educational strategies for accelerating development in southern africa

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Educational crisis

Just over four years ago the important International Conference on the World Crisis in Education was held in Williamsburg, Virginia. That an education crisis existed was amply documented and its ramifications were analysed and discussed. In this paper we shall be exploring the dimensions of that crisis under conditions peculiar to southern Africa. Then hopefully, we may try to find some solutions. At least 5 major educational problems comprising that crisis can be identified.

Rising demand and limited resources

The heart of the educational crisis is in the widening imbalance or gap between school systems and their social-economic environments. There is a gap between educational demand and supply. A population that suddenly gets more education wants even more education. A bright African youth of illiterate parents who learns to read wants to finish primary school and to enter secondary school. In turn, he will want more schooling for his children. Educational expansion in one generation increases the educational demand in the next generation. One dramatic example is in the USA where between 1900 and 1967, the population increased two and a half times while secondary school enrollments increased from 12% to 90% of the age group and higher education from 4% to 44% of the age group. Democratic aspirations, parental demand, population growth, better health, longer lives, family migration from rural to urban areas - all have contributed to a rising educational demand which strained limited resources. Unfortunately, the thin spread of limited resources over more and more students resulted in reduced quality and increased numbers of dropouts and repeaters.

The crisis of demand and supply for which a solution is needed is that of rising enrol-

ments and lowered quality. The ideal is an education system expanding in numbers and quality at all levels. Such a system should provide sufficient skills at ever improving levels of quality to attain high employment and a rising **gross national product**. Strategies to attain this ideal require that there be a balance of educational inputs by means of which desired educational outputs may be achieved; that is, there is a need for a planned systems analysis approach that is somewhat like a physician's concern with balancing total bodily health. Thus, a first problem to be solved is the gap between demand and supply.

Less income and higher cost

A second problem results from the gap between income and costs. Education budgets, which have recently risen steadily, have now levelled off because of other pressing national needs. Since poor countries have a growing proportion of younger people, a proportionately smaller working population must support those not working. In the battle of the budget education cannot get an expanding share of the national economic pie, both because of inflation and because of the higher salaries needed to hold good teachers and administrators as well as to hire new ones in competition with industry and business.

Education is a rising cost enterprise, needing more money each year to accomplish the same results as in the previous year and, of course, needing substantially more to meet increased enrollments. The lack of money as a root of the educational crisis requires strategies that will find new money sources, relate educational expansion to economic growth, and improve educational efficiency and productivity. Thus, the second problem to be solved is the gap between income and costs.

Mounting school output but relatively fewer jobs

A third problem is an imbalance between school output and jobs. A poor country with less labour mobility and job absorbability needs a close match between school output and available jobs. This imbalance has affected rich countries too, as in France in May 1968 when anxious university students, principally in the social sciences who were worried that their numbers exceeded jobs, helped touch off the revolt that nearly toppled President De Gaulle.

Poor countries tend to produce an imbalance of needed skills: there are too many graduates in the classics, arts, law, and while there are not enough in health, agriculture, mathematics and science. A proper school mix would reflect the fact that the urban and industrial sector houses and employs about 25% of the people; as well as that the rural and agrarian plus the small-town and smallindustry sectors employ and house threequarters of the people. The latter sectors are where development must be accelerated and where the transition to modernity must take place. Rather than educate youth to escape to the urban areas where jobs are scarce and frustrations are high, the schools need somehow to attract, equip and challenge young people to improve and modernize the rural areas.

Imbalance in skill levels is costly and inefficient when professionals perform work that paraprofessionals should do. Unemployment and under-employment, long accepted as inevitable in static and traditional societies, are now becoming unacceptable and even intolerable. Unemployed school leavers in their loud clamour and swift anger have toppled governments before. Thus, the third problem to be solved is the imbalance between school output and jobs.

New times and old content

A fourth problem, a qualitative one, is the lag in course content and teaching methods at a time of rapidly advancing frontiers of knowledge. Critics hold that much of what is taught is irrelevant to current personal and national needs and hardly suitable for the future. Old teaching methods designed for yesterday's intellectual élite do not fit today's heterogeneous students who have a wide range of abilities, motivations and career aspirations. A student today needs guidance which will enable him to select a more effective individualised fit from the expanded curriculum. But traditional courses and teaching methods continue. This built-in resistance to change is expressed in the quip that it is easier to move a graveyard than to change a curriculum. This, the fourth problem is to assure the continued relevance of educational content and methods.

Formal and informal education

A fifth problem is the imbalance between the formal school system and out-of-school training and opportunities. Informal education lifelong education is a better term - has a vital role to play in poor nations, whether in up-dating the skills of those already educated or in bringing literacy to the masses deprived of formal schooling. Lifelong education, a key need for rural transformation, needs to be organized, administered, financed and motivated. Lifelong education can involve national youth service and literacy campaigns as well as the work of women, girls and the elderly in rural improvement. Thus, the fifth problem to be solved is the gap between formal and informal education.

Late start in Africa

These five problems of rising demand, high cost, job shortages, old content and poor methods as well as the need for lifelong education, weigh heavily on Africa, which has only lately come to grips with its lack in education and development. In dependent African states, which have increased from three to over 40 in the last 20 years, were late starters in development. Their hopeful mood in the 1960s, expressed in the slogan "seek first the political kingdom and all else will be added", is giving way in the 1970s to a serious facing up to the need to overcome their poor economic condition.

Independent African states, among the world's poorest, include 19 of the world's least developed countries. In 1968 87% of the African people earned an average of under \$160 per person and 55% earned under

\$80 per person. Unequal income distribution between urban and rural people and between wage earners and subsistence farmers makes conditions even worse for the majority. By one account Africa would at present growth rates, need 200 years to reach the present levels of the industrial states. By then of course the developed countries will have pulled far ahead and again widened the gap.

Obstacles to development

Obvious major obstacles to African development include a lack of road, rail and air transport: meagre communications, housing. and health facilities: the predominance of subsistence farming, which employs twothirds of the people; illiteracy of over 80% of the adults: unemployment and underutilization of human resources. At the same time there are such problems as a shortage of trained manpower; too many small local markets in a continent of too many small states: reliance on a few major food and mineral exports whose prices fluctuate on the world market; low personal income, even for the one-fifth of the working population who earn cash wages: scarce investment capital: inadequate knowledge of, and poor exploitative possiblities for, natural resources; piecemeal rather than organized planning; and rapid population explosion.

School expansion

Despite obstacles. Africa's new leaders, many of them former teachers, believe in education as a vital catalyst for modernization and have had to promise it to gain political support. Their drive to advance African education resulted in a continent-wide UNESCO education conference held in Addis Ababa. Ethiopia, in 1961. The estimate then was that 80% to 85% of Africans over age 15 were illiterate, nearly double the world average; that fewer than half of middle Africa's 25 million school-age children would complete primary school: fewer than three out of every 100 would enter secondary school and fewer than two out of every 1 000 would receive any higher education. The following educational targets were set for 1980: primary education free to all, 20% of these to enter secondary schools and about 2% of these to enter higher education. In the 20 year period education expenditures were expected to rise from \$450 million (1960) to \$2,2 billion (1980). African countries accepted periodic growth targets and were encouraged to align their economic priorities for increased investments in education.

UNESCO conference in Nairobi, Kenya, assessed educational growth between 1960 and 1965. It showed that primary school enrolment, which was 36% of the relevant age group in 1960, reached 44% in 1965, or 3% below the 47% target for 1965 (1,1 million pupils short of target). Secondary school enrolment, which was 3% of the relevant age group in 1960, reached just under 5% in 1965, or more than 1% below the 1965 target of 6% (272,000 pupils short of target). Only in higher education was the Addis Ababa target slightly overfilled: the enrolment of .02% of the relevant age group in 1960 reached .05% in 1965, or .01% above the Addis Ababa target. Another target called for a 5% annual increase in primary school enrolment but the average annual increase from 1960 to 1965 was only 1,8%. The result is growing illiteracy. On the basis of trends between 1960 and 1965 and assuming that at least four years of education are needed for literacy, it was estimated that 3 816 000 Africans or 71% (as against 54% forecast earlier) of those at age 6 in 1960 would be adult illiterates at age 15 and 4 160 000 Africans or 69% of those at age 6 in 1965 would be adult illiterates when they reach age 15. Nor were Addis Ababa targets reached in the number of trained primary and secondary school teachers, although substantial gains were made.

Education and economic growth

Economist Frederic Harbison of Princeton University (served on the Nigerian Education Commission headed by Sir Eric Ashby in the late 1950s) stressed the key role of manpower training in the economic development of lowincome countries. The Ashby Commission report projected Nigeria's manpower needs to 1980 and set comparable goals for the educacational system.

In a developed country like the USA education has been a factor in economic growth.

In the early 1960s economist Edward F. Denison attributed 23% of the economic growth of the United States between 1929 and 1957 to education and an additional 18% of the economic arowth during these same years to advances in knowledge. These figures have been confirmed by economist Theodore W. Schultz. In later study, Denison claimed that between 1955 and 1962 one-fifth of the increase in US national income per person employed was a result of workers' higher educational levels. He added that for that same period advances in knowledge, coming mainly from higher education, added another one-fourth to the increase in national income per person employed. These studies suggest that both schooling and advances in knowledge are sources of economic growth for all countries and that unlike limited natural resources they are man-made resources which can be continually improved.

What strategies then can make education serve better a people's material welfare?

Some suggested strategies

The suggested and interrelated education and development strategies that follow may be obvious to national planners but are presented here for consideration as to their relevance to southern Africa.

Setting educational objectives

School systems by their very organsation and financing have built-in objectives, aims and goals. But benefit can be derived from stating objectives explicitly, reviewing them regularly, and restating them frequently in the light of changes in the school system and in the society it serves. The hope is that when objectives are under continual and careful review, they may be improved for continual renewal of efficiency, innovation, and service to society. All important elements of the sosiety have their part to play in setting educational objectives, while the chief responsibilit rests on those officials chosen to carry out the mandates of the people.

National planning

By one account, three guarters of African countries have some form of development plan. Planning departments, while they at top levels co-ordinate the efforts of the ministries of agriculture, education, economics, industry, social welfare, youth services and others are frequently separate from them. In these departments growth rates are set and the objectives and programmes of supporting ministries are correlated with these growth rates. Essential aspects of planning include better co-ordination of all resources, stress on innovation or changes calculated to achieve improvements, and a clear order of priorities. Critics say that in most national plans the allocation of resources shows an exaggerated priority for industry and relative neglect of agriculture.

Yet it is agricultural development in bare subsistence countries which can most practically aid economic growth and hold down urban non-existent, national planning should be begun under trained personnel as an essential part of any strategy for development. Planning is necessary in setting goals, co-ordinating efforts, and ordering priorities.

Regional planning

Regional co-operation that mutually benefits participating countries and the region as a whole is widely practised and exists in southern Africa for customs and trade purposes. Much good could be gained if such co-operation were enlarged to its best operating limits in order to accomplish such things as advantageous exchange of goods and common use of appropriate services and communications facilities; co-operative buying, storage, processing and distribution of agricultural and other products ;and joint planning by experts in various fields, including education. Savings would result from the elimination of duplicate facilities and in addition needed facilities could be introduced to serve local and regional needs.

In the education sphere, incentives might result for the exchange of students, teachers and administrators, and for the posting of personnel to needed areas; for the creation of university extension centres, adult education centres and curriculum experiment centres.

SYMPOSIUM

These would advance materials and methods in such subjects as languages, mathematics, science, the social studies, language arts, and particularly in vocational education. Regional planning might bring better co-ordination of the size, scope and contribution of educational systems with already existing rural and urban growth centres, thereby strengthening these growth centres in a proper balance of industry, agriculture, and supporting infrastructures. A model for the educational part of such regional planning centres alrealy exists in UNESCO's regional centres around the world. But the idea could be improved upon if in southern Africa the richer and poorer countries could co-ordinate their efforts in balanced total planning for national gain and regional progress.

The fact is that once co-ordinated regional planning is begun, it would undoubtedly introduce national planning in those countries in the region without such programmes. It would also strengthen existing national planning programmes. Such a regional approach would be more likely to attract, and would probably more efficiently use, loans and aid from such international organizations as UNESCO, the United Nations Development Programmes fund and the World Bank. Also, certain population, education and other strategies lend themselves more readily to a regional approach.

Family planning

Of the two major forces behind rising school enrolments, one is the social and political demand for education and the other is population growth. It was estimated in 1970 that the percentage of total population under age 15 was 27% in developed countries and 41% in developing countries.. This heavier concentration of school age children in poorer countries illustrates the need for information on family planning. Such planning and information exists nationally in some southern African countries, but it would probably have greater impact, produce better research, and arouse more public attention if organized on a regional basis.

Easing alienation

Western education to some degree alienates the recipient from his traditional society. De-

velopment and the changes thus brought about alienate the schooled from the unschooled. What can be done to ease the shock of alienation? In school the problem might be reduced by including in the curriculum units on understanding cultural change and on appreciation for cultural heritage. For the out-of-school and the unschooled, mass media can revive pride in the people's culture in dance, song, legend, stories, and humour while community clubs as ethnic centres can offer direct participation in these activities. Such community culture centres may not only ease alienation but may also provide a bridge to modern industrial and urban life.

The unschooled and little schooled

Although universal primary education is the goal in the 1980s, there is still a long way to go in the current decade. The 50% or so of schoolage children in southern Africa, who never go to school or who drop out in the first few years before literacy takes root, comprise the bulk of the labour force. Put another way, in East Africa about 70% of new entrants into the work force have either no primary education or have never finished their primary education. The proportion is probably similar in southern Africa. Most of those will be in the labour force in the year 2000 as unskilled, illiterate subsistence farmers or as unskilled, underemployed urban dwellers. If anything is to be done for this unschooled and little schooled group, a variety of programmes will be needed: Literacy centres, training centres, on-the-job training, and special mass media programmes.

In addition, preschool enrichment for the culturally handicapped, community centre programmes, vocational programmes for dropouts, school-leaving equivalency tests for over age learners, easy entry to evening school for late bloomers, and a host of other extra-chance avenues will be needed for those hitherto cut off from such opportunity. The lifting of this large labouring group to more acceptable stages on the educational ladder is esential for national and regional economic and social progress.

1973/74

Master teachers

An effective and creative teaching force is both the archstone of national and regional progress and the bane of poorer countries. The field of education, and particularly that of teacher education, is still in a handicraft stage compared to the revolutions that have modernized industry, medicine, transportation and communication. Today's teacher is trained for vesterday's schools in vesterday's world and his professional growth is problematical, especially in the isolation of a village school, Education systems will hardly be modernized until teacher education is made more intellectual, more challenging, and more rewarding. One way is to add a Master Teacher Academy concept to existing teacher training schemes. The most talented teachers and administrators can be selected for high-level courses which will lead to career advancement at salaries comparable with those of other professions. Too long have too many poor teachers driven out the few good teachers. We need to reverse the process so that growing numbers of master teachers, trained, advanced, and paid as professionals, will take the place of poor teachers.

Conclusion

There is no simple solution, no easy way out of the dilemma, except through the whole cluster of parts that make up development planning — parts which include money, systems analysis, reform, co-operation, efficiency, enthusiasm, clearly defined goals, and determination to accomplish these goals. Development can be accelerated, but it requires local support, national planning, and regional co-ordination. The key may lie in **esprit de corps**, a spirit of pride, an overwhelming drive to pull oneself, one's country, and one's region out of the past and into modern times. In the last analysis it is concerned and dedicated people who must find ways to set in motion a people's determination to move forward in peace and dignity toward the common good.

The working document discussed at the October, 1967, Williamsburg, Virginia, conference was Philip H. Coombs, **The World Educational Crisis; A** systems Analysis (N.Y.: Oxford University Press, 1968), which has an excellent annotated guide for further study. Conference papers are in George Z. F. Bereday (ed.) Essays on World Education; The Crisis of Supply and Demand (N.Y.: Oxford University Press, 1969). Mr. Coombs directed UNESCO's International Institute for Educational Planning, Paris, whose growing list of studies, particularly on East and West Africa, are essential reading on the topic. The Virginia conference led in part to the UNESCO-sponsored International Education Year 1970, in which connection the following useful conference papers were issued:

Proceedings of the First World Congress of Comparative Education Societies on the Role and Rationale for Educational Aid to Developing Countries during International Education Year (Ottawa, Canada: World Council for Comparative Education, August, 1970).

Educational shortcomings in developing countries are discussed objectively in John W. Hanson and Cole S. Bremback (eds.), Education and the Development of Nations (N.Y.: Holt, Rinehart and Winston, 1966). The Addis Ababa and Nairobi UNESCO conferences are reviewed in context in Richard Greenough, Africa Prospect: Progress in Education (Paris: UNESCO, 1966).

For education's relation to economic growth, see Edward F. Denison, The Sources of Economic Growth in the United States and the Alternatives Before Us, Supplementary Paper No. 13 (N.Y.: Committee for Economic Development, 1962). Edward F. Denison and Jean-Pierre Poullier, Why Growth Rates Differ: Postwar Experience in Nine Western Countries (N.Y.: Brookings Institute, 1967) and Theodore W. Schultz, The Economic Value of Éducation (N.Y.: Columbia University Press, 1963).

Invaluable is Lester Pearson, et al., Partners in Development: Report of the Commission on International Development (N.Y.: Praeger Publishers, 1969), and Pearson's speech on his report before the Columbia University Conference on International Development, February 1970, in CERES (FAO Review), III No. 2 (March-April, 1970), pp. 21-25. See also the World Bank's Education Sector Working Paper (N.Y.: World Bank, September, 1971).

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