were still in place when the data on which these studies were made were collected. Education is typically not well rewarded in unskilled manual occupations for obvious reasons. There is also consensus that in recent years the quality of African primary education has often been poor. Thus, where samples are national or heavily concentrated on those in

unskilled manual occupations, it is not surprising that estimated rates of return to primary schooling are low.

Where samples cover populations who have more mobility between occupations and employment opportunities, it is reasonable that the rates of return should be higher. Given that barriers to mobility of Africans are being reduced, one would expect returns to primary education to improve. However, several of these estimates are low by comparison with other countries at similar income levels; this is probably due to the unusual segmentation of South African labor markets at the time the data were collected.

In sum, investment in primary education for Africans should be economically beneficial if accompanied by continued improvements in geographic and occupational mobility of African workers, and especially since primary education is a prerequisite to the attainment of secondary education, which uniformly has good estimated rates of return.

ANNEX D

POLICY OPTIONS AND COST PROJECTIONS

D.0 OVERVIEW

This chapter presents a discussion of some of the main policy options that will face a new South African government in the field of primary education. The presentation is accompanied by projections of the costs of these options over the coming decade. The cost projections have been derived on the basis of the APEX (Assessing Policies for Educational Excellence) model funded by the Independent Development Trust and the U.S. Agency for International Development and developed by The Research Triangle Institute.

Two main qualifications should be stated at the outset. First, the policy alternatives explored in this chapter address only a few of the policy choices that will face a new government, and represent only a few of the policy options available. Limited time (and imagination) prevent a fuller discussion of policy alternatives here, but a fuller and broader discussion is clearly required. It is hoped that the analysis presented in this chapter will be useful as an illustration of how alternative policies might be evaluated, but no claim is made or intended that the issues addressed are necessarily the most important ones, or that the policy alternatives discussed are in any sense the "best" policies available.

Second, the value of any cost analysis is entirely contingent on the validity of the assumptions on which it is based. In the future all things are possible. Should the South African economy grow at 10 percent per year for the next decade, the quantity of resources available for expansion and improvement in the primary education system would be vastly expanded. This is an outcome much to be desired, but policy analyses based on the assumption of 10 percent annual growth rate are unlikely to provide a very useful guide to South Africa's future. In the discussion that follows every effort is made to make key assumptions explicit, so that their realism may be assessed.

D.1 THE APEX MODEL

APEX is a spreadsheet-based model of some key structural features of the South African primary and secondary school systems. The model projects the consequences for enrollments and expenditures of various policy choices. These projections are based on anticipated rates of demographic and economic growth, and on a

series of assumptions about educational policies and inputs, student progress through the system, and costs. The model allows the analyst to vary these assumptions, and to evaluate the effects of alternative policies on future outputs of the educational system including enrollments rates and total costs. One of the main uses of the model is to determine the fiscal feasibility of alternative policies, by projecting both the level of expenditure required to put them into practice and expected growth in government resources. This is the main use to which the model is put in the present chapter.

D.2 KEY ASSUMPTIONS

Four key assumptions underlie the analyses below. The first is that the South African economy will grow at a real annual rate of 2.5 percent over the coming decade. As was noted in Chapter 4, the success of the educational transformation that is now beginning in South Africa will depend to a large extent on the rate of economic growth. If growth is rapid, the quantity of resources available for education will increase commensurately, and progress toward equalization, expansion, and improvement may be achieved relatively easily. If the economy continues to stagnate, however, the attainment of new government's educational objectives will be far more difficult. Under present circumstances, a projected growth rate of 2.5 percent is hopeful but not unreasonable, however readers of the chapter should keep in mind that the real rate of growth may be higher or lower.

The second key assumption is that the educational system will continue to receive 23 percent of all Government revenues over the coming decade, and that primary and secondary education will receive 70 percent of all education revenues. Approximately 21 percent of public revenues are now allocated to education. (See Table 4.4.) This share may increase further, but it is not likely to rise much beyond 23 percent. At the same time, growing demand for post-secondary and higher education could bring about a substantial decline in the share of education resources available for primary and secondary schools. As above, this possibility should be kept in mind in assessing the utility of the analyses presented in this chapter.

The third key assumption is that the distribution of educational resources will be fully equalized across population groups by the end of the decade, with the shares received by different groups converging in the intervening years. Reality is and will remain far more complicated and contentious than these sequences of numbers can suggest. Inequality has many more dimensions than race, and the redistribution of resources is never easy, technically or politically. The more the distribution of educational resources diverges from full equality, however, the

more difficult it will be for a new government to achieve its other educational objectives.

The fourth key assumption that underlies these analyses is that the internal efficiency of the educational system can be greatly improved, especially in African schools. All of the projections below are based on the closely related assumptions that very high rates of repetition in SSA can be reduced to "normal" levels (i.e., 5 percent per year), and that drop-out rates in subsequent grades will decline sharply. The realism of these assumptions depends on a variety of factors, many of which are outside the control of policy makers, but that there is scope for savings based on increased efficiency is beyond question.

D.3 POLICY OPTIONS

Specifying a baseline against which to compare policy alternatives is difficult in the South African case. The political transition that is now under way ensures that the educational system will be dramatically different at the end of the decade, so it is virtually useless to try to define the "status quo," or to project current policies into the future.

Another way to establish a basis for the comparison of alternative policies is to define a desired future state (e.g., free compulsory education through Standard 10) and to determine whether the projected cost of such a policy can be borne out of anticipated budgetary resources. It is then possible to propose alternatives to this ideal scenario, in order either to reduce its cost or to increase its educational effectiveness. This is the approach adopted here. A baseline scenario is described, and then a variety of alternative scenarios are developed that would move the South African primary school system toward financial sustainability. With the exception of the first (ideal) scenario against which the others are to be compared, each successive scenario builds on the ones that precede it.

D.3.1. "Baseline" Scenario

One proposed structure for basic education in South Africa would entail a system with four levels: preparatory, primary, middle, and secondary. Preparatory education would comprise one year of pre-school along with two years of primary school (SSA and SSB). Primary education would comprise the five remaining years of primary school (Standards 1 through 5). Both preparatory and primary education would be free and compulsory for all children. Three years of middle school (Standards 6 through 8) and two years of secondary school (Standards 9 and 10) would follow.

This structure differs from the present structure primarily in the addition of a year of pre-school to the present curriculum, and in the extension of compulsory schooling through Standard 5 to all children. The attendant changes in enrollment rates are relatively small and of indeterminate direction for most groups because the effects of increased access are offset by the effects of increased internal efficiency. (One perverse consequence is that enrollment rates rise fastest in white schools under this and many other scenarios because rates of repetition and drop-out among White children are already low.) The costs of the proposed changes are high, however. The resources that will be required to accomplish these levels of public provision will surpass those projected to be available in 1994. By the year 2000, the annual gap between costs and revenues is projected to be more than R5 billion. (See Table D.1.)

TABLE D.1: ENROLLMENT AND COST PROJECTIONS, "BASELINE" SCENARIO

Enrollment Projections (in percent)

	1991	2000
African		
Age 5	28	100
Age 6-11	109	98
Age 12-14	78	76
Coloured		
Age 5	28	100
Age 6-11	126	103
Age 12-14	95	90
Indian		
Age 5	28	100
Age 6-11	109	98
Age 12-14	102	94
White		
Age 5	28	100
Age 6-11	109	98
Age 12-14	102	106

Cost Projections (in R '000,000)

	1991	1995	2000
Preparatory (Pre-SSB)	3958	5873	8814
Primary (St. 1-5)	5379	7227	9803
Middle (St. 6-8)	3800	4042	4788
Secondary (St. 9-10)	1771	1995	2730
Total	26135	14909	19136
Projected Budget	15503	17793	21094
Balance	594	(1343)	(5041)m

D.3.2. **Alternative Scenario I**

One way to bring the cost of Option I more closely into line with available resources would be to forego the addition of a year of publicly-provided pre-school to the basic education system, leaving decisions about pre-primary education to households, communities, and NGO's. Local and private initiative already sponsors pre-schools throughout South Africa, and elsewhere in Africa as well. A new government might do better to encourage these private efforts, instead of committing itself to provide an expensive new program for all children. Public encouragement of private initiatives might extend to the distribution of selective subsidies (possibly on a matching basis) to poor households and communities, but the extension of public pre-primary education to all children (including the most privileged) without regard to means seems a poor use of scarce resources.

Projected enrollments and costs are presented in Table D.2. The main consequence of eliminating public pre-school is a substantial reduction in gross enrollment rates at the preparatory level (ages 5 to 7), because under this scenario five-year-olds will not be in public schools. (In reality the reduction would be smaller, because private provision would make up some or much of the shortfall.) A corollary consequence is a substantial reduction in costs. Nevertheless, the cost of this alternative exceeds the expected means of the government, with a projected annual deficit of R2.2 billion in the year 2000.

TABLE D.2: ENROLLMENT AND COST PROJECTIONS, SCENARIO I

Enrollment Projections (in percent)		
	1991	2000
African		
Age 5	0	0
Age 6-11	109	98
Age 12-14	78	76
Coloured		
Age 5	0	0
Age 6-11	126	103
Age 12-14	95	90
Indian		
Age 5	0	0
Age 6-11	109	98
Age 12-14	102	94
White		
Age 5	0	0
Age 6-11	109	98
Age 12-14	102	106

Cost Projections (in R '000,000)			
	1991	1995	2000
Preparatory (Pre-SSB)	3264	4233	5892
Primary (St. 1-5)	5379	7227	9803
Middle (St. 6-8)	3800	4042	4788
Secondary (St. 9-10)	1771	1995	2730
Total	14214	17497	23214
Projected Budget	15503	17793	21094
Balance	1289	296	(2120)

D.3.3 **Alternative Scenario II**

A different way to approach the problem of increasing efficiency and educational effectiveness would be to propose an entirely different structure for the South African educational system. One such alternative would extend free, compulsory education to nine years; six years (SSA through Standard 4) in primary schools and three years (Standards 5 through 7) in junior secondary schools. There are a variety of reasons why the adoption of such a structure might be wise.

First, the present curriculum is so inefficiently structured and presented that it could readily be covered in six rather than seven years. (See Chapter 6.)

Second, the definition of a new educational system for a new South Africa might also bring some political benefits.

Third, the establishment of a new junior secondary school comprising Standards 5 through 7 would offer an opportunity to develop an entirely new curriculum for all students aimed at better preparing children for life after school. Such a revision would be less likely to occur if the present structure were left intact.

Fourth, if basic education is to be provided in the mother tongue (with all that this entails in terms of continued separation), then common institutions in which children from different backgrounds can be brought together will be crucially important at higher levels of the educational system. Finally, extending compulsory education through Standard 7 would keep children in school until the age of 14, at which time they might be expected to be better able to find employment or acquire work-related skills.

The consequences for enrollments and costs of shifting to a 6-3-3 educational system are illustrated in Table D.3. Extending compulsory education to nine years will clearly raise costs at the lower levels of the system, as enrollments rise. These costs can be underwritten at higher levels, however, either by limiting or reducing the number of students who enroll, or by shifting a part of the cost of secondary and tertiary education to those students and households who are able to pay.[1] In the present

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[1] Education at these levels could still be provided at public expense to relatively large numbers of students (e.g. two-thirds of all junior-secondary leavers in the present analysis), though the percentage proceeding from junior secondary to secondary schools would be reduced. Private secondary schools might enroll additional students. Under these circumstances, public policies would have to ensure that students from poor households and

analysis it is assumed that only half of junior secondary school leavers will proceed to public secondary schools, and that 20 percent of the cost of secondary education will be borne privately. The gap between public obligations and public resources, nevertheless, remains large at R1.7 billion per year in the year 2000.

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previously disadvantaged groups enjoyed equitable access to the higher levels of the system.

TABLE D.3: ENROLLMENT AND COST PROJECTIONS, SCENARIO II

Enrollment Projections (in percent)

	1991	2000
African		
Age 5	0	0
Age 6-11	109	103
Age 12-14	78	86
Coloured		
Age 5	0	0
Age 6-11	127	106
Age 12-14	95	97
Indian		
Age 5	0	0
Age 6-11	101	101
Age 12-14	101	98
White		
Age 5	0	0
Age 6-11	102	106
Age 12-14	102	106

Cost Projections (in R '000,000)

	1991	1995	2000
Preparatory (Pre-SSB)	3264	4233	5892
Primary (St. 1-5)	5430	7529	10617
Middle (St. 6-8)	3707	3876	4593
Secondary (St. 9-10)	1719	1609	1708
Total	14120	17248	22810
Projected Budget	15503	17793	21094
Balance	1383	545	(1716)

D.3.4 **Alternative Scenario III**

One way to begin to close the gap between available resources and the costs of the educational system would be to shift a larger share of the costs of education to students and their families. If it is assumed, for example, that 25 percent of White students, 10 percent of Indian students, and 2 percent of African and Coloured students at all levels will shift to private schools as resources in the public schools are equalized, the effect on the public cost of education is substantial. (See Table D.4) The financing gap in the year 2000 is reduced by a further R700 million, to R1.1 billion.

TABLE D.4: ENROLLMENT AND COST PROJECTIONS, SCENARIO III

Enrollment Projections (in percent)

	1991	2000
African		
Age 5	0	0
Age 6-11	109	103
Age 12-14	78	86
Coloured		
Age 5	0	0
Age 6-11	127	106
Age 12-14	95	97
Indian		
Age 5	0	0
Age 6-11	101	101
Age 12-14	101	98
White		
Age 5	0	0
Age 6-11	102	106
Age 12-14	102	106

Cost Projections (in R '000,000)

	1991	1995	2000
Preparatory (Pre-SSB)	3240	4137	5676
Primary (St. 1-5)	5430	7462	10344
Middle (St. 6-8)	3707	3876	4534
Secondary (St. 9-10)	1719	1609	1704
Total	14096	17084	22258
Projected Budget	15503	17793	21094
Balance	1407	709	(1164)

D.3.5 Alternative Scenario IV

Another way to close the gap between available resources and the costs of the educational system would be to provide fewer inputs to students in the system, for example by increasing the pupil/teacher ratio. Teachers' salaries are by far the largest component of educational costs in primary schools, and reducing the number of teachers in the system consequently has a large effect on costs. Increasing the pupil/teacher ratio in SSA and SSB by 50 percent (in this case from 17:1 to 25:1) has no effect on enrollments, but brings down the cost of primary education by R1.5 billion in the year 2000. (See Table D.5) In conjunction with the preceding policy changes, this would put the South African primary education system on a financially sustainable footing.

TABLE D.5: ENROLLMENT AND COST PROJECTIONS, SCENARIO IV

Enrollment Projections (in percent)

	1991	2000
African		
Age 5	0	0
Age 6-11	109	103
Age 12-14	78	86
Coloured		
Age 5	0	0
Age 6-11	127	106
Age 12-14	95	97
Indian		
Age 5	0	0
Age 6-11	101	101
Age 12-14	101	98
White		
Age 5	0	0
Age 6-11	102	106
Age 12-14	102	106

Cost Projections (in R '000,000)

	1991	1995	2000
Preparatory (Pre-SSB)	3045	3418	4183
Primary (St. 1-5)	5430	7462	10344
Middle (St. 6-8)	3707	3876	4534
Secondary (St. 9-10)	1719	1609	1704
Total	13901	16366	20764
Projected Budget	15503	17793	21094
Balance	1602	1427	330

Notes on Tables D.1 - D.5

D.1. "Baseline" scenario

Assumes establishment of compulsory, free pre-school and primary school for all children; reduction in repetition rates for African and Coloured children in SSA from 30 percent to 5 percent per year; pupil/teacher ratio in pre-school through SSB of 17:1; increased survival rates through Standard 10 for all children; 20 percent of cost of middle and secondary education paid privately.

D.2. Option I

As above, but without compulsory, free pre-school.

D.3. Option II

As above, but free, compulsory schooling is extended through Standard 7 (primary plus junior secondary) and survival rate between Standard 7 and Standard 8 is reduced to 50 percent.

D.4. Option III

As above, but 25 percent of White children, 10 percent of Indian children, and 2 percent of African and Coloured children enroll in private schools from SSA.

D.5. Option IV

As above, but pupil/teacher ratio in SSA and SSB is increased to 25:1.

D.3.6 **Summary**

The set of policy alternatives analyzed above is meant to be illustrative rather than exhaustive, and no endorsement of any of the alternatives is stated or implied. The intention of the exercise is rather to indicate the magnitude of the problem that will face a new South African government as it seeks to expand access, improve quality, and equalize resources in the educational system within the strict limitations imposed by available revenues. Establishing an educational system that responds to the demands of citizens and to the development objectives of the nation, and that can be sustained with local resources, will require a great deal of flexibility in the choice and use of a variety of policy instruments.

D.4 SENSITIVITY ANALYSIS

As noted at the beginning of this chapter, the utility of any cost analysis is entirely dependent on the realism of the assumptions on which it is based. For example, if the rate of growth in the South African economy is faster (or slower) than the rate assumed in these analyses, then the government will have significantly more (or fewer) resources to invest in the educational system. The sensitivity of the analysis to changes in the underlying assumptions is illustrated below. (See Table D.6)

TABLE D.6: COST CONSEQUENCES OF ALTERNATIVE GROWTH RATES

Cost Projections (in R '000,000)			
	1991	1995	2000
"Baseline" Scenario	14909	19136	26135
Scenario I	14214	17497	23214
Scenario II	14120	17248	22810
Scenario III	14096	17084	22258
Scenario IV	13901	16366	20704
Projected Budgets			
Annual growth rate			
2.5	15503	17793	21094
0.0	15125	15727	16479
5.0	15881	20071	26842

The first five lines of Table D.6 show the levels of expenditure that would be required to fund the five policy scenarios defined above. The sixth line shows the size of the government budget if the economy grows at 2.5 percent per year over the next decade, as has been assumed in the preceding analyses. The final two lines show what will happen to the government budget if growth

averages 5 percent per year or 0 percent per year over the same period.

The consequences in either case are dramatic. If growth averages five percent per year over the coming decade, then any of the policy alternatives is affordable, including the baseline scenario. Hard choices about restricting enrollments, increasing private costs, or reducing instructional inputs can be avoided. Pre-schools can be provided for all students at public expense. If the economy continues to stagnate, however, even the final scenario will be far too expensive for the new government to sustain. Costs will exceed revenues by approximately 25 percent, even after the cutbacks in service and the increases in private costs described above.

The central point for this discussion is not to determine which of these assumptions is the most realistic, but rather to recognize that the choice of assumptions has large consequences for decisions about the feasibility of various policy alternatives. Changes in other key assumptions (e.g., about the size of the government's budget for education) would have similar effects on the policy conclusions drawn above.

D.5 PUBLIC INVESTMENT IN THE SHORT TERM

One attractive feature of scenarios developed with the APEX model is that the government's fiscal obligations to basic education increase steadily over the coming decade in line with rising enrollments. As a result, in each of the scenarios described above there is an apparent budgetary surplus in the years before enrollments catch up with revenues.

This is an artifact of the algorithm used to build the model: if enrollments were to rise very rapidly in a single year (as they might in the year following a change in government) the budget would rise correspondingly, and the apparent budget surplus would be reduced or eliminated. It, nevertheless, serves to illustrate the importance of immediate investment in the quality of the basic education system. Funds for these purposes are more readily available now than they will be later in the decade. As enrollments rise over the next ten years, government resources will be more and more fully committed to the payment of salaries and other fixed costs, and fewer resources will be left for discretionary investments.

A variety of suggestions for short-term investments in the basic education system have been presented in the preceding chapters. Many of these involve training. In the next few years, there will be a massive demand for training and retraining throughout the educational system. In-service training will be required to upgrade the skills and qualifications of unqualified teachers, and to prepare <u>all</u> teachers to deliver new and potentially

different curricula. Pre-service teacher training programs will have to be expanded and reorganized to meet the rising demand for school places, which may entail training in new methodologies including multi-grade and peer-assisted instruction. Pre-service and in-service training will be required in order to provide effective administrators at regional, local, and school levels.

Additional resources will have to be invested in the development of new curricula for all Standards, and in the production of new textbooks, guides, and materials. New schools and classrooms will have to be constructed, both in rural areas and in informal settlements in urban centers. The size of these investments will be greatly increased if the basic education system is to be reorganized, either to include a compulsory year of pre-primary school or to provide a new junior secondary school.

Some back-of-the-envelope estimates of the costs of these investments are presented in the Tables in Section D.6. It is immediately apparent that the potential cost of the investments needed to bring about the transformation of the basic education system will quickly exceed the public revenues available, even under the most optimistic of assumptions. This serves to reiterate the importance of the point made in Chapter 4, that a new government will have to identify and call upon additional sources of revenue if its educational objectives are to be achieved.

D.6 ILLUSTRATIVE COST PARAMETERS

The following Tables were developed as illustrative cost estimates of implementing various recommendations contained elsewhere in this report. They are included here not for their accuracy of projections but rather as a guide to what expected costs might be associated with various assumptions concerning the degree of effort invested towards each objective. The cost options at the top of each column represent a range of choices that policy making and finance experts might want to consider in their deliberations. The examples that follow are heuristic illustrations that are intended to help ground discussions of policy choice in a modicum of empirical reality.

D-6.1: SCHOOL READINESS - PRESCHOOL SUBSIDIES

Cost / Coverage	R 2,000 (billion)	R 1,000 (million)	R 500 (million)
75 %	R 1,5	R 750	R 375
50 %	R 1	R 500	R 250
25 %	R 5	R 250	R 125

Projected 5-year olds in 1990 = 1 million

D-6.2: SCHOOL FEEDING[2]

Cost / Coverage	R .5 day	R 1/day	R 2/day
100 %	R 670 m	R 1,340 m	R 2,680 m
75 %	R 502.5 m	R 1,005 m R 3(x)5.03	R 2,010 m R 5(x)5.03
50 %	R 335 m	R 670 m	R 1,340 m

1990 primary school enrollment = 6.7 million.

[2] At least one school feeding program in KwaZulu operates on R.25 per day. Whether the feeding program provides a snack or a meal would be a function of resources available and local conditions/preference.

D-6.3: TEACHER RESOURCE CENTERS[3]

Cost / Schools/ Center	R 2.5 m	R 1 m	R .5 m
20	R 2.5 billion	R 1 billion	R 500 m
50	R 1 billion	R 400 m	R 200 m
100	R 500 m	R 200 m	R 100 m

Number of primary schools = 20,845.

D-6.4 NEW CLASSROOMS (PRIMARY AND SECONDARY)[4]

Cost / Number *)	R 100,000	R 50,000	R 30,000
50,000	R 5 b	R 2.5 b	R 1.5 b
100,000	R 10 b	R 5 b	R 3 b
132,934	R 13.29 b	R 6.65 b	R 3.99 b

*) DBSA estimate shortfall @ 132,937 by 1995, net of classrooms redeployed from other 'systems,' if pupil-teacher ratio remains at 40:1.

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[3] Cost ranges are based on assumption that needs range from materials and equipment only to the construction of additional rooms to house the Centers.

[4] Current construction costs used by the Independent Development Trust are R 30,000. Additional unit costs are provided to account for specialized classrooms (i.e., science labs), and special logistical situations.

D-6.5: TRAINING - CERTIFYING "UNQUALIFIED" TEACHERS

Cost / Coverage	R 20,000[a]	R 10,000[b]	R 1,000[c]
100 %	R 600 m	R 300 m	R 30 m
66 %	R 400 m	R 200 m	R 20 m
33 %	R 200 m	R 100 m	R 10 m

Number of unqualified teachers = 30,000.

a. Equivalent to 2 years full-time study in DEC (HoR) TTC
b. Equivalent to 3 years full-time study in DET TTC
c. Equivalent to 3 years in TOPS in-service

D-6.6: CURRICULUM IN-SERVICE TRAINING FOR ALL TEACHERS[5]

Number of teachers = 190,000

Cost	Recurrent		Non-recurrent	
Number	R 1000[a]	R 2000[b]	R 200[a]	R 50[b]
190,000	R 190 m	R 380 m	R 38 m	R 9.5 m

a. Radio/video + correspondence + non-residential workshops
b. Residential workshops for all teachers

[5] Unit cost figures are "guestimates" provided to illustrate magnitudes of differences resulting from unit cost projections.

D-6.7 ADMINISTRATOR TRAINING (IN-SERVICE)[6]

Cost / Coverage	R 20,000	R 10,000	R 1,000
100 %	R 400 m	R 200 m	R 20 m
75 %	R 300 m	R 150 m	R 15 m
50 %	R 200 m	R 100 m	R 10 m

Number of principals = 20,000 (15,000 primary school principals in RSA)

[6] Unit cost in a function of length of training and direct costs covered by the Government, such as per diem, travel, food, etc.

ANNEX E

PRIMARY EDUCATION SECTOR ASSESSMENT (PESA)

SCOPE OF WORK

1. INTRODUCTION

1.1 Goal

The goal of the Primary Education Sector Assessment (PESA) is to provide a comprehensive and in-depth analysis of the status of primary education in South Africa. Such an assessment will provide strategic information for donor interventions in the primary education sector, and will also generate information of value to policy makers who are likely to be influential in a post-apartheid government.

As the political transition in South Africa continues the PESA study anticipates increased activity in the primary education policy arena. Accordingly, the goal of PESA is to analyze the general status of primary education, identify significant problem areas, and formulate strategic options for possible future intervention.

1.2 Background

The study will take place in the context of a nation in transition from apartheid to a nonracial democratic government, and it is the contingencies and complexities of this period which should inform the assessment.

Since February 1990 South Africa has moved significantly closer to the reality of a nonracial democratic dispensation. Legislation being tabled in the current parliament (April 1991) continues to erode remaining pillars of apartheid.

Consequently, in virtually every social sector, vigorous debate has broken out around different policy options, priorities and strategies for what is loosely called "the new South Africa." Given its political visibility, particularly since 1976, education has been especially targeted by the anti-apartheid movement and international donor communities as an important locus of change during and after the transition from apartheid.

While all levels of the educational system are in dire need of restructuring, this assessment rests on the assumption that primary education will represent one of the most challenging agendas of a post-apartheid government.

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1.3 Rationale: Why Primary Education?

The World Conference on Education For All (Jomtien, Thailand, 5-9 March 1990) revived the idea of primary education (or, "basic education," in the language of the Conference) as fundamental to human and social development. Out of this Conference, several rationales emerged for increasing support to primary education: [1] the economic benefits of investment in primary education; [2] the educational significance of providing a firm basis for participation in secondary schooling and beyond; and [3] the social importance of preparing a literate and numerate population for participation in technologically advancing societies. Given the importance of these rationales in contemporary education policy debates, opportunities for national and international involvement in restructuring primary schooling are likely to increase significantly in the next few years. In addition to this persuasive global rationale for investing in primary education, the fact that all South African political actors are agreed that universal primary education is necessary in a new South Africa merely underlines the need for such a focus.

By any standard, primary education in South Africa is in a state of crisis.[1] While the well-known indicators of apartheid schooling--high dropout rates, low teacher qualifications, overcrowded classrooms--are prevalent throughout the different levels of the educational system, it is nevertheless striking that some of the more dramatic manifestations of the crisis are already evident in the first few years of formal education; a period in which the most <u>basic</u> knowledge, skills and values are ordinarily imparted.

By way of illustration, consider the following selective statistics on primary education:[2]

*in 1989 the Department of Education and Training (DET) claimed that there were, officially, shortages of 60,343 primary school places.

*in 1988 more than twenty-five percent (25%) of all dropouts were Grade 1 pupils.

*in 1989, of 5,088,000 black children of primary school age,

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[1] **The South African Government, obtusely y, acknowledges its neglect of primary education: "the basic education which is provided in the first six years could not be developed as it should have been..." (Annual Report 1990, Department of Education and Training, p.18).**

[2] **These statistics are taken from the <u>Race Relations Survey</u> (1989/90), pp.816, 828.**

779,000 were not at school.

Clearly, in such a context the need to dramatically increase support to the national primary school system becomes the more compelling.

1.4 Entry level

PESA can enter the arena of primary education reform either at the macro-level (national governmental decisions such as policies on desegregation or public/private schooling), intermediary level (policy decisions which assess the status of broad areas of educational activity, such as teacher training and curriculum development) and micro-level (policies which identify specific programs to achieve national objectives such as low-cost science packages or micro-teaching techniques for trainee teachers).

At this stage in South Africa's transition, PESA can best direct it's contributions to the policy debate by concentrating efforts on intermediary level interventions. This decision is defensible in that a) most macro-level policy decisions will only be formulated and adopted after a major political settlement, and b) most micro-level programs have an uncertain fate, and are likely to have minimal impact on the national system during the transition from apartheid. In addition, both macro- and micro-level decisions and programs can only proceed confidently if based on reliable and detailed analyses of the status and problems of primary education; such analyses are virtually non-existent in South Africa, and intermediary-level interventions can make an invaluable contribution to promoting policy and practice in the area of primary education reform.

Such an entry-level decision does not, however, foreclose the possibility that in the long term, international donors such as USAID (United States Agency for International Development) may be requested by a post-apartheid government to provide further assistance at the macro-level, or that intermediary analyses could eventually be translated by donors into micro-level programmatic support (e.g., developing vocational education programs). In fact, USAID has already provided substantial assistance to the macro-policy debate through the Policy Options Workshop. The workshops provide senior black leaders with computer-generated projections of educational policy options as negotiating instruments during meetings with government officials. These macro-policy inputs will undoubtedly inform intermediary-level interventions, and their precise impact on primary education policy options should form part of the work of PESA. However, as the transition to democratic government proceeds, donor support will directed more fruitfully towards intermediary level interventions.

1.5 Assumptions

Since this assessment is based on anticipated (and, to some extent, unpredictable) changes in regime type and in educational policy, it should be informed by defensible assumptions about the possible consequences and the direction of change. The following minimalist assumptions should direct the study: 1] that a new national (including the "homelands") government will be established within the next 5-10 years with a broad non-racial orientation across all social sectors, including education; 2] that a unitary education system will eventually prevail and which will have far-ranging implications for the distribution of resources for primary (and, of course, secondary and tertiary) schooling e.g., the (racial) allocation and distribution of teachers; 3] that the most formidable, long-term challenge to changing primary education will be in the qualitative domain e.g., reducing pupil-teacher ratios.

2. OBJECTIVES OF THE ASSESSMENT

In the broad pursuit of supporting and establishing a non-racial, unitary, compulsory primary education system in South Africa, the assessment should be guided by the following objectives:

a] to determine the general status of primary education in South Africa with particular reference to the quantity and quality of the information base for primary education policy formation. While this review of existing data bases (including the Education Policy Options Model funded by USAID) will provide the informational basis for formulating policy interventions, it should also illuminate those areas in which the primary education data base is inadequate and in need of further investigation.

b] to provide more detailed analyses of the status of South African primary education in the following seven sub-areas:

1. policy initiatives and alternatives in the primary education sector.
2. statistical information/data bases.
3. student participation.
4. teacher preparation and classroom pedagogy.
5. curricular structure and provisions.
6. school administration and management, with particular focus on the leadership role and capacities of the school principal.
7. economic costs and financing.

c] to identify, based on the analyses provided, the levels and

types of resources available in each of the seven sub-areas and suggest ways in which available resources can best be distributed/redistributed among them.

d] to outline policy options and make concrete recommendations for donor intervention in the seven sub-areas specified above. In particular, given limited resources, what are the priority items (across and within the sub-areas) for quality intervention and in which areas is donor support likely to promote internal efficiency and equity in the primary system?

e] to draw on comparative "cases" of educational innovation in other contexts (United States, Zimbabwe, Latin America, etc.) which could inform the direction of reform in the South African primary education sector.

3. POLICY CONSTRAINTS

Contemporary policy debate in South Africa anticipates a post-apartheid era. In this transition, there are several constraints within the policy environment which the sector assessment must take into consideration:

A first constraint on policy development is the existing structure of schooling as organized under the post-1948 legislation instituted by the Nationalist Party government e.g., the Bantu Education Act of 1953 which governed "African" schools. As a result, the existing administration of schooling in South Africa is splintered into 17 different departments on the basis of racial separateness. In addition, the Administration of black schooling distinguishes among Indian, "Colored" and African[3] schools and, in the case of the latter, among "homeland" education departments (controlled by respective "homeland" governments) and urban schools (controlled by the Department of Education and Training). Furthermore, white schools fall under the Administration of four different provincial authorities. Thus, a sector assessment and policy analysis must necessarily address a fundamental issue, namely how to move effectively toward a unitary education system given the existing racial and regional divisions of educational administration?

A second constraint concerns the quality and availability of existing educational and socio-economic data. Educational statistics of the Department of Education and Training (see Annual

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[3] **These labels--"Indian", "Colored" and "African" are themselves reflective of apartheid policy and are used here simply to illuminate the ways in which the administration of schooling is organized in South Africa.**

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Report 1990) contrast with that of the Institute of Race Relations (see Race Relations Survey 1989/90) in part because of different methods and assumptions employed in the statistical analyses.[4] Data on rural schools, and particularly farm schools, are severely limited and there are few if any research reports which provide strong qualitative descriptions of schooling in South Africa.

A third constraint relates to the accessibility of educational data. Given the political sensitivities surrounding education and the need of the different parties currently involved in political negotiation to limit what types of information they make available to whom, it is important not to assume the ready availability of required data. In the case of government sources, information may have to be obtained indirectly and/or through careful negotiation.

A fourth constraint derives from the fact that South Africa does not have a centralized policy institute which provides reliable educational data to the general public or to policy researchers. The assessment should, therefore, take into account the many different sites of policy discussion in South Africa (University-based Education Policy Units or EPUs, NGO-commissioned research, and government-sponsored studies, etc.).[5] While the PESA team should remain critical of any and all of these studies, they should be careful not to unnecessarily duplicate existing work.

A fifth (and perhaps the most important) constraint results from the absence of a bilateral agreement between the governments of South Africa and the United States. The Comprehensive Anti-Apartheid Act of 1986 restricts the operating environment of the USAID Mission and this means that most of the PESA research must (1) proceed through non-governmental organizations; (2) accept reticence on the part of government educational authorities to divulge information to a United States consultancy; and (3) recognize the boundaries within which USAID can engage in macro-policy deliberations which typically follow from bilateral engagement.

4. RESEARCH FOCI

Major <u>focal areas</u> for the sector assessment, with selected rationales, are:

1. policy research, analysis and formulation
   <u>rationale</u>: until recently the alternative education

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[4] **The clearest example is in the calculation of per capita expenditure on education under the different Departments.**

[5] **See Appendices for detailed listing of educational policy institutes which collect and analyze data on education.**

community (consisting of academics, practitioners and NGO leaders) have neglected policy research in favor of critique of the South African Government's policy of bantu education. Thus, a void remains at a time where alternative policy proposals should be available for serious deliberation, particularly in preparation for negotiations on the reform of the education system.

2. statistical information bases
rationale: that data on which to build sound policy options are either lacking, dispersed, or of dubious quality.

3. student participation
rationale: that school attendance is characterized by low participation rates, high repetition rates, and high dropout percentage.

4. teacher availability and preparation
rationale: there are not enough teachers to staff a compulsory/unitary primary education system and most teachers are under-qualified and, therefore, poorly prepared for dealing with the complex classroom tasks of planning, instruction and management. This is compounded by the fact that teacher training is often limited to a one-time professional education program and seldom updated, improved or reassessed.

5. pedagogy and materials availability
rationale: that instruction is frequently teacher-centered, characterized by the one-way transmission of textbook "facts" from teacher to student and that learning materials are scarce in most classrooms.

6. curricular structure and provision
rationale: that curricula (primarily textbooks in the South African context) are overloaded with factual detail, biased by race/gender/class, and limited by low readability and poor teacher usability value.

7. school administration and management, with a particular focus on the leadership role of the school principal
rationale: that school-based administration is authoritarian and inflexible, lacking creative input for dealing with curricular, faculty, student and community challenges.

8. economic costs and financing
rationale: that a long history of discriminatory spending lies at the root of the underdevelopment of primary education, so that the goal of expanded schooling in a period of extensive economic demands will require creative funding mechanisms.

5. KEY PERSONNEL

Individual team members are required to meet the following general criteria: a) prior work experience relating to education systems in third world settings; b) at least a Masters degree in the designated area of expertise; and c) training and experience in educational policy studies, especially in the primary education sub-sector. Work experience in and familiarity with education systems of Southern Africa or other developing countries are desirable.

5.1 EDUCATION POLICY SPECIALIST: THE TEAM LEADER

The assessment requires a team leader who, in addition to meeting the criteria specified above, has experience in the coordination and leadership of education assessments of the type described in this scope of work. Strong background, training and experience in primary education policy reform in the third world is essential. Prior experience conducting at least two prior sector assessments for A.I.D., with a leadership role in at least one of those assignments is also required.

The team leader will have ultimate responsibility for managing the sector assessment, integrating various inputs into a cohesive and consistent written report, and making two presentations on the report, one to the USAID Mission and the other to interested local educationists. Specific responsibilities include:

A. lead and coordinate all segments of the sector assessment (PESA) before, during and after implementation.

B. offer feedback, support, direction and regular assessments of individual consultants' work.

C. ensure that individual inputs and the final document fall within the purview of the "scope of work" and the general USAID guidelines (cf. Sector Assessment Manual).

D. liaise with and report to the USAID Mission staff throughout the duration of the sector study.

E. edit, synthesize and, if necessary, redraft the different elements of the report into a coherent, consistent and logical education policy document.

Illustrative questions:

5.1.1 In the policy debate on primary education in South Africa, who are the major actors, what specific contributions do they bring to the debate, and what are their likely impact in terms of influencing education policy in a post-apartheid context?

5.1.2 In what ways do recent international developments in the field of basic education (e.g., the Jomtien Conference, Thailand) inform the process of primary education reform in South Africa?

The following specialists will be added to the team and serve under the general direction and management of the team leader:

5.2 EDUCATION STATISTICIAN

The education statistician shall have training and experience in collecting, analyzing and assessing national data sources. Illustrative tasks include:

A. discriminate and test the validity of diverse and divergent sources of statistical data (contrast, for example, the education statistics in the Annual Report of the DET and the Annual Survey of the South African Institute for Race Relations).

B. reconcile the statistical data bases available in different institutional settings in South Africa so as not to unnecessarily duplicate available data, including data gathered in the Policy Options Computer Modelling exercise.

C. transfer the existing division of statistics according to 17 ethnic departments into a meaningful, national statistical map. The national data presented should help inform policy makers working towards a unitary, nonracial education system.

D. collect and analyze, in collaboration with the rest of the team, data across the focal areas addressed by this assessment and relevant socio-economic data.

E. disaggregate national statistics in each of the focal areas in terms of race and regional identities, giving special attention to gender equity in the education system.

F. produce a final statistical report for use as an annex or supplemental volume which contains reliable summary data in illustrative form (maps, diagrams, charts, etc.), serving as a basis for making policy decisions in primary education.

Illustrative questions:

5.2.1 What statistical information exists on the following dimensions of **student participation** in primary schooling and to what extent are they reliable?

a. access?
b. retention?[6]
c. successful completion?
d. repetition?

5.2.2 How does this global information on student participation break down in terms of race/gender/regional identities?

a. What statistical information exists on **teacher qualifications** at the primary school level?
b. Level of qualifications?
c. Meaning of qualifications, that is, what types of competence, if any, can be assumed under a particular qualification?

5.2.3 How do these national statistics on teacher qualifications disaggregate in terms of racial and regional divisions?

5.2.4 What is the statistical information on the **distribution of textbooks** in schools?

a. How many schools have the basic textbooks for primary education?
b. In which subjects is the textbook crisis particularly acute?

5.2.5 How do statistics on textbook availability break down in terms of the regional distribution of schools?

5.2.6 What projections are implied in these statistical analyses for the development of equitable education policies? For example,

a. How many teachers have to be trained, up to what level, over what period, before every school in the national system has a full complement of trained teachers?

b. How many textbooks will be required to furnish each

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[6] **This is one area, for example, where the statistician would have to work closely with experts in other areas--in this case, the anthropologist/sociologist.**

primary school, in 1991, 1995, 2000, with the basic textbooks indispensable for learning in the early grades?

c. Assuming a policy of compulsory schooling, what are realistic predictions of primary school enrollments in the next decade?

d. Assuming a policy of non-racial education, what implications does this hold for the capacity of under-enrolled or vacated white primary schools to absorb black students, and the redistribution of teachers to modify the teacher qualification crisis?

5.2.7 To what extent are existing statistical data bases adequate for the purposes of national policy projections? Conversely, which specific areas of primary education are "data poor"?

5.3 EDUCATION ANTHROPOLOGIST/SOCIOLOGIST

The education anthropologist or sociologist shall have a training and experience in education related research, especially in areas of student access, retention and completion. Illustrative tasks include:

A. collect primary data on student access and retention in areas which are not easily accessible to research and data-gathering activities, such as the farm schools and the so-called homelands.

B. identify and assess the relative importance of the underlying reasons for low retention in black schools, taking into account the range of factors (social, economic, political) which undermine full participation in the primary grades.

C. recommend specific interventions designed to increase student participation rates in the primary grades.

Illustrative questions:

5.3.1 What are the principal factors, ranked according to their relative order of importance, which account for the generally low access, retention and completion rates among black primary students?

5.3.2 What specific inputs are required, both short- and long-term, in order to address the key factors identified as responsible for low access, retention, and completion rates?

5.3.3 What lessons can be learned from existing models

designed to enhance student retention in the primary grades:

a. How useful are existing programs in South Africa for increasing retention (e.g. school feeding schemes) and can these models be extended to a concerted nationwide program?

b. What lessons are available from comparative experience (e.g., Alternative Primary Education in Bangladesh[7] or elsewhere) can be transferred to enhance South African student retention?

c. In spite of resource scarcities created by apartheid, certain South African schools and educationally defined regions have been successful. What are the key policies and practices which have led to their success, and can they be replicated?

5.4 TEACHER TRAINING EXPERT

The teacher training expert shall have a strong background in alternative approaches to teacher training including preservice and inservice training (INSET) as well as the variations within these different approaches e.g. inservice education at an independent site using external trainers and school-based training. S/he should also be familiar with different approaches to instruction (such as co-operative learning) which would enhance the possibility of democratic classroom environments. Illustrative tasks include:

A. identify the principal problem areas facing effective teaching in South African primary schools.

B. describe the major factors limiting a democratic classroom pedagogy.

C. recommend:

1. models of teacher training designed to lead to a fully qualified (in terms of abilities or policies, not necessarily formal certification) teaching force in primary education within a specified period of time.

2. approaches to classroom pedagogy designed to make teacher-student-curriculum relationships more interactive, flexible, and co-operative.

Illustrative questions:

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[7] **The Bangladesh Rural Advancement Committee--offers an alternative education program which enrolls close to 100% of primary students with 98% completion rates after three years.**

5.4.1 What are the main problem areas (in terms of origins, nature, and consequences) limiting effective teaching in primary schools and how can these be overcome?

5.4.2 What factors account for the authoritarian and teacher-dominated classroom environments and pedagogy prevalent in South Africa and what alternatives can be proposed?

5.4.3 What specific inputs are needed in terms of teacher preparation that would provide the necessary knowledge base for effective teaching and more democratic classroom environments in the primary grades?

5.4.4 What policy options are suggested by the study of teacher preparation and classroom pedagogy?

a. Should the current minimum qualification level for teaching be significantly raised and if so, with what positive and negative consequences? Or, should the emphasis be shifted towards ongoing inservice training?

b. Should policies aimed at changing pedagogy emphasize improving the structural conditions (e.g., classroom size and availability) of schooling or is it realistic to explore alternative pedagogy within existing structures?

5.4.4 What lessons can be gleaned from existing models designed to enhance teacher professionalism, competence and classroom pedagogy in the primary grades:

a. How useful are existing programs in South Africa for improving teacher preparation and classroom pedagogy (e.g. Boputhatswana's Primary Education Upgrading Program, Molteno Literacy and Bridge to English, or the Urban Foundation Primary Science Project) and can such models be extended to a concerted nationwide program?

b. What lessons can be applied from the comparative international experience in enhancing teachers' professional skills (e.g., ZINTEC)[8] and classroom pedagogy (e.g., Freirean approaches)[9]?

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[8] **ZINTEC= The Zimbabwe Integrated Teacher Education Course.**

[9] **The best collection of Freirean pedagogy in practice is by Ira Shor (ed.), (1990), Freire for the Classroom, Boston, Beacon Press.**

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5.5 CURRICULUM ANALYST

The curriculum analyst, trained and experienced in curriculum development and analysis, must be able to assess the status of the primary school curriculum both at the national level (the core curriculum) and in its manifestations in the different education departments.[10] S/he will need to work closely with the teacher training expert since their respective problem areas are strongly interdependent. Illustrative tasks include:

A. analyze the primary curriculum with a view to determining whether the curriculum contains the core knowledge/skills/values (KSV) essential for creating a literate and numerate population and providing a sufficient foundation for secondary education.

B. identify social biases (gender, race, class) in the primary curriculum and recommend interventions which could reduce or eliminate such tendencies.

C. locate the curricular barriers to effective teaching (such as the quality of support materials) and learning (such as the availability of textbooks) in the primary grades.

D. determine, in conjunction with the statistician, the current availability of and projected estimates for basic textbooks in different primary schools on a racial/regional basis.

E. assess the role and influence of examinations on curriculum practice and student progress in the primary grades.

F. recommend specific interventions which will improve curriculum practice in South African primary schools.

Illustrative questions:

5.5.1 Is the primary school curriculum adequate to dispense the most basic KSV for (i) the transition to secondary education and (2) meaningful participation in social and economic life.

5.5.2 To what extent does the primary curriculum content

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[10] **The curriculum analyst should note that in the South African context there is no national curriculum policy. Local understandings of "curriculum" normally refers to a syllabus (outline of content to be covered in specific school subjects) in accordance with which a set of prescribed textbooks are written. In most South African schools, it is the textbook which is the exclusive authority on and reference for what content is taught.**

promote or inhibit the development of a nonracial, nonsexist society?

5.5.3 What are the major constraints on effective curriculum practice in primary schools and how do they effect education in primary schools?

5.5.4 In which school subjects (e.g., English, Science, Math, etc.) is effective curriculum practice most constrained? Why?

5.5.5 What effects do examinations have on curriculum practice and student achievement?

5.5.6 What are the policy implications of the following areas?

a. Which school subjects are priority areas for primary curriculum reform?

b. What types of interventions to promote nonracial classroom and social environments? (e.g. multicultural education? magnate schools?)

c. What types of curriculum inputs might best improve curriculum practice?

d. What options for promotion in the primary grades? (e.g., is automatic promotion feasible? alternatives to a final written examination?)

5.5.7 What lessons can be applied from existing models designed to enhance curriculum practice in the primary grades:

a. How useful are existing programs in South Africa for improving curriculum practice (e.g. Science Education Program) and can such models be extended to a concerted nation-wide, primary education program?

b. What lessons are there from the comparative experience (e.g. Instrumental Enrichment in Venezuela) in enhancing curriculum practice?

5.5.8 Given a multi-cultural, multi-lingual environment, what should be the language of instruction in primary schools and when should a student be introduced to English?

5.6 EDUCATION ADMINISTRATOR

The education administrator shall have training and demonstrated experience in school-based administration. Since this

is a relatively unexplored area in South African education in part because of the strongly centralized approach to school administration, basic data on school-level administration will be important for future policy purposes. The key figure in schools is the principal, and it is well known that the qualities of leadership on the part of the head vary greatly, with differential consequences for school-based administration. Illustrative tasks include:

A. provide a detailed description of the different patterns of school-level administration within the dominant, centralized approach.

B. identify major problems which stand in the way of democratic, responsive and effective administration at the primary school-level.

C. provide clear recommendations on the types of policy initiatives needed to improve school-based administration.

D. explore model relationships between central administration (e.g., the role of inspectors/subject advisors) and school-based administration which would enhance the capacity of the latter for creative and democratic practice.

E. propose concrete ways in which school-based administration might incorporate women in leadership roles, especially at the level of the principal.

Illustrative questions:

5.6.1 What is the optimal trade-off between centralized and decentralized administration in South Africa?

5.6.2 What patterns of management and administration currently exist at the primary level?

5.6.3 What factors account for schools with a relatively a successful[11] administration?

5.6.4 What factors constrain the development of a responsive and democratic system of school administration?

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[11] **Successful in this context means: administration which is able to maintain democratic relations with the student body, involve parents maximally in the running of the school, motivate the staff in their varied tasks, define clear and attainable goals for the institution, and promote equity (racial and gender) in administrative leadership.**

5.6.5 What specific policy initiatives and changes in practice are likely to encourage democratic and creative administration at the school level?

a. Is the decentralized administration of schooling a feasible option in the South African context?[12]

b. Assuming a continued role for central administration, what models of supervision (e.g., inspectors?) might build successful school-based governance?

c. What types of training inputs are required to promote the administrative capacities and leadership of school principals?[13]

d. What specific mechanisms can be employed to increase the number of women in school leadership positions?

5.6.6 What lessons can be applied from existing models designed to enhance school-level administration in the primary grades:

a. In what ways can examples of successful school-based administration (e.g., those private South African schools in which parents, principals and students make effective inputs into local school governance) be extended to primary schools throughout the country?

b. What lessons from comparative experience (e.g., decentralized school administration in Australia) enhance the case for school-based administration?

5.7 ECONOMIC ANALYST

The economic analyst shall assess the ability of the economy to support projected expansion in the education sector in the next decade, with special emphasis on budgetary and financing options and constraints. Illustrative tasks include:

A. discuss current cost and financing arrangements for primary education and its relative role in the broader education sector, in South Africa's overall budget and in the economy as

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[12] **The current resurgence of debate on education decentralization--and specifically on decentralization and democracy-- in developing countries makes this question particularly salient.**

[13] **The work of Michael Fullan at the Ontario Institute for Studies in Education (OISE) is informative in this regard; see M. Fullan (1984), The Meaning of Educational Change, Toronto: OISE.**

a whole.

B. discuss the financial implications of current financial allocations to primary education and compare these levels with other countries at similar levels of development.

C. predict financial inputs required to achieve clearly defined levels of equity in the national primary system over specified periods of time.

D. map out alternative nongovernmental, parental and community sources of funding for primary education in South Africa, their relative contribution to financing primary education and the future prospects of their support to primary education.

E. with the other members of the team, cost their recommendations and rank them in order of cost effectiveness.

F. offer and discuss the financial implications of at least six examples of education programs which have been shown in other contexts to be cost-effective and equitable interventions in primary education.

G. examine the long-term sustainability of a unitary, compulsory primary education system and discuss the budgetary and economic growth assumptions which have to be met in order to maintain this level of service.

Illustrative questions:

5.7.1 Assuming a policy of universal primary education, what are the economic and financial implications for a post-apartheid government in South Africa? For example, do existing economic and education projections support Universal Primary Education (UPE) by the year 2000?

5.7.2 Assuming that for some time there will be an inadequate number of primary school places, what alternative, financially feasible arrangements can be considered to help alleviate this problem beyond building more schools? That is, by what means can existing school places be rationalized and their likely financial and institutional constraints to be faced by a post-apartheid government?

5.7.3 Assuming the primacy of education materials (such as textbooks) in promoting learning, what would it cost to place the basic learning materials in every primary school in South Africa?

5.7.4 Assuming a policy of raising the qualifications of each teacher to an acceptable minimum competency, what will such a program cost and how could it be financed?

5.7.5 What lessons can be learned from existing approaches to the financing of primary education?

a. What are the different patterns of financing primary school in South Africa and what are the advantages and disadvantages of each?

b. What lessons can be applied from the comparative experience in financing primary education in other countries or school systems?

5.8 RESIDENT ADVISOR

The resident advisor shall be a local resident with considerable experience administering and studying the South African primary education sector. Principal tasks of the Resident Advisor include:

A. prepare a brief background document (single spaced, maximum 4 pages) prior to the teams arrival as a orientation document and for inclusion into the final report.

B. prepare, prior to the teams arrival a list of contacts and materials which will be utilized to direct the individual consultants to relevant human and material resources which could benefit the PESA study.

C. provide a general orientation to the team, during the two-day orientation period, describing the major features of primary education in South Africa, its historical background, and the political and economic environment in which it operates.

D. offer constant feedback during the course of the PESA study to the team concerning the implementation plan, substantive content and main conclusions, with respect to both individual activities and the final document.

E. serve as a resource person and facilitator for other team members in the overall implementation of the primary education sector assessment.

F. prepare a brief written document suitable for inclusion in to the final report which addresses the following **illustrative question**: how do the different contexts (historical, social, educational, economic, political etc) within which education is embedded impact on the nature and direction of primary education reform in South Africa?

6. LEVEL OF EFFORT

The assessment will span a total of seven weeks, beginning on or about 1 September and concluding on or about 30 November 1991. The team is expected to work six-day weeks and will be paid accordingly. The following is an illustrative table of the numbers of days required to complete the scope of work by each consultant:

Team Leader	60 days
Resident Advisor	21 days
Anthropologist/Sociologist	42 days
Teacher Training Expert	42 days
Curriculum Analyst	42 days
Education Administration	42 days
Education Economist	30 days
Statistician	30 days

Consultants will be expected to work out of their hotel rooms, with a central location for meetings and other coordination provided by the Advancing Basic Education and Literacy (ABEL) offices in Johannesburg.

Ten working days prior to arriving in South Africa, the team leader will conduct preparatory work, which will include: identification of key supporting resources on education policy; liaison with the contracting agency in Washington D.C. on issues relating to PESA; initial interviews with key sources (South or Southern African education experts based in the U.S.); review primary education sector assessments in neighboring Southern African states (e.g. World Bank studies in Zimbabwe); and discuss and gain an understanding of the data gathered and the computer modeling exercise developed by Research Triangle Institute. This exercise details financial feasible education policy options for a post-apartheid South Africa.

Three working days before the rest of the team arrives, the team leader will meet with the Mission and the Resident Advisor to develop a draft work plan to be presented to the Mission and the other team members to be ratified before the end of the first full week.

All team members (other than the team leader and the Resident Advisor) will time their arrival to allow them to participate in a two-day orientation session. The USAID Mission staff will assist the PESA Team with interpretations of the scope of work, guidelines for operating in the South African environment, and suggestions for initial contacts and resources. Briefings will be provided by the Resident Advisor and selected South African educationists actively involved in the eduction policy debate. The group will also work together to ratify the proposed work plan. Midway through the first week, the PESA team will present the workplan for Mission approval outlining the schedule and areas of responsibility for

completing the scope of work which the allocated period of time.

The second to fifth weeks of the PESA study will be devoted to intensive data-collection and analysis as described in the Mission approved workplan. During this period, individual consultants will have different work schedules (see Table A). By the middle of the third week, each consultant shall make available to the team leader and the Mission Staff, substantive outlines detailing what areas are being investigated, along with preliminary findings. Midway through the assessment, the PESA Team will have its second combined deliberations with the Mission. At this time it will be important, under the guidance of the team leader, to review progress, identify areas yet to be covered, assess the time-line for completion, and share individual concerns or problems encountered during the first three weeks of research. During this period the Resident Advisor will again be present to offer further guidance and direction on the Assessment and to respond to queries from the PESA Team.

By the sixth week, each consultant will have completed their individual reports for submission to the team leader. During this period the consultants will work closely with the team leader to establish continuity and complementarity in the report. The Resident Advisor will again be present to assist in the final deliberations leading up to the production of the final draft report. By the beginning of the seventh week, the final draft report will be completed. The team will brief the Mission and present the draft report for comments within two working days. A further five working days is provided for the team leader to integrate Mission comments and last minute additions into the report. During this time, the team leader and the South African consultants will be requested to conduct a briefing for interested South African educationists.

7. REPORTING

Throughout the assessment, the team leader will engage in regular discussions with the Mission Staff and the ABEL Office on the progress and problems of the assessment.

The Team Leader will report to the Chief of Education and Training Office for general and technical direction; immediate management issues and day-to-day implementation issues will be handled by the Team Leader in consultation with the Project Development Officer for the Educational Support and Training project (ESAT). The Team Leader will also regularly consult with the ABEL Chief-of-Party for technical advice. By the end of the sixth week, the preliminary draft report will be circulated to Mission staff and presented for discussion. The Mission will provide substantive feedback to the PESA team within 72 hours of receiving this draft report.

Based on the feedback received, the seventh and final week allows for the preparation of the final draft report which will be submitted to the Mission for a second round of commentary by the end of that week.

The Mission will present comments to the team leader two weeks after reception of the final draft report and, two weeks later (i.e., one month after the completion of consultations in South Africa), the team leader will forward a not less than five copies of the final report to the Mission by air courier and not less than thirty copies by pouch.

In addition to the formal reporting requirements outlined above, the Mission may require the team leader to provide written or oral progress reports from time to time during the course of the study. Regular feedback sessions will be held between the PESA team and the Mission Staff, and each of the five reports will be the basis for a joint meeting.

Summarized:

nature of report	**due**
1. workplan	1st week
2. substantive outlines	middle of 3rd week
3. early draft report	middle of 6th week
4. preliminary draft report	end of 6th week
5. final draft report	end of 7th week
6. final report	4 wks after final presentation in South Africa

Unless mutually agreed otherwise, the Final Report shall contain the components outlined in Table B.

8. METHODOLOGY

The conduct of the study and the structure of the final report will be guided by the Education and Human Resources Sector Assessment Manual (August 1988). In some areas the generation of primary data (e.g., retention rates in rural farm schools) will be necessary but in most cases secondary data (e.g., primary school teacher qualifications) will be available for assessment and analysis. Primary data collection strategies will be interviews, document reviews, statistical analyses, and site observations.

ANNEX F

FUNDING SCENARIOS FOR USAID/PRETORIA

SUGGESTED USAID INTERVENTIONS
PRIMARY EDUCATION SECTOR

F.0 Summary

1. Develop and disseminate teacher guides for implementing the curriculum. Put special focus on coping with large and multi-graded classrooms in rural areas, shack settlements, and other disadvantaged areas.

2. Assist the revision of primary level curriculum, especially in areas of science, math, and language. Initial focus should be placed on SSA and SSB levels.

3. Continue support for especially successful NGO and PVO activities in areas of in-service teacher training, pre-primary education support activities, curriculum, management and policy dialogue efforts (e.g., EDUSOURCE-RTI model).

4. Develop and help to implement teacher in-service training materials. Concentrate on development of practical, sample instructional lesson plans and demonstration tapes in actual classroom settings.

5. Support the development of policy options papers on key sector development issues such as testing, privatization, curriculum reform strategy, design of a national institute of education. Continue to support existing policy paper activities.

6. Support administrative and management training through long-term participant training, short-term study tours, and in-country seminars and workshops.

7. Create a Primary Education Development Trust to serve severely disadvantaged areas and disenfranchised populations. Based on a self-help theme and with clear criteria for the disbursement of funds, interest only could be drawn down in the first five years and principal and interest in the next ten years with trust retired in fifteen.

8. Develop the testing capacity of administrators and researchers at national and regional level in conjunction with development of a unitary education management information system.

9. Develop and help to implement a social marketing campaign focused on:

   - family involvement;
   - health, nutrition, education information dissemination;
   - attendance, enrollment;
   - school-community relations;
   - parent groups; and
   - understanding curriculum reform.

10. Support the establishment of teacher resource centers by providing materials, master training and other non-recurrent operational costs. The centers would be linked to existing infrastructure, such as colleges of education.

11. Support the use of interactive radio for reaching "marginalized youth" and other young, school-age populations in need of supplementary educational services.

F.1 Development of Teacher Guides

In no other area are the differences in quality of primary schooling more obvious than in teacher qualifications. There are striking disparities in the educational attainment of teachers and in their formal training programs. These differences vary by race, region, and urban-rural site. Paradoxically, the schools that face the most adverse pedagogical conditions are also the schools which have access only to the pool of the poorest trained teachers. Those who are least well-prepared must cope with the most difficult learning situations.

Research has shown that the most promising way to compensate for low ability levels of teachers in the short run is to develop simple, easy to use, pedagogically sound teacher guides for use in the classroom. Although these guides are not meant to foster a cookbook approach to instruction, they do offer security to teachers who have insufficient subject matter knowledge and teaching skills to cope with the demands of curious students.

Teacher guides should be developed in close harmony with the curriculum for each subject. If well designed, the guides not only strengthen teachers' performances on particular subjects, but they also serve as hidden models of appropriate teaching behavior for other subjects as well. With repeated modelling of instructional strategies, teachers internalize the examples and begin to apply the lessons learned in an increasingly wide array of instructional situations.

In conjunction with a revision of the primary curriculum, USAID could make a significant impact on primary level instruction by supporting the development and dissemination of guides for each

subject at each level of the primary cycle. Initial development work is labor-intensive and thus prototype materials are somewhat costly to develop. Once distributed, however, the guides reinforce basic concepts to teachers and serve as in-service tools for improving teaching techniques.

A long-term instructional design consultant might be made a part of USAID's new primary level project. This person might be supplemented by short-term technical assistance as necessary and appropriate. It is estimated that 30-40 individual subject guides would be desirable. These guides should be pilot tested and disseminated to all needy teachers. The guides could have a significant impact on most classrooms in South Africa but would be of special benefit in rural and disadvantaged schools, most notably those with multi-grade and age classes, where over-crowding is a severe problem, and in schools with few economic and human resources to overcome teaching and learning deficits. The guides should be developed in collaboration with curriculum experts and should be a high priority in the development of a post-apartheid education system.

F.2 Revision of Primary Curriculum

The primary education curricula in South Africa have contributed to the social differentiation caused by the apartheid system of institutional structuring. Although the central ministry has recently released a plan to restructure the primary curriculum and to standardize it across all types of primary schools, it is clear that a curriculum which is acceptable to the majority of South Africans is one which has been sanctioned by local constituents. As the education system is transformed, it is likely that curricula will become more regionally centered. Regional education officials will assume more responsibility for designing, adapting, and approving curricula and textbooks.

Curriculum design is a process requiring great skill and training. Few black South Africans have had the opportunity to develop these skills. USAID can play a significant role in enabling South African educators to assume greater control of the content and structure of instructional materials by supporting training in curriculum development methods and in financing a reexamination of the content of curricula, especially in the areas of social science and history, science, and math.

USAID support would be given to South Africans to make adjustments in the content of the curricula. Expatriate technical assistance might be funded to help South Africans improve the structure of the curricula. Assistance in both areas is needed, especially since new emphasis will be placed on the control of schooling by local officials.

USAID support might take the form of one or more long-term consultants who, working in conjunction with short-term TA, would offer advice to South African educators on a variety of curriculum issues including:

- sequencing and spiraling of curriculum;
- strengthening the relationship of curriculum to primary school objectives;
- matching curriculum and methods to educational context and students needs and capabilities; and
- establishing closer links to testing and other accountability methods.

USAID contributions to support an expatriate advisor for two years would total about $250,000 based on average long-term TA estimates. Support to South Africans for curriculum revisions, training and workshops could equal $100,000 per year.

F.3 Support Existing USAID-PVO/NGO Network

Over the past several years, USAID has supported a number of PVO and NGO groups that are working in the education and human resource development area. Many of these have done excellent work and have filled a critical void in government services. These programs and the support for them may be entering a transition phase, however.

The great number of these voluntary organizations has meant that scarce donor funds have been divided among many groups. Some have been more successful in harnessing resources to solutions than others. USAID has supported a number of groups such as TOPS and Grassroots that have provided excellent services and have assumed leadership roles in the PVO community. Those that have been especially meritorious and that have demonstrated the capacity to play a leadership role should continue to be supported.

USAID is encouraged to examine carefully its funding portfolio and to support a limited number of the most promising organizations that are providing critical services during this time of transition. Emphasis might be placed on those that are playing multiplier roles and that link directly to one or more of the other recommendations contained in this section of the report. Preschool education, for example, is of vital importance to the success of disadvantaged students in primary school. It is unlikely that in the near future the government can or should subsidize pre-schools. USAID does not have the resources to sustain such an effort either. However, USAID has supported PVOs with a pre-school emphasis. A select number of these groups should continue to be assisted and USAID might contribute fiscal and management support to the integration and management of these disparate efforts.

Of critical importance to these small organizations is funding security. Many PVOs operate on budgets of less than $100,000 per year with funding guaranteed for no longer than 12 months. Thus, a disproportionate amount of their time is spent on raising money, not on program development. To alleviate this uncertainty, USAID should continue to provide 3-year support through its grant-giving process. In addition, USAID is encouraged to continue to invest in innovative solutions/pilot programs run through the NGO community.

In short, it is recommended that USAID continue to support a limited number of high impact PVOs and NGOs. Investments should serve to consolidate the field of organizations USAID supports with the trade off being longer-term support if not also larger funding levels for those groups chosen. A careful review of existing grant recipients should serve as a preliminary basis for making allocations. Emphasis should be placed on integration of efforts and leadership roles of those organizations which are supported by USAID.

F.4 In-Service Teacher Training Materials

Like most other aspects of the South African education system, great disparities exist among types of teacher training institutions. Colleges of education under the DET are generally over-crowded, qualitatively under-staffed, and lack materials and space to train future teachers adequately.

Graduates of many of these programs possess theoretical and some substantive skills, but they lack practical tools and techniques for making instruction more effective and more appealing to primary level students. Staff of colleges of education usually lack the time and the technical insight to design new and better materials to use in their teacher training programs.

Faculty in teacher training institutions needs exposure to new strategies and techniques for developing pedagogically sound lessons. Prospective teachers need to be exposed to a greater number of strategies for coping with large classes, multi-grades, and unmotivated students. The use of group learning, peer-tutoring, inter-active learning, etc. could greatly improve the interest and performance of students in classrooms. Few of these techniques are taught in colleges, and even fewer find their way into actual practice in primary schools.

USAID could support the development of a variety of instructional packages for use in colleges of education and for later transferral and application in primary schools. Assistance might include the development of a series of model lessons that are based on the actual curriculum. These lessons could be recorded on video tape for showing at the proposed Teacher Resource Centers, at union offices, or other suitable locations. The

tapes would focus on lessons that teachers will be required to teach in coming weeks and each should illustrate a different principle of pedagogy. Model lessons should be created for each major subject and should be mutually reinforcing.

Materials development might also include the development and publication of an instructional newsletter that would be sent to all primary teachers in a designated area. The newsletter would contain tips and practical suggestions for teaching upcoming lessons. It could also be a forum for teachers to share ideas and experiences. Above all, the in-service materials should focus on real problems and tested -- but simple -- solutions to them.

Resources might be provided for a complete set of instructional training materials, including a video-tape. The newsletter could be produced for as little as 20 cents per copy plus labor. If properly organized and structured, these materials could result in considerable recurrent training savings for the Government and could have a significant impact on student achievement.

F.5 Policy Options Papers

Academics, educators and policy makers have for years been engaged in a culture of conflict oriented toward the demise of the apartheid system. A great deal of intellectual effort has gone into documenting the moral and practical unacceptability of a racially structured society. Much work remains to be done in the development of policy alternatives that could be invoked in a post-apartheid society. The rapidity of political change in South Africa in the past eighteen months places great pressure on all social groups to come to the political negotiation process with a well-articulated set of options for social restructuring.

In the education arena, issues such as national testing, privatization schemes, curriculum reform, management information systems, community-school enrollment incentive programs, etc. require careful thought and analysis before positions of advocacy can be taken. Not only do the various options open to planners and policy makers have to be delineated, but the costs and benefits of various schemes must be identified and explained to political constituencies.

USAID has played a lead role in identifying education policy options in countries all over the world. USAID has the experience and technical assistance at its disposal to play a lead role in helping key South African officials chart the course of education reform in South Africa.

USAID support might take the form of a series of commissioned policy papers on issues such as those defined above. The teams could consist solely of South Africans or they might be a mix of

local and expatriate experts. Teams of no more than four consultants working for periods of time not to exceed four weeks should be adequate to complete most policy papers.

Independent of or in conjunction with these papers, USAID might also sponsor a series of seminars on key policy issues. These independent forums would serve as the basis for conducting frank discussions on key education issues, especially those of a contentious nature. It is recommended that an independent, perhaps expatriate, facilitator be hired to moderate the meetings. Each session should have as a goal the production of a discussion paper or agreement on critical issues and steps that pertain to the subject of the seminar. Each seminar would last approximately 3 days and should be supported with funds to promote the conference, to hire a facilitator and to reproduce the final report.

A combination of 10 policy papers and seminars conducted over the next 18 months would result in a major contribution to the internal dialogue on the future of primary education.

F.6 Short and Long-Term Training

Despite the abundance of skills among some segments of the education community in certain substantive areas, there is a pressing need for advanced training in teacher education, testing, and education management among the previously under-served populations. The problem is especially acute in rural areas, the TBVC states, and in the rapidly growing squatter settlements outside of metropolitan areas.

A post-apartheid education system will undoubtedly place more management and control of education institutions at the local level. Increases in autonomy must be paralleled by the development of mechanisms for ensuring that quality is maintained, if not also improved, and that local officials are held accountable for the performance of the school system.

USAID could provide a valuable service to this transition through support for long-term training at the M.A. level in education management and administration. These programs would be even more effective if the period of study were linked to an internship or apprenticeship program in a U.S. school system. The degree program should be applications-focused and should concentrate on the generation of practical skills, such as conflict management, budgeting, leadership, facilities management and school-community relations. USAID could draw upon existing tools to identify educators with leadership/management potential. A program consisting of training for 20 managers per year who would then be strategically placed upon completion of their training should continue to be emphasized and would help to improve the quality of primary services.

Additional training slots should continue to be reserved for individuals interested in pursuing critical skills such as testing, curriculum development, educational planning, and instructional supervision. Individuals selected for these opportunities should return to South Africa in positions that will enable them to play a multiplier role or to have a direct impact on policy and practice.

Short-term in-country seminars and workshops that focus on critical transition problems could be supported by USAID. These workshops would be led by a combination of South African and expatriate experts on such functional topics as decentralization issues, testing, education management information systems, design and production of instructional materials, management, social marketing, community mobilization, etc. The workshops would last from one to two weeks and would involve no more than 20 participants each. Following the design of the prototype materials, the workshops could be conducted for about $5,000 each. Development costs would average about $10,000-15,000 per module.

A carefully integrated schedule of activities should be developed to coordinate training with anticipated changes in the structure of the system and with shifts in teacher training and curriculum development.

F.7 Independent Education Trust Fund

The future of education development rests in the hands of South Africans themselves. One of the most difficult challenges facing a post-apartheid system is how to compensate for the enduring legacies of decades of structured discrimination. The central government, even with the assistance of locally-generated resources, will have a difficult task in meeting the pent-up demand for educational services. Compensatory programs will be extremely difficult to develop because of the constraints on resources, both human and fiscal.

USAID could spearhead the development of an independent body to administer a pool of funds to be contributed by international and domestic donors. The creation of a trust that was focused on bringing about adjustments in education quality and opportunity could complement future government efforts to increase enrollments and to bring about a more equitable system. The trust should not be designed to relieve the government of its responsibilities to provide free, equitable, primary education services to all members of the population. The purpose would be to provide resources to begin to ameliorate the competitive disadvantage of groups that have been historically oppressed and yet must now compete in a non-racial but merit-based system. Funds for the Trust could be used to restructure/enhance existing

Trusts, or if necessary, to create a new one that responds to well-defined needs.

USAID could provide seed money to the fund from ESF or excess currency funds. A Congressional exception might also permit the use of DA funding for the effort. The trust might be established with an initial endowment of $10-20 million with resources solicited from other bilateral donors. If established for a 20 year period, only interest could be drawn down for the first 10 years, and principal and interest during the second 10 with the fund retired in the year 2012.

USAID working in collaboration with South Africans could establish criteria for disbursement. Stipulations might include use for communities that meet certain definitions of need, organizational and management capability, matching funds, benchmarks of progress, promise of benefit, etc. The fund would be managed by a carefully selected, politically acceptable group of individuals representing a racial and geographical cross-spectrum of South African society.

Examples of funding possibilities include:

- community based scholarships and tuition subsidies;
- school construction and rehabilitation;
- training of para-professionals to assist local teachers;
- acquisition of instructional materials and libraries;
- establishment of locally managed pre-school programs; and
- support for school-feeding programs in nutrition deficit communities.

Criteria should be flexible, should ensure accountability, but should encourage innovation and self-help efforts.

F.8 Testing and Research

At present only one standardized test is given to students in South African schools; this occurs at the end of the secondary cycle and is used primarily to determine access into the university system. In the non-white schools, no attempt is made to collect information on the relative performance of schools or on the progress of individual students through the primary cycle. As a result, it is impossible to identify the strengths and weaknesses of individual programs, teachers, or students. Without such data, it is difficult to assess whether interventions designed to improve school quality are effective.

USAID can help this process in two ways: First, by supporting training of individuals in testing and measurement skills, USAID would help to ensure that if testing became more common and focused on diagnostics rather than selection, a suitable cadre of experts would be available to implement the process. Second,

USAID could help central and regional level planners to rethink the testing process to make it more analytical and problem oriented.

A revised testing scheme should be able to help analysts identify schools that are consistently producing under-achieving students. It should be able to identify classes in which the curriculum is not being adequately implemented. A good testing system should also permit analysts to diagnose individual learning difficulties and to group students more effectively into learning groups that will promote individual achievement.

USAID support could be given to hiring a long-term consultant to assist South African officials to rethink the entire testing program in South Africa. Support could also be given to the design and implementation of an education management information system that would allow analysts to track the progress of schools and individual students with more care and with greater emphasis on diagnosis and timely and relevant interventions. A series of seminars and workshops might also be supported for local education officials on key issues in testing and measurement. These seminars could be contracted directly with an expatriate firm or could be run through a grant to a local firm or university in which the requisite skills are available.

F.9 Educational Marketing Campaign

Social marketing campaigns have been remarkably successful in the fields of health and population. These campaigns usually have several objectives: disseminate information on a particular topic to an often heretofore disinterested or unaware population; persuade or motivate people to act in certain ways that are commensurate with their own and society's best interests; develop a groundswell of support for a concept or a set of behaviors.

In a post-apartheid social system, the South African Government will have to accomplish all of these objectives, not just in the health and population sectors, but in education as well. Skeptical citizens will have to be persuaded that reforms in the system will serve their best interests and that education institutions, in particular, will accomplish the tasks for which they were designed. During the past decade, primary schools and, to a greater extent, secondary schools have been used for political purposes as much as pedagogical ones. Confidence must be restored in public education by earning the public trust.

An education marketing campaign would inform citizens about the anticipated changes in the education system and why they are necessary. The new curriculum must be explained to parents and their role in helping their children succeed in school must be clarified. The campaign should also stress the links among nutrition, health, and education. In short, an education

campaign would, first and foremost, explain the new education systems and its objectives to its clients.

Second, the campaign would motivate both parents and students to excel in their respective roles: parents to assist their children and facilitate their learning process, and students to develop good study habits and to value success. The campaign would also be targeted at school teachers and administrators, exhorting them to restore dignity and achievement orientation to the school setting.

Third, the campaign would stress the social and economic payoffs to doing well in school. One of the legacies of apartheid is the realization that schooling has not been more important than race. As ascriptive characteristics associated with success are replaced with achievement based criteria, the population must be persuaded that education is linked to social mobility; that effort matters.

USAID is uniquely positioned among bilateral donors in designing and orchestrating such a campaign in tandem with South African institutions. In the wake of the creation of a new constitution, will be a sense of optimism and a commitment to a new social order. A well integrated campaign aimed at increasing enrollment and school completion through community participation could play a critical role in bringing about an orderly transition of power and in establishing education as a necessity and not just a right of all citizens. A national education campaign can help to establish a new commitment to primary schooling.

F.10 Teacher Resource Centers

Teacher training colleges currently operated by the DET are staffed with insufficiently trained instructors, lack physical facilities and equipment to illustrate instructional techniques in an exemplary fashion, have insufficient linkages with actual schools, and produce insufficient numbers of teachers to meet the anticipated demand for educational services.

The government will do well to meet the recurrent costs of generating the next generation of teachers. Budgets are likely to be too slim to include upgrading of training facilities, let alone to provide for the production and distribution of instructional aids and resources. Pedagogical materials are desperately needed by teachers in impoverished areas. Teachers with creative ideas have no place to go to develop their ideas into instructional tools and materials. Likewise, they lack a centralized support unit to go to for ideas, suggestions, and counsel.

USAID could play an invaluable role in improving instructional quality by contributing to the support and development of a

limited number of teacher resource centers. If the centers were attached to colleges of education, they could serve a dual role: an idea and materials bank for currently employed teachers; and a training center and materials development lab for teachers undergoing training. Ideally, the centers would provide a natural link between the colleges and teachers in the field. As teacher trainers develop new materials, they could be field tested by employed teachers. Experienced teachers could also use the centers to share problems and solutions with prospective teachers. The resource center could double as a place for teachers to get advice from college staff. Teachers need mentors, especially during the first several years of a new career. The resource centers might provide a suitable bridge between theory and practice. The Center could also be attached to Union officers, NGO Centers, and Community Centers. The merits and drawbacks of each alternative should be carefully assessed.

USAID support could take the form of matching capital construction costs. More importantly, however, would be USAID's contribution to the design and operation of the centers. Resources for materials development might be provided over a 10-year period on a matching basis: USAID's contribution would decline by 10 percent per year for the duration of the effort, but the balance would be forthcoming on the condition that the college maintain the initially agreed-upon center funding level . (For example, if a center were to be funded at $10,000 per year, USAID's contribution would decline by 10 percent per year, but the college would have to find an additional 10 percent to compensate for AID's diminishing role. Failure to do so would affect USAID's contribution to the center.) The college could obtain its resources from public or private sources, including unions. Close collaborative relations should be maintained among the colleges, teacher associations, and subject matter societies.

F.11 Radio Instruction

Over the past decade, the efficacy of radio as a medium of instruction has been clearly and consistently documented. Results from one-half dozen countries in the developing world have shown that radio instruction has produced learning gains as high as 25 percent beyond traditional instructional practices. The results are most pronounced in areas where teacher quality is poor, educational facilities are inferior, and where education management is weak.

All of these conditions apply to many geographic areas in South Africa. Upgrading the quality of teachers is a long-term effort. A new, standard curriculum has been proposed for all primary schools in South Africa, but retraining teachers to understand and implement the curriculum will be a mammoth, multi-year task. Radio can play a key role in addressing these issues.

Radio instruction works well in part because it is based on carefully thought out, well-structured lesson plans and highly organized and disciplined presentation of the material. It is also successful because it uses time very efficiently. In traditional classrooms, there is no guarantee that the teacher and student will even be in the classroom at the same time, let alone actively engaged in instruction and learning. Radio instruction demands attention and keeps the students actively involved in learning for the duration of the program.

USAID support of radio education in South Africa could be of immense help in disadvantaged areas. Among the things it could accomplish are:

- Deliver well-articulated lessons especially in subjects for which teachers are known to be weak such as math and science;
- Permit teachers in multi-grade classrooms to concentrate on students in grades other than those receiving the radio instruction;
- Provide instructional methods models for teachers with limited pedagogical training; examples could be modeled in other subjects;
- Enable students in remote areas and those who have dropped out of the formal system to have access to instructional resources currently denied them; and
- Offer instructional programs for teachers and parents that link with and help deliver the primary school curriculum.