REPORT OF THE INTERNATIONAL COMMISSION

ON THE

DEVELOPMENT OF EDUCATION

A REVIEW AND COMMENTARY

Office of Education and Human Resources
Bureau for Technical Assistance
Agency for International Development

Washington, D.C. 20523

November 1972

November 7, 1972

MEMORANDUM FOR THE ADMINISTRATOR'S ADVISORY COUNCIL

SUBJECT: Review of the Report of the International Commission on the Development of Education (Faure Commission)

Attached is a paper on the above report, prepared by the Office of Education and Human Resources, Technical Assistance Bureau, for consideration of the Administrator's Advisory Council at its meeting on November 15, 1972. This paper consists of three parts:

Commentary by the Office of Education and Human Resources

Annex A - Origin, Membership, Procedure and Terms of Reference of the Commission

Annex B - Abstract of the Report

In preparing this paper, O/EHR has consulted the Regional Bureaus and PPC and has taken their comments into account. However, it is not put forward as a consensus of Agency reaction to the Faure Commission report, or to its implications for A.I.D.

The purpose of the paper is two-fold: (1) to extract from the Commission Report its main facts, conclusions and recommendations, and (2) to indicate some of the issues it poses for A.I.D.

The AAC discussion will be in the nature of a seminar on the report and the issues it raises. No policy or program decisions are expected. However, discussion of this paper by the AAC will be valuable guidance in the preparation of the Sector Statement on Education that we hope to place before the AAC in December.

Joel Bernstein
Assistant Administrator
Bureau for Technical Assistance

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on the

DEVELOPMENT OF EDUCATION

Commentary

by the

OFFICE OF EDUCATION AND HUMAN RESOURCES
Bureau for Technical Assistance

Introduction

This commentary is the first of three documents through which the Agency will undertake to analyze, appraise and, as appropriate, modify its policies and investments in education in the developing countries. (1) Commentary on the Faure Commission Report (November), (2) Sector Statement on Education (December), and (3) Report to the Senate Committee on Appropriations, as required in its Report of September 27, 1972 (January).

This initial document is designed (1) to identify the main theses of the Faure Commission Report, facts adduced, conclusions reached and recommendations submitted, and (2) to comment on these as they relate to educational development, and to AID policies and programs.

The Sector Statement will be a detailed statement of the Agency's program in education, highlighting its principal characteristics and achievements during the past decade, analyzing its present components, and recommending directions and emphases for the next 3-5 years. Guidance for the Sector Statement will be derived, in part, from discussion

of the Faure Commission Report by the Administrator's Advisory Council.

The report to the Senate Committee on Appropriations will be derived, in part, from the Sector Statement, and presented in the form determined by the Administrator.

COMMENTS BY O/EHR STAFF

Some General Observations

A careful reading of the Faure Commission Report calls to mind the observation of John Stuart Mill that "education is one of those subjects which essentially require to be considered by various minds and from a variety of points of view. For, of all many-sided subjects, it is the one which has the greatest number of sides."

In education, more than in most human enterprises, every thesis has its antithesis, every assertion its rebuttal, every reality its multiple facets, every initiative a host of constraints.

The Faure Commission recognizes all this but undertakes, nevertheless, to make a bold and imaginative statement of what education has been, is and must be if it is to serve effectively the needs of man in the future.

The only substitute for reading the report is a massive presumption on the part of a commentator. As an intellectual and literary contribution in the field of education, it amply justifies reading in its entirety.

Its basic argument is that unless there are different concepts and definitions of education, implemented through very significant changes in allocation of resources and new methodologies, to reach a much larger proportion of the developing world's population, the educational enterprise is foredoomed to failure. By "failure," the Commission means not only will the developing countries fall farthe and farther behind the developed countries, but that they will fall farther and farther behind in meeting their own national needs. Experience of the past two decades suggests that this is a valid argument.

In early reactions to the report, several countries have observed that it contains "nothing new". We believe it contains a good deal that is new to many educational leaders, and to most political leaders concerned with education. However, the Commission in no way derogates what these leaders know; it addresses itself rather to what it believes they should do. Surely one of the most glaring inconsistencies about education, worldwide, is between what is known about it and what is done about it.

Another observation is that it postulates a mode and range of education which is wholly out of reach of the developing countries, even if deemed desirable. For development leaders, this is a valid criticism. The attempt to deal with educational development problems or strategies on a world scale befogs the issue. Education has broad commonalities worldwide, but strategies must be, in large part, country, culture, objective and resource specific.

On the other hand, careful study of the report somewhat diminishes this criticism. In the first place, the Commission spoke not in fiscal year, or even in five year terms; it addresses itself to generational aims, concepts and directions, beginning now.

For those seeking new, long-term philosophical and policy directions in education, this is a valuable and thought-provoking report. It should open minds a little wider, make innovation in education more respectable, and show clearly that such departures are an imperative for the developing countries.

In terms of new "strategies of education" the report's value lies more in its fundamental analyses and conclusions than in delineating strategies. It does not attempt to give explicit or prescriptive guidance out of educational dilemmas, for either developing countries or development assistance agencies.

Perhaps most important of all, it is an extensive, coherent position paper which is commanding the attention of all developing countries and all development assistance agencies. UNESCO has already begun a series of national and regional seminars for analytical examination of the report as it may apply to particular countries or groups of countries. Such an examination can hardly fail to have a beneficial effect on the thinking of educational leaders, no matter the extent to which they consider its propositions and recommendations immediately acceptable or feasible.

Therefore, A.I.D. should take specific action (1) to acquaint all USAIDs with the report and the views of AID/W with regard to it;

(2) to encourage them to discuss its implications with appropriate educational leaders, and to inform AID/W of its present or prospective effect on educational planning and action in each country, and (3) to participate as appropriate in UNESCO's national and regional seminars for study of the report.

Membership and General Terms of References

It can be, and indeed has been, argued in the brief time since the report was published that it was the wrong kind of Commission, with the wrong terms of reference, and, therefore the wrong kind of report. Whether this is true or not, it is beside the point.

The Commission was formed of seven eminent men, each of a different educational cultural and political background; it was given the terms of reference cited; and it has rendered its report.

This report is receiving serious study in more countries than perhaps any other document on education issued by UNESCO since its inception. It will, in some degree, affect the thinking, and possibly behavior, of educational leaders in every developing country, in many developed countries, and in development assistance agencies. It may affect most of all the thinking of young men and women who are on the verge of becoming educational leaders.

It is therefore important that those concerned with education, in both developing countries and in development assistance agencies, take the trouble to understand this report, whether they agree with it in whole, in part, or not at all.

The approach of A.I.D. to the report should be to identify and emphasize its positive values rather than its defects.

I. General Premises

Throughout the report, the concepts of life-long education and the learning society are dominant themes. We believe these concepts are fundamentally correct, and, as elaborated by the Commission, can be substantially equated with the "quality of life" concept.

A.I.D. has always been peripherally concerned with these concepts, but has only recently stated them explicitly as central to our philosophy and objectives. Even so, the implications of the Commission's concept requires some translation to bear directly upon our primary objectives in development.

In the context of the report, life-long learning could be read as a seminar in medieval history at the Sorbonne, a course in accounting at the British Open University, or a night class in oil painting in the United States.

Valuable as these may be, for the developing countries, even more creative learning can be built purposefully around life-skills in more productive agriculture, health, nutrition, family planning, community cooperation, learning of modern sector skills and urban adjustment.

Thus far, we have tended to view both technical and capital assistance primarily as a direct thrust at these problems, with its learning component somewhat assumed or ancillary to the technology applied to solution of the problems.

In the future, we should consciously consider the learning component as a primary objective in every assistance activity, and structure our projects so that it is built into every project, in every development sector.

The Commission emphasizes that education suffers basically from the gap between its content and the living experience of its pupils; between its ancient curricula and the concrete goals of society.

Much of our investment in education in the past has resulted, whether we intended it or not, in shoring up and continuing archaic and largely irrelevant systems of education. Even now, the Agency and developing countries tend to make only marginal investments in educational innovation more consonant with the aims and means for producing education closely related to life.

This has been largely the case with all development assistance agencies, forced in some measure by the proclivities of developing countries for ever-increasing investments in outmoded education systems.

A.I.D. should commit itself, in both policy and program terms, to a significant shift from support of traditional education to a greater emphasis on educational innovation, in subject matter, methodology and learning clienteles and on evaluation of the results of such innovation.

Such a commitment could have several effects: (1) result in more innovative education projects at costs not necessarily greater than we incur now (2) stimulate LDC leaders to think more imaginatively about new subject matter and methodology because of prospects of AID support, and (3) influence other development assistance agencies to make similar commitments, thus multiplying the funds available for "a renewal of education".

II. On Educational Technology

The Commission felt that new educational technologies, while valuable for developed countries, "for the developing countries they would appear to be the basic pre-condition for dealing with the entire problem....for most of them....the firm introduction of innovations in this area is the only way they can hope to advance toward a satisfactory solution within a reasonable period of time." In this connection, it notes that educational technology, to be meaningful and effective, must be integrated with the total education system, the goals and modes of the whole educational process.

The Commission believes that research and the present rate of progress in educational technology makes this possible.

This is a statement of faith not yet fully supported by evidence. Nevertheless, it is a faith which is being more justified each year; and equally important, it is one to which there are no discernable alternatives. It was for these reasons, TAB in 1970 selected educational technology as a Key Problem Area.

From the beginning of the foreign aid program, AID (and its predecessors) have given lip-service and limited support to communications technology as a tool of development. However, within the past decade, two important new elements have entered the picture (1) evidence continues to mount that traditional, even marginally improved and expanded, schooling is no acceptable solution to the LDC education problem and (2) new communications and instructional technology systems have entered a period of extraordinary growth and development.

In 1969, the Congress enacted Section 220 of the Foreign Assistance Act, directing AID to foster and support development through use of the new communications technology. We have done this, but only in a spotty and marginal way.

In the past seven years, the Agency has invested some $800 million in education, more than that in agriculture, and significant amounts in population, health, nutrition and other development sectors. During that same period, we have invested a cumulative total of only $23.6 million in communications technology for development. The preponderance of this was in education--$19.5 million. The remainder was in population programs, with no identifiable expenditures in agriculture, health, nutrition, industrial development or urbanization.

The record is somewhat better than these figures indicate, for the LDCs themselves have made some use of communications technology in all these sectors, based upon knowledge which we have provided, or assisted them in developing. Moreover, only recently has the U.S.

(or any other nation) undertaken to prepare people for effective activity in communications technology for development--to create the technical and management skills, software and integrated delivery systems to make it practicable. Our two 211(d) grants for this purpose (to Florida State University and the East-West Center) were made less than two years ago. Only one research grant has been ($239,593), for investigation of the potential of low-cost instructional technologies.

The TAB envisages a significant step-up in research, development and experimentation with educational technology during FY 1973-74. However, this can bear fruit only if the Agency as a whole makes a firm commitment, in both policy and program terms, to more purposeful support of communications technology for development in every sector.

We are now working on a strategy in this area, which will be incorporated into the Education Sector Statement to be placed before the AAC in December.

III. On Educational Finance and Resources

The Commission paints a graphic picture of the disparity between educational resources in the developed countries and the LDCs. "With only one quarter of the young people in the world, industrialized countries spent ten times more money on education than the developing countries," ($120 billion against $12 billion). And this disparity is increasing.

Even so, half the children in most of the LDCs leave school before they acquire lasting literacy, but absorb between 20 and 40 per cent of the total State education budget.

Although the Commission makes a case for increased expenditures (and foreign aid) for education, it does not fall into the trap of advocating linear expansion of education or education budgets. It calls attention to the exorbitant costs of building "prestige" schools and states that "developing countries would be better advised to focus most of their attention on the non-material aspects of schooling". It also emphasizes that "increasing financial resources, however necessary, is not the only possible solution. A no less effective expedient may be to make more judicious budgetary choices and to apportion effort and means in more productive fashion, in particular by innovations in the use of supplementary resources allocated to education". (p. 12)

The following table provides a quick summary of AID's assistance in education and manpower training for fiscal years 1971-72-73. (Figures for the International Development Association, Inter-American Development Bank and the Asian Development Bank show very comparable percentages of their loans for education, heavily oriented toward buildings and equipment.)

The figures for AID, including expenditures for the Public Safety Program, are of the order of $109 million annually for the three years.

We are not in position to comment on the magnitude of AID's investment in education at this time. Our concern focuses more directly upon the Commission's observations about better budgetary allocations and emphasis upon innovations designed to produce more

U.S. bilateral foreign assistance for education and manpower training

[Millions]

Region and Category	FY 1971				FY 1972				FY 1973			
	Total Loans	Educ. %	Total Grants	Educ. %	Total Loans	Educ. %	Total Grants	Educ. %	Total Loans	Educ. %	Total Grants	Educ. %
Asia	$372	2%	$44	35%	$296	1%	$36	34%	$465	0%	$38	34%
Africa	92	4%	58	30%	93	0%	55	35%	100	0%	63	32%
Latin America	233	16%	81	44%	233	14%	79	42%	295	14%	80	42%
Nonregional and other			84		2		90				90	
Total	[1] 697	7%	267	25%	624	6%	260	25%	860	5%	271	24%

[1] Total and regional figures exclude population funds from development loans. The table is compiled from the AID FY 1973 Congressional Presentation, using regional program summaries for the category of "education and manpower training."

and better education for the money spent on it.

In 1970, TAB selected as one of its three key problem areas in education that of education finance and measurement of inputs, efficiency and outputs. This is a thorny area and one about which we have relatively little knowledge and only primitive instruments of measurement. For these reasons, many people in the Agency regarded it as a poor choice.

Nevertheless, it is obviously of such crucial importance to more intelligent and productive use of educational resources, it was retained. During the past eighteen months, Harvard University, through a contract with AID, has been exploring the various aspects and dimensions of the problem, and developing a research "map" for investigation of educational finance and measurement. This work is to be completed by mid-1973.

At present, we are considering a 211(d) grant in this area to the University of California at Berkeley. This institution probably has the best talent in the U.S. in this problem area, and would build on the significant work now being completed by Harvard.

A.I.D. should (1) approve the proposed grant in educational finance and measurement, (2) encourage USAIDs to bring this problem area to the particular attention of LDC educational leaders, and (3) provide funds and technical support to those LDC institutions which show interest and potential competence in investigating it.

IV. On Non-Formal Education

Non-formal education was also selected by TAD in 1970 as a key problem area in education. The Commission states the case cogently: "Spending on education continues to be concentrated in the institutionalized forms of teaching, reserved for children and adolescents attending schools...this unilateral method of financing needs is fundamentally unjust. For hundreds of millions of illiterate people in the world, school can no longer be of help. In the developing countries, nearly half the children of primary school age today are condemned, no matter what happens, to grow up without ever attending a class".

The Commission sees, as we do, an enormous potential for life-long, out-of-school education through much wider and more effective use of communications technology.

AID was among the first of the development assistance agencies to identify non-formal education as a primary objective for educational development. Now the development banks, UNESCO, UNDP and other agencies have officially espoused it. The IBRD and UNICEF have contracted with the International Council for Educational Development for a wide range of case studies as a guide to investments in this field.

AID has a major contract with Michigan State University for nine studies dealing with various aspects of non-formal education. The Regional Bureaus have given support to seminars and studies of the problem. Developing countries have expressed keen interest and intentions to act. However, to date, non-formal education, as a major, purposeful contribution to development, remains largely a doctrine without a product.

Field support resources in this area are now being rapidly mobilized. AID/W should give explicit encouragement, technical and financial support

to USAIDs and LDCs in designing and launching significant efforts in non-formal education in FY 1973-74.

V. On Employment

The Commission notes, but does not deal extensively with the issue of education as related to employment. It points out the generally poor fit of education with employment opportunities in the LDCs. It observes that "the aim of education in relation to employment and economic progress should be not so much to prepare young people and adults for a specific life-time vocation, as to "optimize mobility among the professions and afford a permanent stimulus to learn and train oneself." For the great majority of people in the LDCs, this is a stilted and impracticable concept.

More relevant is that unemployment in many of the LDCs is now of substantial magnitude and, in some, increasing; and that between 1970 and 1980, 268 million additional people will enter the labor market. Failure to deal adequately with this problem could be the rock on which development, as we have conceived it, could founder.

Regardless of what is done about education, the levels of economic employment, as defined in the industrialized countries, are literally inconceivable in most of the LDCs. Furthermore, it may not even be desirable.

It would seem necessary and feasible to define employment in different terms for the LDCs (as it is now being implicitly redefined in the developed countries) as a useful role or function in society, economic, partially economic or non-economic. The paramount role of economic employment is, of course, as a mechanism for distribution of income. But far more than is generally acknowledged, employment enables people to participate in society, to be useful, feel significant, become human beings instead of

ciphers. There is a vast potential for this concept of employment which is only partially economic or non-economic in any direct sense. Education properly conceived and conducted, can play an immense role in all these areas.

With the leadership of the World Bank, nearly all development assistance agencies are giving serious attention to employment, and to the relationship between it and education. AID should play an important role in this effort. But it should also give serious attention to different concepts and definitions of employment (function in society), human resources, and their utilization to achieve the multiple objectives of development. Doing so will provide important insights into the nature of and priorities in the educational enterprise.

VI. On Policy, Strategy, Planning

In this section, the Commission suggests excellent principles and a useful rubric for considering educational policy, strategy and planning. However, these are highly abstract and deficient in specificity and examples.

A practical approach to all these is inherent in sector analysis and strategy. We are now undertaking work (as are several other agencies) in this area at several levels. The USAIDs have been instructed to prepare sector analyses as part of their FY 1974 program submissions. TAB has established a Task Force to provide leadership in the methodology of sector analysis for its several sector offices. The Office of Education and Human Resources has commissioned outside consultants to develop definitions, concepts, approaches and methodology for sector analysis in education. A few of the LDCs have made significant progress in this field, notably Colombia, Panama, Ethiopia and Korea.

By January 1973, we expect to have completed a "primer" on sector analysis methodology in education for use of the field missions. Work on upgrading this primer and on application of both qualitative and quantitative methods will continue on a priority basis, with LDCs encouraged and assisted as primary participants.

However, since the concept of sector analysis was enunciated as an AID policy and basic program activity, it has received little central leadership and support. AID should direct more specific and concrete effort in sector analysis, in concert with other development assistance agencies, as an increasingly useful guide to development policy, strategy and planning in all development sectors, including education.

VII. On Educational Reform

The Commission makes the central point that "it is no longer desirable to undertake educational reforms in piecemeal fashions, without a concept of the totality of the goals and modes of the educational process. To find out how to reshape its components parts, one must have a vision of the whole". This is to state, in a somewhat different way, the observations it made with regard to policy, strategy and planning. And again, the abstract concepts may be given meaning and specificity by competent sector analysis.

One of the lessons we have learned from application of educational technology is that unless total educational reform is undertaken - in materials, equipment, teaching - learning, objectives and environment - the technology is cost-additive and ineffective.

Consequently, AID should encourage and support efforts at overall educational reform(rather than pieces of it such as curriculum, teacher training and purchase of equipment) based upon analysis and diagnosis of education needs and problems in a particular country.

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VIII. Recommendations

(NOTE: Twenty-one recommendations are explicitly labeled "recommendations". They are, for the most part, of a very general nature, and there are other recommendations scattered throughout the report. Moreover, they are little more than summarizations of points made in preceding sections, and our comments will be primarily directed at them as a group. See pp. 20-24, Report of the Commission, Annex B)

In general, we are in agreement with all the recommendations made in this section. Some of them are put forward as basic propositions, (e.g. lifelong education as the master concept) others as general admonitions, (e.g. each person should be able to choose his (educational) path more freely).

All are relevant in some degree to the developing countries, and several, which have not previously been mentioned, are of specific interest to AID.

One is that "Efforts must be made to bridge the gap, still found in all too many cases, between educational establishments and business, whether privately or publicly owned, for the latter constitute a key element in the overall education system. Their role should not be limited to training workers, but extended so far as possible to training technicians and researchers".

Recognition of employment as a valuable learning environment has steadily mounted as a result of valid research and experimentation, in this country and others, including some of the LDCs. Yet the employer and the employment environment as a learning resource, is frequently unrecognized, seldom, and never fully, exploited.

AID should encourage direct action in this field through the International Executive Service Corps and through conducting case studies and research.

One other observation relates to universities and is worth noting because of the almost complete absence of reference to higher education in

the Commission's report. "Universities should be turned into multi-purpose establishments open to adults and young people, and designed as much for continual training and periodic upgrading as for specialization and research".

While we do not take issue with this recommendation, it seems to seriously understate the potential role of higher education in the whole field of national development. Having invested roughly a billion dollars in development of higher education in the LDCs, AID should encourage and support long-term relationships between U.S. and LDC universities to assist them in mutual efforts to play a wider and more effective role in national development, including education at non-university levels.

IX. Co-operation and Exchange of Experience

The Commission envisages the need for a substantial increase in interaction between LDCs and between LDCs and developed countries, on basic policy issues of the first magnitude. It particularly stresses the importance of a better and quicker diffusion of information on innovative experiments in education and the results of significant research.

We are, of course, in agreement with this.

A particularly interesting, and, we believe, important observation is that, "Experts should be better, fewer, self-displacing, should live closer to their colleagues and to local populations, and more of them should come from countries where socio-economic conditions are similar to those being visited."

Finally, the Commission expressed the hope that UNESCO would "commit itself in favour of innovation in education ...and push its theoretical, research and practical activity in that direction".

UNESCO has, in the past, shown little disposition or capability to espouse educational innovation in a major way. However, in the past year or two, it has developed a growing capability in the field of educational technology, and has shown increased interest in non-formal education and educational finance and measurement.

To enhance and accelerate the diffusion of information on innovations in education, AID should (1) actively propagate linkages with all institutions engaged in such activities, (2) help create and participate in information net works, and (3) establish closer ties and colloborative efforts with other bilateral and multi-lateral assistance agencies.

The matter of the kinds, quality, and behavior of "experts" in LDCs will increasingly emerge as AID relys more on intermediary institutions and the LDCs achieve professional parity with U.S. scholars. AID should therefore conduct a careful study of the arrangements, and perquisites provided individuals working with LDC educational institutions to assure that they do, in fact, live closer to their colleagues and to local populations.

With regard to UNESCO, the U.S. has been and is the largest single contributor to its budget, both directly and through UNDP allocations. However, it would appear that our voice in UNESCO councils is not sufficiently heard, and that, indeed, we have not sufficiently exerted ourselves to make it heard.

AID should participate more actively through its staff and through established channels to influence UNESCO to respond to the Commissions' recommendation for it to take a more innovative role in education.

X. Sources and Modes of Assistance

This last section of the Commission report is a collection of some seventeen observations and hopes, which are, in effect recommendations. They may be grouped roughly under: (1) sources and conditions of aid to education, (2) major purposes of aid, and (3) new organizational arrangements.

Taken in that order, the net of the first group is: aid to education can and must be increased; bi-lateral aid should be continued, but increased amounts of aid should flow through multilateral agencies; various types of aid should be coordinated; aid should be more equitably distributed; tied aid should be gradually dropped, in the sense that LDCs could buy goods and services from other LDCs; aid loans for education should be on a more concessional basis; donor countries should, by 1975, attempt to reach the UN target of 1% of their GNP (as the only prospect of more aid to education); and include an educational component in every development package.

As we see it, there is merit in a number of these suggestions. However, any conclusion regarding such merit (or lack of it) can be reached only by more study than has been possible since publication of the report. Therefore, it is suggested that AID establish a small working group to consider these matters and make recommendations with respect to those on which Agency policy may be reconsidered.

With regard to major purposes of aid, the report suggests: requiring all foreign investors, public or private, to train nationals employed on

development projects; giving priority to a new type of project to help countries make an overall diagnosis of education, draw up a list of objectives and identify entry-points to produce the most effective systems, content and methods; concentrating more on the creation and financing of institutions capable of implementing alternative strategies and establishing the infrastructure for continuous educational reform; donors defraying the operational costs of new methods and programs as well as start-up costs of new instructional technologies; financing a larger number of experimental projects; and review the present state of research and development in education with a view to strengthening the capacities of LDCs to improve their educational systems, and to invent, design and test new educational experiments appropriate to their cultures and resources.

All these suggestions, although beyond the means or control of AID (or any other assistance agency) make eminently good sense. Of the present expenditures on education in the LDCs, the external aid of all donors amounts to only roughly 10% of the total. Of this 10%, only about 10% is contributed by AID. In other words, AID contributes approximately 1% of public expenditures on education in the LDCs.

It is obvious on the face of it that external aid can have no significant effect on educational development except as it can contribute to new knowledge, new methodology and new institutional arrangements whereby the LDCs can make far more efficient use of the 90% which they themselves invest in education.

A recent, preliminary study of AID FY 1972 obligations indicates that AID invested $1.25 million in educational research and experimental development. Another $10.7 million could be ascribed to "institution building" for research, development and experimentation. This amounts to roughly 11% of AID obligations for education in FY 1972.

Obviously, some of our obligations were to meet commitments made in previous years, and these will, in some degree continue. However, AID should gradually shift its support for education from its present pattern to a much heavier emphasis on research, development and experimentation on innovative modes of education. For FY 1974 a reasonable target might be an increase from 11% to 25%, with increments each year until we reach a minimum of 50% of our annual obligations for education.

The final recommendation made by the Commission was the setting up of an International Program for Educational Innovations, "attached to Unesco and placed under the control of a representative international body -- a program designed to help countries take a decisive step towards a renewal of their education systems."

The Commission was split on this recommendation; the Director-General expressed the view that it was unnecessary to set up a new entity and program, that Unesco could, with additional funds, achieve the Commission's objective.

The wording of the recommendation is such that the real concept and intent of the Commission are extremely obscure.

AID should seek clarification of the meaning of this recommendation and discuss it with other assistance agencies. In the meantime, AID should withhold judgment with regard to it.

ANNEX A

INTERNATIONAL COMMISSION

on the

DEVELOPMENT OF EDUCATION

Origin, Membership and Procedure of the Commission

At its 1970 meeting the General Conference of Unesco adopted a resolution which said, in part: "The Director-General is authorized to prepare and present to Member States the necessary elements for reflection on educational strategies at the international level: ... (b) by establishing an International Commission on the Development of Education, publishing its report, presenting it with his comments to Member States, the Executive Board, the International Conference on Education and the General Conference (of Unesco), and taking it into consideration in formulating Unesco's future programmes in the field of education."

The members of the Commission were:

Edgar Faure (France), Chairman, former Prime Minister and Minister of Education, former Professor of Law and Politics.

Professor Felipe Herrera (Chile), University of Chile, former President of the Inter-American Development Bank, Professor of Economics, University of Santiago.

Professor Abdul-Razzak Kaddoura (Syria), Professor of Nuclear Physics at the University of Damascus.

Henri Lopes (People's Republic of the Congo), Minister of Froeign Affairs, former Minister of Education.

Professor Arthur V. Petrovsky (U.S.S.R.), Member of the Academy of Pedagogical Sciences of the U.S.S.R.

Majid Rahnema (Iran), former Minister of Higher Education and Sciences.

Frederick Champion Ward (United States of America), Adviser on International Education, The Ford Foundation.

The Commission was provided, by Unesco, with a Secretariat. Between March 1971 and April 1972, the Commission met six times to consider documentation assembled by the Secretariat, including 75 original studies by specialists in different aspects of education.

Members of the Commission visited 24 countries to learn the views of educational and political leaders. It organized seminars in the various regions and consulted senior officials of the various institutions and organizations in the United Nations system.

The report is designed to be a synthesis of the best thought derived from these activities. However, most of the 75 papers prepared for the Commission will be published separately at a later date.

General Terms of Reference

It is essential at the outset to understand clearly what the Commision was asked to do. Many of the criticisms of the report which have arisen appear to overlook the General Terms of Reference given to the Commission.

Seven eminent educators, from as many countries, were enjoined: (1) "...to produce a report to assist governments to formulate national strategies for the development of education," (2) "...that the term education should be taken in its broadest connotation of a coherent and a deliberate action aimed at the transmission of knowledge, the development of attitudes, and the training and betterment of man in all respects and throughout his life," (3) "...the Commission will be called upon to define the new aims to be assigned to education as a result of the rapid

changes in knowledge and in societies, the demands of development, the aspirations of the individual, and the over-riding need for international understanding and peace, "(4) "...to study the means of ensuring an optimum contribution to educational development in the developing countries, through a typology based on certain regional or national features," and (5) "...to formulate recommendations for international cooperation viewed from its two-fold aspect of intellectual cooperation, on the one hand, and of investments, financial aid and provision of services and equipment on the other."

A further directive to the Commission was to deal with education in both highly developed and under-developed countries.

ANNEX B

REPORT OF

THE INTERNATIONAL COMMISSION ON THE DEVELOPMENT OF EDUCATION

An Abstract by the Office of Education and Human Resources

(Section headings have been supplied by EHR Staff. Text of this Annex is a verbatim extract from and closely follows organization of the Commission Report).

I. GENERAL PREMISES

"The Commission laid stress above all on two fundamental ideas: lifelong education and the learning society. Since studies can no longer constitute a definitive 'whole', handed out to and received by a student before he embarks on adult life, whatever the level of his intellectual equipment and the age at which he does so, educational systems must be thought out afresh, in their entirety, as must our very conception of them. If all that has to be learned must be continually re-invented and renewed, then teaching becomes education and, more and more, learning. If learning involves all of one's life, in the sense of both time-span and diversity, and all of society, including its social and economic as well as its educational resources, then we must go even further than the necessary overhaul of 'education systems' until we reach the stage of a learning society. For these are the true proportions of the challenge education will be facing in the future. It is by no means certain that conservatism of a cultural nature will be easier to overcome than economic or political resistance. But once in

a position to measure the stakes against the price, how can we refuse to fight the fight? And the weapons we need for that fight are available.

The physical, intellectual, emotional and ethical integration of the individual into a complete man is a broad definition of the fundamental aim for education.

Education has a far richer past than the relative uniformity of its present structures might lead one to think. The Amerindian civilizations, African cultures, Asian philosophies and many other traditions are imbued with values which could become a source of inspiration not only for educational systems in the countries which have inherited them, but for universal educational thought as well. There can be little doubt that many eminently valuable possessions have been lost--in some cases even before the colonial era, through internal decline--or were destroyed or distorted through external action, especially through colonialism. It is relevant to note, however, that many nations which have undergone foreign rule--including some of those now most resolutely affirming their independence--have proudly taken over, particularly in education, the best part of the intellectual disciplines and so-called classical culture acquired in harder times.

Second, outmoded dogma and custom weigh heavily on education and, in many ways, the older nations suffer no less from anachronisms in their educational systems than the young States which inherited them in the form of imported models.

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Another no less important fact for the future, of a sociological order, is that for the first time in history, education is now engaged in preparing men for a type of society which does not yet exist.

Strong support must be given to democracy, as the only way for man to avoid becoming enslaved to machines, and the only condition compatible with the dignity which the intellectual achievements of the human race require; the concept of democracy itself must be developed, for it can no longer be limited to a minimum of juridical guarantees protecting citizens from the arbitrary exercise of power in a subsistence society; furthermore, and in conjunction with this, more support must also be given to educational requirements, for there cannot--or will not--be a democratic and egalitarian relationship between classes divided by excessive inequality in education; and the aim and content of education must be re-created, to allow both for the new features of society and the new features of democracy.

The commission stressed the fact that education must be regarded as a domain where political action is of especially decisive importance.

The commission suggested that any neo-Malthusian trend and any attempt to slow down educational development be excluded from educational policies and strategies, on cultural, political and economic grounds. The aim of education is to enable man to be himself, to 'become himself'. And the aim of education in relation to employment and economic progress should be not so much to prepare young people and adults for a specific life-time vocation, as to 'optimize' mobility among the professions and

afford a permanent stimulus to the desire to learn and to train oneself. In brief, without abandoning the expansion of education, its objectives, methods and structures should be thoroughly reappraised.

Education suffers basically from the gap between its content and the living experience of its pupils, between the systems of values that it preaches and the goals set up by society, between its ancient curricula and the modernity of science. Link education to life, associate it with concrete goals, establish a close relationship between society and economy, invent or rediscover an education system that fits its surroundings--surely this is where the solution must be sought.

The school of the future must make the object of education the subject of his own education. The man submitting to education must become the man educating himself; education of others must become the education of oneself. This fundamental change in the individual's relationship to himself is the most difficult problem facing education for the future decades of scientific and technical revolution.

It is far more necessary today than in the past for reforms in education to have social and economic development objectives.

Moreover, it is hard to conceive of society developing without a renewal in education. This is valid for all societies, of whatever type, whatever their predominant doctrine and however they envisage their future--whether reformist or revolutionary.

There is a close correlation--simultaneous and delayed--between changes in the socio-economic environment and the structures and forms of action of education, which we believe makes a functional contribution

to historical movements. Moreover, it seems to us that through the knowledge it provides of the environment in which it operates education may help society to become aware of its problems and, provided the efforts are centred on training 'complete men' who will consciously see their individual and collective emancipation, it may greatly contribute to changing and humanizing societies.

II. On Educational Technology

"The malfunction of much educational practice makes renovation in education necessary. Changes in socio-economic structures and the scientific and technological revolution make it imperative. Scientific research and technological progress related to education, combined with growing awareness among the peoples of the world, make it possible.

Today, it is no longer desirable to undertake educational reforms in piecemeal fashion, without a concept of the totality of the goals and modes of the educational process. To find out how to reshape its component parts, one must have a vision of the whole.

Today, whether reforms are partial or more general, we cannot dismiss the need to conceive of both one and the other in relation to the over-all situation, and to envisage their consequences.

The reasons for this are that the effects of education are ranging further and further and that we now have the necessary tools to make short- and medium-term forecasting a very different thing from intuitive speculation.

We therefore no longer have the right either to improvise or to limit ourselves to narrow pragmatism.

This does not mean we should dare nothing, fail to grasp new possibilities or commit ourselves to tomorrow. It means on the contrary that we must think clearly in exploring new paths for the future. When developing and reforming educational institutions and methods, we must not overlook the means and techniques in the present-day world which not only enable us to improve existing modes, institutions and systems, but also to find fresh alternatives to them. This search for practical alternatives as part of a genuine strategy of innovation seems to us to be one of the primary tasks of any educational undertaking.

It is necessary, even indispensable for all countries, whatever th eir level of development, to use educational technology and technological principles on a large scale, or in other words, to use post-machine-age intellectual technologies.

These technologies are therefore a very valuable asset for developed countries; but for the developing countries they would appear to be the basic pre-condition for dealing with the entire problem. So far as developing countries are concerned, or most of them, at least, the firm introduction of innovations in this area is the only way they can hope to advance towards a satisfactory solution within a reasonable period of time.

Whether we have in mind merely the improvement of existing systems or the development of new learning strategies, scientific or technological developments can only exert an over-all influence on the current orientation of educational systems if:

1. Interdisciplinary contacts are systematically organized between the various researchers in the 'education sciences'.
2. Educational development institutions enable new findings to move from the laboratory or pilot project stage to large-scale utilization, taking into account the requisite strategical and logistical problems.
3. Efficient networks disseminate information to educational workers, and above all through institutes which train educators of all kinds and at all levels.

For technological innovation to be meaningful and effective, the implications of its use must be considered in relation to the total education system.

We consider that it would be useful, at the same time as advanced technology is developed, to use simplified technologies, adapted to a country's particular needs and possibilities. We would encourage use of new technologies which do not require massive investment, and intermediate

technologies able to help the regeneration of education in developing countries. We should not delay moving ahead while waiting for new principles to be deduced from advanced educational technology, the significance of which is far greater than that of mere techniques.

To the extent that it enables us to orchestrate many agents into a unified process leading to the greatest possible efficiency, systems analysis would appear to be an intellectual instrument which may be applied to an over-all critical study of existing educational systems and is likely to suggest new scientifically calculated pedagogic patterns."

III. On Educational Finance and Resources

"In 1968, the developed nations' expenditure on education rose to more than $120,000 million, and that of developing countries to less than $12,000 million. With about one-third the population and only one-quarter of the young people in the world, industrialized countries spent ten times more money on education than the developing countries.

The most serious aspect of this enormous difference is that it is growing larger. From 1960 to 1968, industrialized nations' educational expenditure increased from 3.52 per cent to 4.80 per cent of their gross national product, which in turn,,during the same period, increased by 78 per cent. Developing countries' educational expenditure also took up a larger percentage of their GNP (at a slower rate of increase, however, the figure rising from 2.73 to 3.91 per cent), but their over-all revenue itself increased only by 62 per cent. The consequence is that industrialized regions' educational spending increased by 145 per cent and that of developing countries by only 130 per cent.

In other words, there is an absolute increase in educational expenditure in the developing countries, but they are allocating a

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decreasing percentage of world-wide expenditure in this area. (The figure in 1960 was 9 per cent; in 1968, 8.6 per cent.)

This means that large-scale efforts, financial sacrifices and considerable results--in the education race as in the march to economic progress--have all failed to prevent the continued widening of the gap between industrialized and developing countries.

However, the quantitative facts are ambiguous. Statistics disclose a dual picture. One shows the constant increase in the demand for knowledge and in the number of those who want (or who ought) to go to school, together with the unprecedented expansion of educational activities in recent decades. The other depicts the many dead ends to which this expansion appears to be leading, and the flagrant inequality in the geographical and social distribution of available educational resources.

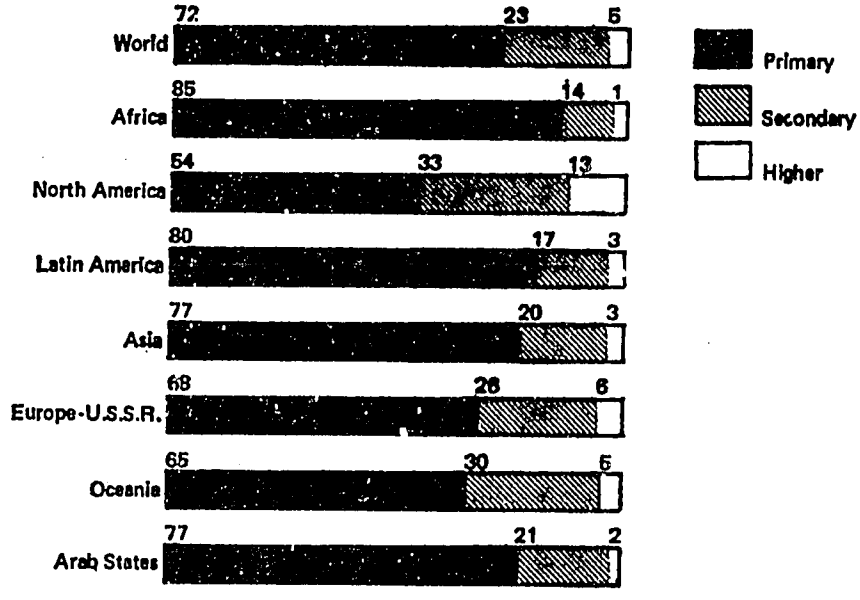
Two facts suffice to indicate the dimensions of this subject:

1. During the first United Nations Development Decade, from 1960 to 1968, the world's population increased from just under 3,000 million to almost 3,500 million human beings. This was a jump of 17 per cent in eight years, an annual growth rate just under 2 per cent.
2. During this same eight-year period, the world's total school-age (from 5 to 19 years) population increased from some 955 million children to about 1,150 million, or by approximately 20 per cent, with an annual rate of increase of 2.35 per cent, that is to say at a rate nearly 20 per cent higher than the world population expansion rate.

For the remaining years of this century, predictions are that the number of people of school and university age will increase by more than 1,000 million. This represents an average annual increase of 36 million potential pupils and students!

World illiteracy statistics

Year	Estimated world adult population (over 15) (Millions)			Illiteracy rate (%)
	Total	Literates	Illiterates	
1950	1,579	879	700	44.3
1960	1,869	1,134	735	39.3
1970	2,287	1,504	783	34.2



Pupil distribution, by educational level, 1968 (percentages).

The favoured and less favoured nations reveal a similar disparity in the number of teachers, even without taking into account differences between primary-school teachers' professional training levels. Develop-

ing countries have 65 million more pupils than Europe and North America but approximately the same number of teachers. The primary-school situation, by region, is as follows: in Europe and the U.S.S.R., one teacher for 25 pupils; in North America, 1 for 26; in Latin America, 1 for 32; Asia, 1 for 36, Arab States, 1 for 38; Africa, 1 for 40.

Again, differences are marked in education for girls and women. In North America, Europe and Latin America, school enrolments of boys and girls at primary and secondary levels are approximately equal. But grouping Africa, Asia and the Arab States together, we find 50 percent more boys than girls in primary schools, and 100 per cent more in secondary schools. World illiteracy figures show further the extent to which women are at a disadvantage; some 40 per cent are estimated to be illiterate, compared with 28 per cent of men.

If we compare world increase in enrolment in traditional school systems for the three levels of instruction with that of spending on such instruction, we see that for the period between 1960 and 1968 the enrolment figure rose by 4.5 per cent annually whereas the corresponding annual increase in spending was 11.7 per cent.

In half the countries of the world, half the children enrolled in schools fail to complete the primary cycle. Even if we consider only those who leave school after their first, second or third year--that is, for the most part, having acquired little lasting benefit--the fac remains that in many countries the money spent on them absorbs between 20 and 40 per cent of the total State education budget.

When we consider the often exorbitant cost of building schools calculated to rival the best of their kind elsewhere, it would appear

that developing countries would be better advised to focus most of their attention on the non-material aspects of schooling. Above all, competition with other countries in this field in order to enhance 'national prestige' should be avoided. Succumbing to temptations of this kind not only leads to imposing an unjustifiable burden on the educational economy; it can also send general educational development in an unhealthy direction. Besides, methods diametrically opposed to these may be used to forge far more satisfactory links between schools and the surrounding environment.

There has in general been broad agreement on making the financial sacrifices needed to cover the demand for education. They have increased at an even faster rate than has the number of pupils.

There is no absolute theoretical 'ceiling' or'floor' for educational spending. In order to find the 'optimal' level for such spending, it must be determined less in terms of the volume of available financing resources than by rigorously applying the fundamental political and economic options of State and society, even to public education hitherto regarded as sacrosanct.

In this respect, increasing financial resources, however necessary this may be, is not the only possible solution. A no less effective expedient may be to make more judicious budgetary choices and to apportion effort and means in more productive fashion, in particular by innovations in the use of supplementary resources allocated to education."

IV. On Non-Formal Education

"In seeking greater returns from educational expenditure, the total volume of financial resources is not the sole determining factor. In many respects, the way in which they are distributed is even more crucial. From this point of view, public spending on education continues to be concentrated on the institutionalized forms of teaching, reserved for children and adolescents attending schools.

Despite oft-stated intentions, such budgeting is an expression of the enduring rule of allocating most public funds for the specific benefit of the school and university population. This reflects the old idea that schooling is the only valid education and that the time for learning is limited to traditional school age.

It is increasingly evident that in most countries--and therefore for most people--this narrow conception, this unilateral method of financing needs, is fundamentally unjust. For hundreds of millions of illiterate people in the world, school can no longer be of help. In the developing countries, nearly half the children of primary school age today are condemned, no matter what happens, to grow up without ever having attended a class.

The promotion of new techniques in no way implies dismissal of the most vital component of the fundamental educational reforms required by our age: the massive development of latent human resources.

In the years to come, progress in educational technologies will permit a large measure of individual fulfilment for those in the advantageous position to benefit from it. And increasing use of new technologies will not be limited to formal education. It will spread

beyond this sector and lead to considerable advances, in the fairly near future, in other fields of educational activity--promotion of literacy, basic education and public information--through the deployment of modern mass-communication media.

But prospects for mobilizing the human potential--at present scarcely tapped--are far from being dependent on technological means alone.

There are immense possibilities for mass participation in the social and educational enterprise. Peoples until now submerged by the tides of history are becoming aware of their will and their power. The size and strength of the potential to be unleashed through mobilizing the people, through volunteer movements and spontaneous popular organizations, is clear from examples of many countries over the past fifty years."

V. On Employment

"One particularly important consequence of this situation is that it makes the employment problem more acute. From 1960 to 1970 the active population in developing countries rose by 22 per cent as against 12 per cent in industrialized countries; from 1970 to 1980, the ratio is expected to be 21.11 per cent. Forecasts in absolute figures indicate that during this second period some 268 million people will make their first appearance on a labour market in developing countries, while only 56 million are expected to do so in the industrialized countries.

If to the declared unemployed we add the 'hidden' unemployed, including all those who do not look for work because labour market prospects discourage them, and the underemployed (also either declared or 'hidden') including those who work less than thirty hours per week

and endeavour to work longer or would do so if opportunities offered--then unemployment may be described as hitting a possible 40 per cent of the active population.

One particularly disturbing feature is unemployment among young people, including an increasing number of graduates with degrees and diplomas. Such unemployment is two or three times greater in this group than among adults over the age of 25. It affects people who have had an elementary or secondary education more than the illiterate, on the one hand, and more than those with higher education diplomas on the other."

VI. On Policy, Strategy, Planning

"Policies occupy the initial phase during which fundamental choices, formulated in the name of the community, are made by organs or individuals designated for this responsibility, with the people participating to a greater or lesser extent or giving implicit approval of certain postulates (if they are sufficiently integrated, socially and culturally, into the management of their public affairs).

Any educational policy reflects a country's political options, its traditions and values and its conception of its future. Clearly, in the first place, it is a function pertaining to each State's national sovereignty.

Expounding an educational policy is the end result of a process of thought which consists in:

Ensuring that educational objectives comply with over-all objectives.

Deducing educational objectives--in fact--from aims approved in over-all political policy.

Harmonizing educational objectives with those adopted in other sectors of national activity.

Educational policy cannot be reduced to the proclamation of a few over-all guiding principles. It must comprise a close-knit, unified structure of specific objectives, including: general objectives of a spiritual, philosophic and cultural nature reflecting a certain idea of mankind; political objectives corresponding to the national community's major options; socio-economic objectives fixing goals to be reached in terms of a certain idea of society and development; broad educational objectives defining the main guidelines which the educational system requires

in order to achieve whatever objectives are assigned to it that go beyond education; finally, the strictly educational objectives, expressing orientations approved for different types and levels of institution or action within the system.

Once objectives have been determined, it is not enough merely to list them. They must be arranged according to priority and given their place in a co-ordinated whole which only then deserves the name of educational policy.

We may then move from the policy phase to the strategic phase.

The concept of strategy covers three ideas:

1. The organization of elements into a coherent whole.
2. Allowance for chance in the way events unfold.
3. The will to confront that chance and control it.

To summarize: the combining element, the probability element, the element of will.

The object of strategy is to transcribe policy into a body of conditional decisions, determining action to be taken in relation to different situations which may arise in the future.

The translation of policy objectives into operational terms brings out: concrete goals, resources likely to be allocated, decision-making criteria and models forming the range of possibilities.

The object of planning is to make decisions easier at the various levels where strategical directives must be applied. It does this by making the calculations required to quantify the terms of technical choices, and by taking care that all necessary factors are brought together when the time comes to take action.

Planning cannot therefore be reduced, as too often believed, to a set of projections of desirable objectives. It is mainly a combination of ways and means for implementing policy. Social reality being in a state of perpetual change, and analytical tools being constantly improved, planning must be a continuous operation.

Failure to adhere to the logical process, moving from policy to strategy and from strategy to planning, ensuring the continuity and relevance of decisions made from one level to the next, is responsible for education having been too often oriented by chance, guided blindly and developed in anarchic fashion.

Linear expansion strategies can no longer be justified, either from the point of view of results obtained or their methodology. When an education system has to absorb a huge number of children, strategies must be modified, must move from the quantitative to the qualitative, from imitation and reproduction to a search for innovations, from a uniform procedure to diverse alternatives."

VII. On Educational Reform

"Today, it is no longer desirable to undertake educational reforms in piecemeal fashion, without a concept of the totality of the goals and modes of the educational process. To find out how to reshape its component parts, one must have a vision of the whole.

Today, whether reforms are partial or more general, we cannot dismiss the need to conceive of both one and the other in relation to the over-all situation, and to envisage their consequences.

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We deal here with only one aspect of internal reform: its place in the over-all strategy of educational development. In this respect, the following points should be made:

1. Internal reforms cannot be separated from the search for alternatives to existing educational practice. These reforms may be effective enough in some cases to make it possible to postpone applying more radical measures. At the same time, they may also help to prepare for fundamental change later on. The capacity to effect partial reforms is a sign of vitality in an educational system and proof that it may be able to undergo even more sweeping changes. For this reason and, even if they regard such measures as inadequate, education authorities should encourage modification of educational methods and content.
2. Research in pedagogy and related sciences is insufficiently developed in many countries. Many questions in psychology, pedagogy and educational technology remain unanswered. Seen in this light, reforms play the part of experiments.
3. Experience shows that when internal reforms are ineffective, or lead to great wastage of talent and energy, it is generally because of poor communication and co-ordination between management at the top and action below. This leaves the creative, imaginative reformers isolated. The propagation of ideas and experiments is slowed down. Educational authorities in all countries should set up special machinery for promoting innovations; this should include information and application campaigns for tested reforms.

4. Success or failure in the concrete application of reforms depends on teachers' attitudes. In most schemes devised by innovative theorists, however, the aim appears to be to act on teachers--for them possibly, but rarely with them. This technocratic paternalism is based on distrust and evokes distrust in return. Teachers, on the whole, are not against reforms as much as they are offended at the way they are presented to them, not to mention imposed on them; thus, the major importance for educators to be actively associated with any educational reform project."

VIII. Recommendations

"1. We propose lifelong education as the master concept for educational policies in the years to come for both developed and developing countries.

2. Educational institutions and means must be multiplied, made more accessible, offer the individual a far more diversified choice. Education must assume the proportions of a true mass movement.

3. Each person should be able to choose his path more freely, in a more flexible framework, without being compelled to give up using educational services for life if he leaves the system.

4. Artificial or outmoded barriers between different educational disciplines, courses and levels, and between formal and non-formal education should be gradually introduced and made available in the first place to certain categories of the active population.

5. The development of education for pre-school-age children must become one of the major objectives for educational strategies in the 1970s.

6. Universal basic education, in a variety of forms depending on possibilities and needs, should be the top priority for educational policies in the 1970s.

7. Rigid distinctions between different types of teaching - general, scientific, technical and professional - must be dropped, and education, as from primary and secondary levels, must become theoretical, technological, practical and manual at the same time.

8. Professional and technical training colleges must be developed in conjunction with the secondary education system. The instruction they give must be followed by practical training at places of work, all of which must, above all, be completed by recurrent education and vocational training courses.

9. Efforts must be made to bridge the gap, still found in all too many cases, between educational establishments and business companies, whether privately or publicly owned, for the latter constitute a key element in the over-all education system. Their role should not be limited to training workers, but extended so far as possible to training technicians and researchers.

10. Throughout the post-secondary educational system, structures, subject-matter and student categories must be very broadly diversified.

11. As educational systems become more diversified and as possibilities for entry, exit and re-entry increase, obtaining university degrees and diplomas should become less and less closely linked to completing a pre-determined course of study. Examinations should serve essentially as a means of comparing skills acquired under varying conditions by individuals of different origins, a mark not of a conclusion but of a starting-point, helping each individual to assess the effectiveness of his own study methods. Evaluation procedures should measure an individual's progress as much as the extent to which he conforms to externally fixed standards.

12. Educational strategies in the coming decade should have rapid development of adult education, in school and out of school, as one of their priority objectives.

13. In all areas where there is widespread illiteracy, programmes organized for the adult population must include a strong literacy campaign. Action must be taken in two ways: it must aim firstly at functional literacy among strongly motivated sections of the working population and secondly at mass literacy when conditions are appropriate and, above all, when social development conditions - political, economic and cultural - are suitable for active large-scale participation by the people.

14. Institutions and services of a new kind, intended to help people teach themselves - language laboratories, technical training laboratories, information centres, libraries and related services, data banks, programmed and personalized teaching aids, audio-visual aids, etc. - should be integrated into all education systems.

15. (1) In the conception and general planning of education systems, allowance must be made for the possible contribution of new techniques with a view to developing a unified process aimed at using available means and resources in the most efficient way.

(2) When getting systems with technological support under way, strategies must be differentiated according to different levels of economic development.

16. (1) Modify teacher-training programmes so that teachers are equipped for the different roles and functions imposed by new technologies.

(2) Reserve a fixed part of the increase in education budgets for the rational development of sophisticated techniques.

17. Legislative, professional, labour union and social action should gradually reduce and finally abolish hierarchical distinctions maintained for no valid reason among the various categories of teachers.

18. Conditions in which teachers are trained should be profoundly changed so that, essentially, they become educators rather than specialists in transmitting pre-established curricula; the principle of a first, accelerated training stage, followed by in-service training cycles, should be adopted.

19. Auxiliaries and specialists from other professions (workers, technicians, professional and executive personnel) should be called in to work beside professional teachers. Authorities should also enlist the co-operation of pupils and students, in such a way that they teach themselves while instructing others, and become imbued with the idea that acquiring an 'intellectual capital' involves its possessor in the duty of sharing it with others.

20. It should be made a principle to centre educational activity on the learner, to allow him greater and greater freedom, as he matures, to decide for himself what he wants to learn, and how and where he wants to learn it and take his training. Even if the learner has to accept certain pedagogic and socio-cultural obligations as to subject-matter and methods, these should still be defined more in terms of free choice, of psychological propensities and drives among learners than hitherto.

21. All learners, whether young or adult, should be able to play a responsible part not only in their own education but in the entire educational enterprise.

To conclude: The indispensable remoulding of education demands that all its elements--theory and practice, structures and methods, management and organization--be completely rethought from one and the same point of view.

Essential elements of reform and change on which concrete work might begin in the 1970s may be summarized as follows.

The concept of education limited in time (to 'school age') and confined in space (to school buildings) must be superseded. School education must be regarded not as the end but as the fundamental component of total educational activity, which includes both institutionalized and out-of-school education. A proportion of educational activity should be de-formalized and replaced by flexible, diversified models. Excessive prolongation of compulsory schooling, which is beyond certain countries' capacities, must be avoided. The extension of continual training will more than compensate for the shorter average duration of initial studies. Briefly, education must be conceived of as an existential continuum as long as life.

'Closed' educational systems should be made 'open'. We must gradually eliminate rigid distinctions between primary, secondary and post-secondary education. Short-cuts and branch-articulations should be introduced into educational channels.

Special attention should be paid to fostering education for pre-school-age children by selecting and cultivating the most positive forms of family and community association in this work. All available means, conventional and unconventional, should be applied to developing basic education.

General education and technical training should be reconciled. Character and intelligence training should be harmonized. Education and work should be closely associated. Technology should be ever-present in the educational process, both as content and as guiding method. Technical education, which is unnecessarily expensive, should be supplemented and in many cases replaced by out-of-school professional training. Training should be so organized as to facilitate reconversion during employment, to lead to optimum professional mobility and to produce the greatest possible yield from the points of view both of the national economy and the trainees themselves. Narrow, premature specialization should be done away with.

There should be more diversified higher-education institutions. Universities should be turned into multi-purpose establishments open to adults and young people, and designed as much for continual training and periodic upgrading as for specialization and scientific research.

Education should be individualized and personalized to the utmost and constitute a preparation for self-learning. The processes of instruction and learning should be accelerated wherever this is in the learner's and the community's joint interest. New techniques for reproducing and communicating educational material, which are eminently suited to most envisaged innovations, should be introduced at a quicker pace, while technology in general should be regarded as a source of new pedagogic methods (where the cost of equipment is not excessive) and as means of making educational activity more democratic.

Educational management should be democratized, and the general public should play a large part in all decisions affecting education.

The above is assuredly not an exhaustive exploration of all details, yet may provide the broad outline for educational action appropriate to emerging needs and possibilities, and oriented towards the future."

IX. Co-operation and Exchange of Experience

"If education develops along the lines we have recommended, international co-operation among all countries will become more and more necessary.

We should therefore:

- Give increasing importance to particularly significant issues when policy-makers in education hold international meetings.
- Organize more meetings among countries with different socio-economic systems.
- Increase intra-regional cultural exchanges among countries formerly isolated under colonial regions.
- Encourage conferences grouping representatives of countries which are in different geographical regions but have common characteristics or are following a similar course of development.
- Promote as widely as possible the diffusion of information on innovative experiments, and set up machinery enabling government officials and educators directly concerned to study similar experiments in progress elsewhere.
- Increase the means at UNESCO's disposal for co-operating with Member States in the organization of on-the-spot studies and exchanges of experience among educators.

It would be desirable:

To increase international mobility among teachers and students, which implies in particular that governments remove obstacles preventing foreign nationals from teaching in their countries.

To reach formal agreements enabling students and teachers t continue their activities in foreign countries.

Experts should be better, fewer, self-displacing, should live closer to their colleagues and to the local populations, and more of them should come from countries where socio-economic conditions are similar to those being visited.

In our opinion:

Some kind of 'code of honour' should be devised to govern th behaviour of experts working in foreign countries.

In order to define what the role and position of foreign professional personnel should now be, progress achieved in developing countries must be taken into account. In some cases, this progress is so great that it is time for earlier one-sided assistance to become mutual and for the industrialized nations to benefit from experience acquired elsewhere, with the aid of professional people from the Third World.

Mutual assistance among the developing countries must be increased, especially among countries in the same geographical region.

We recommend:

Developing authentically national educational systems which enable individuals to achieve an increasingly harmonious and positive integration at all levels into their environment.

Setting up national, regional and international advanced study centres, and providing them with the necessary equipment.

According abundant scholarships or paid vacations allowing scientists to travel for study purposes, to keep themselves up to date

on scientific innovation and to make contact with fellow-scientists overseas.

Defining explicit national scientific policies, which scientists themselves should actively help to draft.

Associating scientists with the administration of science, so far as possible, in order to reduce bureaucratic procedure and restrict the part played by administrators.

Finally, it is only natural for us to hope that the reasons which have guided us throughout this report will also lead UNESCO to commit itself in favour of innovation in education, to push its theoretical research and practical activity in that direction--and by this go beyond the limits traditionally imposed on ideas about institutions, methods, programmes, students--so that education may expand to meet the virtually unlimited needs of individuals and societies."

X. Sources and Modes of Assistance

"The industrialized nations' financial and technical aid to developing countries firmly supports and orients international co-operation in education. The largest single element, quantitatively speaking, in the world's outlay on international technical assistance is the aid provided for education and professional training. In 1968, it represented about 40 per cent of all bilateral technical assistance.

Aid to education (in million dollars)

Type of aid	1968-69 (per year)	1970-71 (per year) (estimates)
Bilateral aid		
DAC countries	710	760
Socialist countries	150 - 200	150 - 200
Multilateral aid	220	400
Private aid	120 - 170	350 - 400
TOTAL	1,200 - 1,300	1,660 - 1,760

We consider that aid to education can and must be increased.

Due to the specific nature of educational investment, which can only have delayed-action effects, this increase must be achieved in the immediate future, although this does not necessarily imply that it will have to be continually multiplied in succeeding years.

Bilateral aid should not be discouraged, since it performs a useful service and because the countries concerned might possibly refuse to accord it in another form.

Development of multilateral aid is however highly desirable, since it is more in line with the requirements of international solidarity. It should, in any event, be stepped up sufficiently to reach a higher proportion than bilateral aid.

Finally, it is both possible and desirable to co-ordinate the various types of aid to education.

We suggest that international organizations seriously consider the geographical disparities in international co-operation and assistance.

Aid should be more equitably distributed, both bilaterally and multilaterally. This is a political problem as well as one of justice, related to that of decolonization and to the development of truly international relationships between nations.

The practice of tied aid should be gradually dropped, especially in the sense that donor countries should agree to their aid being used in other developing countries (for training in national or regional institutions, for equipment supplied by neighboring countries, etc.).

This is clearly a development which cannot come about, however, unless the countries concerned make a concerted stand.

We call on all countries and international and regional financial organizations to review their interest rates on loans for education and training. Three solutions seem to us to deserve consideration: (a) the application of differential rates, to the advantage of the least developed countries; (b) interest bonuses conceded by the governments of industrialized nations; (c) greater contributions to the International Development Association.

The only chance of a real increase in aid to education for the developing nations is the hope that economically advanced countries will heed the United Nations call and make a genuine effort, beginning not later than 1975, to make yearly transfers of resources equal to at least 1 per cent of their GNP.

In order to increase gradually the proportion of allocations to education and training in the total volume of aid, it would be necessary to:

Utilize country programming procedures to re-examine the place to be given to education aid in the total volume of transfers of financial resources allocated to development.

Include an educational component in every development project ('package project').

Ensure that governments of developing nations systematically require all foreign investors, public or private, to undertake the training of nationals employed on development projects.

We hope:

That multilateral and bilateral bodies financing and assisting education will give priority to a new type of project to help countries make an over-all diagnosis of education, draw up a list of objectives and identify 'points of entry' designed to produce the most effect on systems, content and methods.

That bilateral and multilateral aid will concentrate more on the creation and financing of institutions capable of implementing alternative strategies, and on the establishment of the infrastructure for continuous educational reforms.

That developed countries agree to defray--even under already existing international assistance schemes--some of the operational costs of research and development of new methods and programmes, as well as investment expenditures on costly, modern, educational techniques and technologies originating from industrial societies.

That the developed and developing countries will establish systematic exchanges of data and experience to facilitate the choices

to be made and encourage, on all sides, the spirit of creativity so vital in a phase of innovation.

That the international community will finance a larger number of experimental projects calculated to enrich the world store of new experience rather than reproducing stereotyped activities and, as far as possible, replace laboratory experiments by field experiments and pilot projects carried out in exceptional conditions by experimental projects operating in the normal conditions of the country.

That international aid will be designed not to provide consumer goods but to create or develop productive potential; not to deliver prefabricated schools, but to help set up a national construction industry; not to furnish paper, but to assist in establishing a national paper industry, etc.

In short, we hope that international co-operation will concentrate on inventing and spreading innovations; it should move in this direction now, if the search for new solutions is not to be unduly postponed.

We propose that agencies assisting education, national and international, private and public, review the present state of 'research and development' in education with a view to strengthening the capacities of individual countries to improve their present educational systems and to invent, design and test new educational experiments appropriate to their cultures and resources. We believe that if nations, regional bodies and assisting agencies make the strengthening of these capacities

their first order of business over the next ten years, they will enable a number of countries to begin becoming true 'learning societies'.

Some of us propose that a detailed study be undertaken to establish the conditions in which it would be possible to set up an International Programme for Educational Innovations, attached to UNESCO and placed under the control of a representative international body--a programme designed to help countries take a decisive step towards a renewal of their education systems."

ANNEX A

INTERNATIONAL COMMISSION

on the

DEVELOPMENT OF EDUCATION

Origin, Membership and Procedure of the Commission

At its 1970 meeting the General Conference of Unesco adopted a resolution which said, in part: "The Director-General is authorized to prepare and present to Member States the necessary elements for reflection on educational strategies at the international level: ... (b) by establishing an International Commission on the Development of Education, publishing its report, presenting it with his comments to Member States, the Executive Board, the International Conference on Education and the General Conference (of Unesco), and taking it into consideration in formulating Unesco's future programmes in the field of education."

The members of the Commission were:

Edgar Faure (France), Chairman, former Prime Minister and Minister of Education, former Professor of Law and Politics.

Professor Felipe Herrera (Chile), University of Chile, former President of the Inter-American Development Bank, Professor of Economics, University of Santiago.

Professor Abdul-Razzak Kaddoura (Syria), Professor of Nuclear Physics at the University of Damascus.

Henri Lopes (People's Republic of the Congo), Minister of Froeign Affairs, former Minister of Education.

Professor Arthur V. Petrovsky (U.S.S.R.), Member of the Academy of Pedagogical Sciences of the U.S.S.R.

Majid Rahnema (Iran), former Minister of Higher Education and Sciences.

Frederick Champion Ward (United States of America), Adviser on International Education, The Ford Foundation.

The Commission was provided, by Unesco, with a Secretariat. Between March 1971 and April 1972, the Commission met six times to consider documentation assembled by the Secretariat, including 75 original studies by specialists in different aspects of education.

Members of the Commission visited 24 countries to learn the views of educational and political leaders. It organized seminars in the various regions and consulted senior officials of the various institutions and organizations in the United Nations system.

The report is designed to be a synthesis of the best thought derived from these activities. However, most of the 75 papers prepared for the Commission will be published separately at a later date.

General Terms of Reference

It is essential at the outset to understand clearly what the Commision was asked to do. Many of the criticisms of the report which have arisen appear to overlook the General Terms of Reference given to the Commission.

Seven eminent educators, from as many countries, were enjoined: (1) "...to produce a report to assist governments to formulate national strategies for the development of education," (2) "...that the term education should be taken in its broadest connotation of a coherent and a deliberate action aimed at the transmission of knowledge, the development of attitudes, and the training and betterment of man in all respects and throughout his life," (3) "...the Commission will be called upon to define the new aims to be assigned to education as a result of the rapid

changes in knowledge and in societies, the demands of development, the aspirations of the individual, and the over-riding need for international understanding and peace, "(4) "...to study the means of ensuring an optimum contribution to educational development in the developing countries, through a typology based on certain regional or national features," and (5) "...to formulate recommendations for international cooperation viewed from its two-fold aspect of intellectual cooperation, on the one hand, and of investments, financial aid and provision of services and equipment on the other."

A further directive to the Commission was to deal with education in both highly developed and under-developed countries.

ANNEX B

REPORT OF

THE INTERNATIONAL COMMISSION ON THE DEVELOPMENT OF EDUCATION

An Abstract by the Office of Education and Human Resources

(Section headings have been supplied by EHR Staff. Text of this Annex is a verbatim extract from and closely follows organization of the Commission Report).

I. GENERAL PREMISES

"The Commission laid stress above all on two fundamental ideas: lifelong education and the learning society. Since studies can no longer constitute a definitive 'whole', handed out to and received by a student before he embarks on adult life, whatever the level of his intellectual equipment and the age at which he does so, educational systems must be thought out afresh, in their entirety, as must our very conception of them. If all that has to be learned must be continually re-invented and renewed, then teaching becomes education and, more and more, learning. If learning involves all of one's life, in the sense of both time-span and diversity, and all of society, including its social and economic as well as its educational resources, then we must go even further than the necessary overhaul of 'education systems' until we reach the stage of a learning society. For these are the true proportions of the challenge education will be facing in the future. It is by no means certain that conservatism of a cultural nature will be easier to overcome than economic or political resistance. But once in

a position to measure the stakes against the price, how can we refuse to fight the fight? And the weapons we need for that fight are available.

The physical, intellectual, emotional and ethical integration of the individual into a complete man is a broad definition of the fundamental aim for education.

Education has a far richer past than the relative uniformity of its present structures might lead one to think. The Amerindian civilizations, African cultures, Asian philosophies and many other traditions are imbued with values which could become a source of inspiration not only for educational systems in the countries which have inherited them, but for universal educational thought as well. There can be little doubt that many eminently valuable possessions have been lost--in some cases even before the colonial era, through internal decline--or were destroyed or distorted through external action, especially through colonialism. It is relevant to note, however, that many nations which have undergone forei rule--including some of those now most resolutely affirming their independence--have proudly taken over, particularly in education, the best part of the intellectual disciplines and so-called classical culture acquired in harder times.

Second, outmoded dogma and custom weigh heavily on education and, in many ways, the older nations suffer no less from anachronisms in their educational systems than the young States which inherited them in the form of imported models.

Another no less important fact for the future, of a sociological order, is that for the first time in history, education is now engaged in preparing men for a type of society which does not yet exist.

Strong support must be given to democracy, as the only way for man to avoid becoming enslaved to machines, and the only condition compatible with the dignity which the intellectual achievements of the human race require; the concept of democracy itself must be developed, for it can no longer be limited to a minimum of juridical guarantees protecting citizens from the arbitrary exercise of power in a subsistence society; furthermore, and in conjunction with this, more support must also be given to educational requirements, for there cannot--or will not--be a democratic and egalitarian relationship between classes divided by excessive inequality in education; and the aim and content of education must be re-created, to allow both for the new features of society and the new features of democracy.

The commission stressed the fact that education must be regarded as a domain where political action is of especially decisive importance.

The commission suggested that any neo-Malthusian trend and any attempt to slow down educational development be excluded from educational policies and strategies, on cultural, political and economic grounds. The aim of education is to enable man to be himself, to 'become himself'. And the aim of education in relation to employment and economic progress should be not so much to prepare young people and adults for a specific life-time vocation, as to 'optimize' mobility among the professions and

afford a permanent stimulus to the desire to learn and to train oneself. In brief, without abandoning the expansion of education, its objectives, methods and structures should be thoroughly reappraised.

Education suffers basically from the gap between its content and the living experience of its pupils, between the systems of values that it preaches and the goals set up by society, between its ancient curricula and the modernity of science. Link education to life, associate it with concrete goals, establish a close relationship between society and economy, invent or rediscover an education system that fits its surroundings--surely this is where the solution must be sought.

The school of the future must make the object of education the subject of his own education. The man submitting to education must become the man educating himself; education of others must become the education of oneself. This fundamental change in the individual's relationship to himself is the most difficult problem facing education for the future decades of scientific and technical revolution.

It is far more necessary today than in the past for reforms in education to have social and economic development objectives.

Moreover, it is hard to conceive of society developing without a renewal in education. This is valid for all societies, of whatever type, whatever their predominant doctrine and however they envisage their future--whether reformist or revolutionary.

There is a close correlation--simultaneous and delayed--between changes in the socio-economic environment and the structures and forms of action of education, which we believe makes a functional contribution

to historical movements. Moreover, it seems to us that through the knowledge it provides of the environment in which it operates education may help society to become aware of its problems and, provided that efforts are centered on training 'complete men' who will consciously seek their individual and collective emancipation, it may greatly contribute to changing and humanizing societies.

II. On Educational Technology

"The malfunction of much educational practice makes renovation in education necessary. Changes in socio-economic structures and the scientific and technological revolution make it imperative. Scientific research and technological progress related to education, combined with growing awareness among the peoples of the world, make it possible.

Today, it is no longer desirable to undertake educational reforms in piecemeal fashion, without a concept of the totality of the goals and modes of the educational process. To find out how to reshape its component parts, one must have a vision of the whole.

Today, whether reforms are partial or more general, we cannot dismiss the need to conceive of both one and the other in relation to the over-all situation, and to envisage their consequences.

The reasons for this are that the effects of education are ranging further and further and that we now have the necessary tools to make short- and medium-term forecasting a very different thing from intuitive speculation.

We therefore no longer have the right either to improvise or to limit ourselves to narrow pragmatism.

This does not mean we should dare nothing, fail to grasp new possibilities or commit ourselves to tomorrow. It means on the contrary that we must think clearly in exploring new paths for the future. When developing and reforming educational institutions and methods, we must not overlook the means and techniques in the present-day world which not only enable us to improve existing modes, institutions and systems, but also to find fresh alternatives to them. This search for practical alternatives as part of a genuine strategy of innovation seems to us to be one of the primary tasks of any educational undertaking.

It is necessary, even indispensable for all countries, whatever th eir level of development, to use educational technology and technological principles on a large scale, or in other words, to use post-machine-age intellectual technologies.

These technologies are therefore a very valuable asset for developed countries; but for the developing countries they would appear to be the basic pre-condition for dealing with the entire problem. So far as developing countries are concerned, or most of them, at least, the firm introduction of innovations in this area is the only way they can hope to advance towards a satisfactory solution within a reasonable period of time.

Whether we have in mind merely the improvement of existing systems or the development of new learning strategies, scientific or technological developments can only exert an over-all influence on the current orientation of educational systems if:

1. Interdisciplinary contacts are systematically organized between the various researchers in the 'education sciences'.
2. Educational development institutions enable new findings to move from the laboratory or pilot project stage to large-scale utilization, taking into account the requisite strategical and logistical problems.
3. Efficient networks disseminate information to educational workers, and above all through institutes which train educators of all kinds and at all levels.

For technological innovation to be meaningful and effective, the implications of its use must be considered in relation to the total education system.

We consider that it would be useful, at the same time as advanced technology is developed, to use simplified technologies, adapted to a country's particular needs and possibilities. We would encourage use of new technologies which do not require massive investment, and intermediate

technologies able to help the regeneration of education in developing countries. We should not delay moving ahead while waiting for new principles to be deduced from advanced educational technology, the significance of which is far greater than that of mere techniques.

To the extent that it enables us to orchestrate many agents into a unified process leading to the greatest possible efficiency, systems analysis would appear to be an intellectual instrument which may be applied to an over-all critical study of existing educational systems and is likely to suggest new scientifically calculated pedagogic patterns."

III. On Educational Finance and Resources

"In 1968, the developed nations' expenditure on education rose to more than $120,000 million, and that of developing countries to less than $12,000 million. With about one-third the population and only one-quarter of the young people in the world, industrialized countries spent ten times more money on education than the developing countries.

The most serious aspect of this enormous difference is that it is growing larger. From 1960 to 1968, industrialized nations' educational expenditure increased from 3.52 per cent to 4.80 per cent of their gross national product, which in turn, during the same period, increased by 78 per cent. Developing countries' educational expenditure also took up a larger percentage of their GNP (at a slower rate of increase, however, the figure rising from 2.73 to 3.91 per cent), but their over-all revenue itself increased only by 62 per cent. The consequence is that industrialized regions' educational spending increased by 145 per cent and that of developing countries by only 130 per cent.

In other words, there is an absolute increase in educational expenditure in the developing countries, but they are allocating a

decreasing percentage of world-wide expenditure in this area. (The figure in 1960 was 9 per cent; in 1968, 8.6 per cent.)

This means that large-scale efforts, financial sacrifices and considerable results--in the education race as in the march to economic progress--have all failed to prevent the continued widening of the gap between industrialized and developing countries.

However, the quantitative facts are ambiguous. Statistics disclose a dual picture. One shows the constant increase in the demand for knowledge and in the number of those who want (or who ought) to go to school, together with the unprecedented expansion of educational activities in recent decades. The other depicts the many dead ends to which this expansion appears to be leading, and the flagrant inequality in the geographical and social distribution of available educational resources.

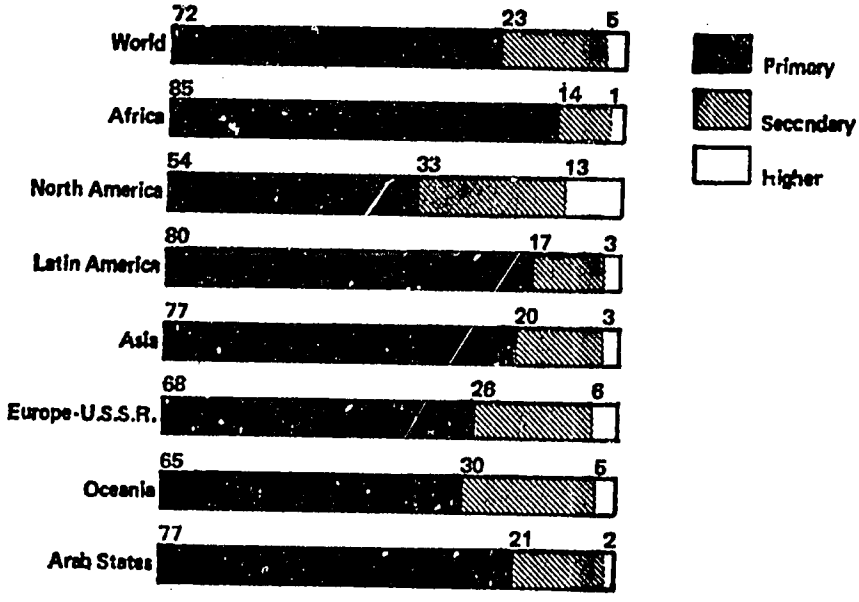
Two facts suffice to indicate the dimensions of this subject:

1. During the first United Nations Development Decade, from 1960 to 1968, the world's population increased from just under 3,000 million to almost 3,500 million human beings. This was a jump of 17 per cent in eight years, an annual growth rate just under 2 per cent.
2. During this same eight-year period, the world's total school-age (from 5 to 19 years) population increased from some 955 million children to about 1,150 million, or by approximately 20 per cent, with an annual rate of increase of 2.35 per cent, that is to say at a rate nearly 20 per cent higher than the world population expansion rate.

For the remaining years of this century, predictions are that the number of people of school and university age will increase by more than 1,000 million. This represents an average annual increase of 36 million potential pupils and students!

World illiteracy statistics

Year	Estimated world adult population (over 15) (Millions)			Illiteracy rate (%)
	Total	Literates	Illiterates	
1950	1,579	879	700	44.3
1960	1,869	1,134	735	39.3
1970	2,287	1,504	783	34.2



Pupil distribution, by educational level, 1968 (percentages).

The favoured and less favoured nations reveal a similar disparity in the number of teachers, even without taking into account differences between primary-school teachers' professional training levels. Develop-

ing countries have 65 million more pupils than Europe and North America but approximately the same number of teachers. The primary-school situation, by region, is as follows: in Europe and the U.S.S.R., one teacher for 25 pupils; in North America, 1 for 26; in Latin America, 1 for 32; Asia, 1 for 36, Arab States, 1 for 38; Africa, 1 for 40.

Again, differences are marked in education for girls and women. In North America, Europe and Latin America, school enrolments of boys and girls at primary and secondary levels are approximately equal. But grouping Africa, Asia and the Arab States together, we find 50 percent more boys than girls in primary schools, and 100 per cent more in secondary schools. World illiteracy figures show further the extent to which women are at a disadvantage; some 40 per cent are estimated to be illiterate, compared with 28 per cent of men.

If we compare world increase in enrolment in traditional school systems for the three levels of instruction with that of spending on such instruction, we see that for the period between 1960 and 1968 the enrolment figure rose by 4.5 per cent annually whereas the corresponding annual increase in spending was 11.7 per cent.

In half the countries of the world, half the children enrolled in schools fail to complete the primary cycle. Even if we consider only those who leave school after their first, second or third year--that is, for the most part, having acquired little lasting benefit--the fact remains that in many countries the money spent on them absorbs between 20 and 40 per cent of the total State education budget.

When we consider the often exorbitant cost of building schools calculated to rival the best of their kind elsewhere, it would appear

that developing countries would be better advised to focus most of their attention on the non-material aspects of schooling. Above all, competition with other countries in this field in order to enhance 'national prestige' should be avoided. Succumbing to temptations of this kind not only leads to imposing an unjustifiable burden on the educational economy; it can also send general educational development in an unhealthy direction. Besides, methods diametrically opposed to these may be used to forge far more satisfactory links between schools and the surrounding environment.

There has in general been broad agreement on making the financial sacrifices needed to cover the demand for education. They have increased at an even faster rate than has the number of pupils.

There is no absolute theoretical 'ceiling' or'floor' for educational spending. In order to find the 'optimal' level for such spending, it must be determined less in terms of the volume of available financing resources than by rigorously applying the fundamental political and economic options of State and society, even to public education hitherto regarded as sacrosanct.

In this respect, increasing financial resources, however necessary this may be, is not the only possible solution. A no less effective expedient may be to make more judicious budgetary choices and to apportion effort and means in more productive fashion, in particular by innovations in the use of supplementary resources allocated to education."

IV. On Non-Formal Education

"In seeking greater returns from educational expenditure, the total volume of financial resources is not the sole determining factor. In many respects, the way in which they are distributed is even more crucial. From this point of view, public spending on education continues to be concentrated on the institutionalized forms of teaching, reserved for children and adolescents attending schools.

Despite oft-stated intentions, such budgeting is an expression of the enduring rule of allocating most public funds for the specific benefit of the school and university population. This reflects the old idea that schooling is the only valid education and that the time for learning is limited to traditional school age.

It is increasingly evident that in most countries--and therefore for most people--this narrow conception, this unilateral method of financing needs, is fundamentally unjust. For hundreds of millions of illiterate people in the world, school can no longer be of help. In the developing countries, nearly half the children of primary school age today are condemned, no matter what happens, to grow up without ever having attended a class.

The promotion of new techniques in no way implies dismissal of the most vital component of the fundamental educational reforms required by our age: the massive development of latent human resources.

In the years to come, progress in educational technologies will permit a large measure of individual fulfilment for those in the advantageous position to benefit from it. And increasing use of new technologies will not be limited to formal education. It will spread

beyond this sector and lead to considerable advances, in the fairly near future, in other fields of educational activity--promotion of literacy, basic education and public information--through the deployment of modern mass-communication media.

But prospects for mobilizing the human potential--at present scarcely tapped--are far from being dependent on technological means alone.

There are immense possibilities for mass participation in the social and educational enterprise. Peoples until now submerged by the tides of history are becoming aware of their will and their power. The size and strength of the potential to be unleashed through mobilizing the people, through volunteer movements and spontaneous popular organizations, is clear from examples of many countries over the past fifty years."

V. On Employment

"One particularly important consequence of this situation is that it makes the employment problem more acute. From 1960 to 1970 the active population in developing countries rose by 22 per cent as against 12 per cent in industrialized countries; from 1970 to 1980, the ratio is expected to be 21-11 per cent. Forecasts in absolute figures indicate that during this second period some 268 million people will make their first appearance on a labour market in developing countries, while only 56 million are expected to do so in the industrialized countries.

If to the declared unemployed we add the 'hidden' unemployed, including all those who do not look for work because labour market prospects discourage them, and the underemployed (also either declared or 'hidden') including those who work less than thirty hours per week

and endeavour to work longer or would do so if opportunities offered--then unemployment may be described as hitting a possible 40 per cent of the active population.

One particularly disturbing feature is unemployment among young people, including an increasing number of graduates with degrees and diplomas. Such unemployment is two or three times greater in this group than among adults over the age of 25. It affects people who have had an elementary or secondary education more than the illiterate, on the one hand, and more than those with higher education diplomas on the other."

VI. On Policy, Strategy, Planning

"Policies occupy the initial phase during which fundamental choices, formulated in the name of the community, are made by organs or individuals designated for this responsibility, with the people participating to a greater or lesser extent or giving implicit approval of certain postulates (if they are sufficiently integrated, socially and culturally, into the management of their public affairs).

Any educational policy reflects a country's political options, its traditions and values and its conception of its future. Clearly, in the first place, it is a function pertaining to each State's national sovereignty.

Expounding an educational policy is the end result of a process of thought which consists in:

Ensuring that educational objectives comply with over-all objectives.

Deducing educational objectives--in fact--from aims approved in over-all political policy.

Harmonizing educational objectives with those adopted in other sectors of national activity.

Educational policy cannot be reduced to the proclamation of a few over-all guiding principles. It must comprise a close-knit, unified structure of specific objectives, including: general objectives of a spiritual, philosophic and cultural nature reflecting a certain idea of mankind; political objectives corresponding to the national community's major options; socio-economic objectives fixing goals to be reached in terms of a certain idea of society and development; broad educational objectives defining the main guidelines which the educational system requires

in order to achieve whatever objectives are assigned to it that go beyond education; finally, the strictly educational objectives, expressing orientations approved for different types and levels of institution or action within the system.

Once objectives have been determined, it is not enough merely to list them. They must be arranged according to priority and given their place in a co-ordinated whole which only then deserves the name of educational policy.

We may then move from the policy phase to the strategic phase.

The concept of strategy covers three ideas:

1. The organization of elements into a coherent whole.
2. Allowance for chance in the way events unfold.
3. The will to confront that chance and control it.

To summarize: the combining element, the probability element, the element of will.

The object of strategy is to transcribe policy into a body of conditional decisions, determining action to be taken in relation to different situations which may arise in the future.

The translation of policy objectives into operational terms brings out: concrete goals, resources likely to be allocated, decision-making criteria and models forming the range of possibilities.

The object of planning is to make decisions easier at the various levels where strategical directives must be applied. It does this by making the calculations required to quantify the terms of technical choices, and by taking care that all necessary factors are brought together when the time comes to take action.

Planning cannot therefore be reduced, as too often believed, to a set of projections of desirable objectives. It is mainly a combination of ways and means for implementing policy. Social reality being in a state of perpetual change, and analytical tools being constantly improved, planning must be a continuous operation.

Failure to adhere to the logical process, moving from policy to strategy and from strategy to planning, ensuring the continuity and relevance of decisions made from one level to the next, is responsible for education having been too often oriented by chance, guided blindly and developed in anarchic fashion.

Linear expansion strategies can no longer be justified, either from the point of view of results obtained or their methodology. When an education system has to absorb a huge number of children, strategies must be modified, must move from the quantitative to the qualitative, from imitation and reproduction to a search for innovations, from a uniform procedure to diverse alternatives."

VII. On Educational Reform

"Today, it is no longer desirable to undertake educational reforms in piecemeal fashion, without a concept of the totality of the goals and modes of the educational process. To find out how to reshape its component parts, one must have a vision of the whole.

Today, whether reforms are partial or more general, we cannot dismiss the need to conceive of both one and the other in relation to the over-all situation, and to envisage their consequences.

We deal here with only one aspect of internal reform: its place in the over-all strategy of educational development. In this respect, the following points should be made:

1. Internal reforms cannot be separated from the search for alternatives to existing educational practice. These reforms may be effective enough in some cases to make it possible to postpone applying more radical measures. At the same time, they may also help to prepare for fundamental change later on. The capacity to effect partial reforms is a sign of vitality in an educational system and proof that it may be able to undergo even more sweeping changes. For this reason and, even if they regard such measures as inadequate, education authorities should encourage modification of educational methods and content.
2. Research in pedagogy and related sciences is insufficiently developed in many countries. Many questions in psychology, pedagogy and educational technology remain unanswered. Seen in this light, reforms play the part of experiments.
3. Experience shows that when internal reforms are ineffective, or lead to great wastage of talent and energy, it is generally because of poor communication and co-ordination between management at the top and action below. This leaves the creative, imaginative reformers isolated. The propagation of ideas and experiments is slowed down. Educational authorities in all countries should set up special machinery for promoting innovations; this should include information and application campaigns for tested reforms.

4. Success or failure in the concrete application of reforms depends on teachers' attitudes. In most schemes devised by innovative theorists, however, the aim appears to be to act on teachers--for them possibly, but rarely with them. This technocratic paternalism is based on distrust and evokes distrust in return. Teachers, on the whole, are not against reforms as much as they are offended at the way they are presented to them, not to mention imposed on them; thus, the major importance for educators to be actively associated with any educational reform project."

VIII. Recommendations

"1. We propose lifelong education as the master concept for educational policies in the years to come for both developed and developing countries.

2. Educational institutions and means must be multiplied, made more accessible, offer the individual a far more diversified choice. Education must assume the proportions of a true mass movement.

3. Each person should be able to choose his path more freely, in a more flexible framework, without being compelled to give up using educational services for life if he leaves the system.

4. Artificial or outmoded barriers between different educational disciplines, courses and levels, and between formal and non-formal education should be gradually introduced and made available in the first place to certain categories of the active population.

5. The development of education for pre-school-age children must become one of the major objectives for educational strategies in the 1970s.

6. Universal basic education, in a variety of forms depending on possibilities and needs, should be the top priority for educational policies in the 1970s.

7. Rigid distinctions between different types of teaching - general, scientific, technical and professional - must be dropped, and education, as from primary and secondary levels, must become theoretical, technological, practical and manual at the same time.

8. Professional and technical training colleges must be developed in conjunction with the secondary education system. The instruction they give must be followed by practical training at places of work, all of which must, above all, be completed by recurrent education and vocational training courses.

9. Efforts must be made to bridge the gap, still found in all too many cases, between educational establishments and business companies, whether privately or publicly owned, for the latter constitute a key element in the over-all education system. Their role should not be limited to training workers, but extended so far as possible to training technicians and researchers.

10. Throughout the post-secondary educational system, structures, subject-matter and student categories must be very broadly diversified.

11. As educational systems become more diversified and as possibilities for entry, exit and re-entry increase, obtaining university degrees and diplomas should become less and less closely linked to completing a pre-determined course of study. Examinations should serve essentially as a means of comparing skills acquired under varying conditions by individuals of different origins, a mark not of a conclusion but of a starting-point, helping each individual to assess the effectiveness of his own study methods. Evaluation procedures should measure an individual's progress as much as the extent to which he conforms to externally fixed standards.

12. Educational strategies in the coming decade should have rapid development of adult education, in school and out of school, as one of their priority objectives.

13. In all areas where there is widespread illiteracy, programmes organized for the adult population must include a strong literacy campaign. Action must be taken in two ways: it must aim firstly at functional literacy among strongly motivated sections of the working population and secondly at mass literacy when conditions are appropriate and, above all, when social development conditions - political, economic and cultural - are suitable for active large-scale participation by the people.

14. Institutions and services of a new kind, intended to help people teach themselves - language laboratories, technical training laboratories, information centres, libraries and related services, data banks, programmed and personalized teaching aids, audio-visual aids, etc. - should be integrated into all education systems.

15. (1) In the conception and general planning of education systems, allowance must be made for the possible contribution of new techniques with a view to developing a unified process aimed at using available means and resources in the most efficient way.

(2) When getting systems with technological support under way, strategies must be differentiated according to different levels of economic development.

16. (1) Modify teacher-training programmes so that teachers are equipped for the different roles and functions imposed by new technologies.

(2) Reserve a fixed part of the increase in education budgets for the rational development of sophisticated techniques.

17. Legislative, professional, labour union and social action should gradually reduce and finally abolish hierarchical distinctions maintained for no valid reason among the various categories of teachers.

18. Conditions in which teachers are trained should be profoundly changed so that, essentially, they become educators rather than specialists in transmitting pre-established curricula; the principle of a first, accelerated training stage, followed by in-service training cycles, should be adopted.

19. Auxiliaries and specialists from other professions (workers, technicians, professional and executive personnel) should be called in to work beside professional teachers. Authorities should also enlist the co-operation of pupils and students, in such a way that they teach themselves while instructing others, and become imbued with the idea that acquiring an 'intellectual capital' involves its possessor in the duty of sharing it with others.

20. It should be made a principle to centre educational activity on the learner, to allow him greater and greater freedom, as he matures, to decide for himself what he wants to learn, and how and where he wants to learn it and take his training. Even if the learner has to accept certain pedagogic and socio-cultural obligations as to subject-matter and methods, these should still be defined more in terms of free choice, of psychological propensities and drives among learners than hitherto.

21. All learners, whether young or adult, should be able to play a responsible part not only in their own education but in the entire educational enterprise.

To conclude: The indispensable remoulding of education demands that all its elements--theory and practice, structures and methods, management and organization--be completely rethought from one and the same point of view.

Essential elements of reform and change on which concrete work might begin in the 1970s may be summarized as follows.

The concept of education limited in time (to 'school age') and confined in space (to school buildings) must be superseded. School education must be regarded not as the end but as the fundamental component of total educational activity, which includes both institutionalized and out-of-school education. A proportion of educational activity should be de-formalized and replaced by flexible, diversified models. Excessive prolongation of compulsory schooling, which is beyond certain countries' capacities, must be avoided. The extension of continual training will more than compensate for the shorter average duration of initial studies. Briefly, education must be conceived of as an existential continuum as long as life.

'Closed' educational systems should be made 'open'. We must gradually eliminate rigid distinctions between primary, secondary and post-secondary education. Short-cuts and branch-articulations should be introduced into educational channels.

Special attention should be paid to fostering education for pre-school-age children by selecting and cultivating the most positive forms of family and community association in this work. All available means, conventional and unconventional, should be applied to developing basic education.

General education and technical training should be reconciled. Character and intelligence training should be harmonized. Education and work should be closely associated. Technology should be ever-present in the educational process, both as content and as guiding method. Technical education, which is unnecessarily expensive, should be supplemented and in many cases replaced by out-of-school professional training. Training should be so organized as to facilitate reconversion during employment, to lead to optimum professional mobility and to produce the greatest possible yield from the points of view both of the national economy and the trainees themselves. Narrow, premature specialization should be done away with.

There should be more diversified higher-education institutions. Universities should be turned into multi-purpose establishments open to adults and young people, and designed as much for continual training and periodic upgrading as for specialization and scientific research.

Education should be individualized and personalized to the utmost and constitute a preparation for self-learning. The processes of instruction and learning should be accelerated wherever this is in the learner's and the community's joint interest. New techniques for reproducing and communicating educational material, which are eminently suited to most envisaged innovations, should be introduced at a quicker pace, while technology in general should be regarded as a source of new pedagogic methods (where the cost of equipment is not excessive) and as means of making educational activity more democratic.

Educational management should be democratized, and the general public should play a large part in all decisions affecting education.

The above is assuredly not an exhaustive exploration of all details, yet may provide the broad outline for educational action appropriate to emerging needs and possibilities, and oriented towards the future."

IX. Co-operation and Exchange of Experience

"If education develops along the lines we have recommended, international co-operation among all countries will become more and more necessary.

We should therefore:

- Give increasing importance to particularly significant issues when policy-makers in education hold international meetings.
- Organize more meetings among countries with different socio-economic systems.
- Increase intra-regional cultural exchanges among countries formerly isolated under colonial regions.
- Encourage conferences grouping representatives of countries which are in different geographical regions but have common characteristics or are following a similar course of development.
- Promote as widely as possible the diffusion of information on innovative experiments, and set up machinery enabling government officials and educators directly concerned to study similar experiments in progress elsewhere.
- Increase the means at UNESCO's disposal for co-operating with Member States in the organization of on-the-spot studies and exchanges of experience among educators.

It would be desirable:

To increase international mobility among teachers and students, which implies in particular that governments remove obstacles preventing foreign nationals from teaching in their countries.

To reach formal agreements enabling students and teachers to continue their activities in foreign countries.

Experts should be better, fewer, self-displacing, should live closer to their colleagues and to the local populations, and more of them should come from countries where socio-economic conditions are similar to those being visited.

In our opinion:

Some kind of 'code of honour' should be devised to govern the behaviour of experts working in foreign countries.

In order to define what the role and position of foreign professional personnel should now be, progress achieved in developing countries must be taken into account. In some cases, this progress is so great that it is time for earlier one-sided assistance to become mutual and for the industrialized nations to benefit from experience acquired elsewhere, with the aid of professional people from the Third World.

Mutual assistance among the developing countries must be increased, especially among countries in the same geographical region.

We recommend:

Developing authentically national educational systems which enable individuals to achieve an increasingly harmonious and positive integration at all levels into their environment.

Setting up national, regional and international advanced study centres, and providing them with the necessary equipment.

According abundant scholarships or paid vacations allowing scientists to travel for study purposes, to keep themselves up to date

on scientific innovation and to make contact with fellow-scientists overseas.

Defining explicit national scientific policies, which scientists themselves should actively help to draft.

Associating scientists with the administration of science, so far as possible, in order to reduce bureaucratic procedure and restrict the part played by administrators.

Finally, it is only natural for us to hope that the reasons which have guided us throughout this report will also lead UNESCO to commit itself in favour of innovation in education, to push its theoretical research and practical activity in that direction--and by this go beyond the limits traditionally imposed on ideas about institutions, methods, programmes, students--so that education may expand to meet the virtually unlimited needs of individuals and societies."

X. Sources and Modes of Assistance

"The industrialized nations' financial and technical aid to developing countries firmly supports and orients international co-operation in education. The largest single element, quantitatively speaking, in the world's outlay on international technical assistance is the aid provided for education and professional training. In 1968, it represented about 40 per cent of all bilateral technical assistance.

Aid to education (in million dollars)

Type of aid	1968-69 (per year)	1970-71 (per year) (estimates)
Bilateral aid		
DAC countries	710	760
Socialist countries	150 - 200	150 - 200
Multilateral aid	220	400
Private aid	120 - 170	350 - 400
TOTAL	1,200 - 1,300	1,660 - 1,760

We consider that aid to education can and must be increased.

Due to the specific nature of educational investment, which can only have delayed-action effects, this increase must be achieved in the immediate future, although this does not necessarily imply that it will have to be continually multiplied in succeeding years.

Bilateral aid should not be discouraged, since it performs a useful service and because the countries concerned might possibly refuse to accord it in another form.

Development of multilateral aid is however highly desirable, since it is more in line with the requirements of international solidarity. It should, in any event, be stepped up sufficiently to reach a higher proportion than bilateral aid.

Finally, it is both possible and desirable to co-ordinate the various types of aid to education.

We suggest that international organizations seriously consider the geographical disparities in international co-operation and assistance.

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Aid should be more equitably distributed, both bilaterally and multilaterally. This is a political problem as well as one of justice, related to that of decolonization and to the development of truly international relationships between nations.

The practice of tied aid should be gradually dropped, especially in the sense that donor countries should agree to their aid being used in other developing countries (for training in national or regional institutions, for equipment supplied by neighboring countries, etc.).

This is clearly a development which cannot come about, however, unless the countries concerned make a concerted stand.

We call on all countries and international and regional financial organizations to review their interest rates on loans for education and training. Three solutions seem to us to deserve consideration: (a) the application of differential rates, to the advantage of the least developed countries; (b) interest bonuses conceded by the governments of industrialized nations; (c) greater contributions to the International Development Association.

The only chance of a real increase in aid to education for the developing nations is the hope that economically advanced countries will heed the United Nations call and make a genuine effort, beginning not later than 1975, to make yearly transfers of resources equal to at least 1 per cent of their GNP.

In order to increase gradually the proportion of allocations to education and training in the total volume of aid, it would be necessary to:

Utilize country programming procedures to re-examine the place to be given to education aid in the total volume of transfers of financial resources allocated to development.

Include an educational component in every development project ('package project').

Ensure that governments of developing nations systematically require all foreign investors, public or private, to undertake the training of nationals employed on development projects.

We hope:

That multilateral and bilateral bodies financing and assisting education will give priority to a new type of project to help countries make an over-all diagnosis of education, draw up a list of objectives and identify 'points of entry' designed to produce the most effect on systems, content and methods.

That bilateral and multilateral aid will concentrate more on the creation and financing of institutions capable of implementing alternative strategies, and on the establishment of the infrastructure for continuous educational reforms.

That developed countries agree to defray--even under already existing international assistance schemes--some of the operational costs of research and development of new methods and programmes, as well as investment expenditures on costly, modern, educational techniques and technologies originating from industrial societies.

That the developed and developing countries will establish systematic exchanges of data and experience to facilitate the choices

to be made and encourage, on all sides, the spirit of creativity so vital in a phase of innovation.

That the international community will finance a larger number of experimental projects calculated to enrich the world store of new experience rather than reproducing stereotyped activities and, as far as possible, replace laboratory experiments by field experiments and pilot projects carried out in exceptional conditions by experimental projects operating in the normal conditions of the country.

That international aid will be designed not to provide consumer goods but to create or develop productive potential; not to deliver prefabricated schools, but to help set up a national construction industry; not to furnish paper, but to assist in establishing a national paper industry, etc.

In short, we hope that international co-operation will concentrate on inventing and spreading innovations; it should move in this direction now, if the search for new solutions is not to be unduly postponed.

We propose that agencies assisting education, national and international, private and public, review the present state of 'research and development' in education with a view to strengthening the capacities of individual countries to improve their present educational systems and to invent, design and test new educational experiments appropriate to their cultures and resources. We believe that if nations, regional bodies and assisting agencies make the strengthening of these capacities

their first order of business over the next ten years, they will enable a number of countries to begin becoming true 'learning societies'.

Some of us propose that a detailed study be undertaken to establish the conditions in which it would be possible to set up an International Programme for Educational Innovations, attached to UNESCO and placed under the control of a representative international body--a programme designed to help countries take a decisive step towards a renewal of their education systems."