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ABSTRACT

The motive power in Algeria's national educational system has been and still remains the ideological force of the Algerian revolution. After independence was won, a dramatic increase in school enrollments (resulting from decentralization) intensified the need for more teachers, better facilities and materials, new curricula, oriented to national socialist goals, and long-range educational planning for leadership training and resource development. The national educational priorities are: (1) teaching Arabic and the "Algerianization of the curricula; (2) literacy and adult education; (3) promotion of general, agricultural and vocational instruction in rural areas; (4) education for girls and women, and assistance in the emancipation of women; (5) promotion of the teaching of science and technology; and (6) relating the school to life. But reforms within the educational system have shown that the system is not equipped to carry out its own revolution by itself. A large part of the responsibility for education is being placed in a new sector in the social environment--out-of-school education--which provides literacy education, "second chance" courses, and basic technical training. But if this approach is to be successful, it must be provided with the ability to break down psychological barriers to change in education. Direct experience of the contradictions inherent in the educational system has bred the conviction that action to promote lifelong education is necessary. (KM)

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STRATEGIES FOR DIRECTING EXISTING EDUCATIONAL
SYSTEMS TOWARDS LIFE-LONG EDUCATION :
WHAT ALGERIAN EXPERIENCE HAS TO CONTRIBUTE

by

O. S K A N D E R

This study, written at Unesco's request, will be a contribution to the work of the Interdisciplinary Symposium on Life-Long Education organized by Unesco in Paris (Unesco House) from 25 September to 2 October 1972

The opinions expressed in the study are the sole responsibility of the author

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I. INTRODUCTION

In July 1962, Algeria emerged from a long period of colonial domination. Its political independence, won at the cost of extremely heavy sacrifices, had the essential merit of galvanizing its energies and of plunging the country into the struggle for economic and cultural independence.

The process of critical examination in the development phase at once gave rise to radical questioning of the structures that had been inherited, an immediate subject of condemnation being the very basis of the educational system, which, it was realized, had to be transformed. Circumstances were later to accentuate the pernicious character of this system even more clearly, and to make it the target of measures showing a steadily increasing awareness of the overall revolution in progress.

The taking over of State affairs by the Algerians themselves, at the conclusion of what was, in effect, a devastating war, raised the problem of the widespread shortage of all types of specialists and administrators in forceful and sobering terms. What had been a focus of political opposition during the armed struggle now suddenly became a constraint to be faced and tackled with a full sense of responsibility.

In the face of this immense task and the shortage of material resources, the determination of the whole national community to affirm its identity was to be the driving force in this "venture". This explains the decisive part played by axiological considerations. Arab-Islamic philosophy⁽¹⁾ combined with socialist ethics, gave pride of place in social policies to intensive and sustained action for developing the potential of the individual.

The odds were thus clearly in favour of human development and, hence, of the establishment of an educational system that would be democratic in its aims, and both national and scientific in character.

All these considerations have given a particular tone to, and had definite practical repercussions on, the development of the Algerian educational system. This accounts for their importance in any analysis of the development of this system in the direction of life-long education. Does this mean that the measures so far taken have been systematically aimed at building up a coherent system of life-long education? The reply is no. The truth is that the prospect of life-long education, in the sense in which it is beginning to be understood to-day, is a recent development, in fact suggested by experience.

The genuinely experimental approach was started only in 1970, coinciding with the introduction of the first integrated development plan. It is still true, however, that the work done in the previous phases, even though empirical, contributed largely to the decision to undertake the re-casting of the whole educational system within the context of life-long education.

(1) Precepts attributed to the Prophet of Islam and often quoted by the Algerian cultural revolution state in substance :

"Knowledge is light, ignorance is darkness."

"No wealth can match the possession of knowledge; no poverty is to be compared with ignorance."

"Seek science (knowledge) from the cradle to the grave." (cont. page 2)

This document is intended to provide material for the discussions that will take place during the Interdisciplinary Symposium on Life-long Education, to be held at Unesco House, Paris, from 25 September to 2 October 1972. It will deal largely with the various measures -- usually limited in scope, or, in some cases, indeed, informal -- with which I have had the privilege of being associated and which have gradually brought the question of the possible development of the educational system on the direction of life-long education to the decision stage.

(1) continuation...

"Go out in quest of knowledge, even if it be to China".

II. DEVELOPMENT OF RESEARCH

1. The basic context :

The educational system inherited by Algeria, established in essentials by the former colonial power and directly administered by it, not merely represented an extension to the country of the model prevailing in the ex-Metropolitan territory but perpetuated in Algerian territory itself the political, economic and social structure that independence was, by definition, to shake to its very foundations.

The educational system, although extensively dislocated throughout had, however, to meet the needs of the first influx of new pupils at the beginning of the academic year, scarcely three months after the proclamation of political independence and only two years after the holding in Montreal, Canada, of the Second International Conference on Adult Education, whose recommendations concerning the transformation of educational systems were beginning to attract attention all over the world.

11. Collapse of the system's structure :

The existing educational system, rather like the whole range of structures during this period of violent change, was profoundly affected by the political changes that had taken place, the hasty departure of almost all its administrators and those it served, and their replacement by a population that differed in structure from the previous one.

The sum of contradictions reflected in this situation resulted in the complete collapse of the system and pointed in categorical terms to the need for a revolution in the procedures and means for building up an entirely new system. The traditional parameters were to be replaced by a political force characterized not so much by rationalism as by the ability to transmit its influence and focused to a much greater extent on action than on planning ahead.

12. Ideological pressures

The ideological factor was bound, however, to intensify all the pressures exerted on what remained of the educational system. Whether in regard to purposes or targets, or in regard to resources or organization the effect of the basic policy decisions was to bring out the complete inadequacy of the existing facilities.

The decision to embark on democratization resulted in an explosive increase in the numbers to be enrolled ; the "Arabization" policy entirely upset the teaching structure ; while the decision to concentrate on science and technology meant that content and methods were, in the main, rendered obsolete.

The elitist outlook and centralizing function of the system immediately gave way to a basically humanistic ideal and democratic administration of the peoples' affairs. The idea of the fully developed Moslem, socialist in outlook and fulfilling his role as a builder of society, became the spear-head of the movement to construct the new system.

13. The constraint of resources

Another feature of the initial situation facing the Algerian education movement was the actual insufficiencies of the material and human resources needed for setting up a system that would differ, both quantitatively and qualitatively, from that inherited from the colonial era.

Despite enormous sacrifices, the take-off point had not been reached. It was only the political consciousness and resourcefulness of the people that could to some extent offset this serious short coming. Extremely bold measures had to be taken, generally in the hurly-burly of day-to-day operations and deriving every possible advantage from the revolutionary fervour.

2. Palliative measures

The overriding constraint in this situation was the priority that had to be given to immediate practical action. The conflicting pressures due to the structural shortcomings of the system and the high expectations of the people at large made it necessary to resort to palliative measures, the effects of which, although giving only temporary relief, were to have an immense influence from the point of view of receptivity to technological innovation on a more enduring basis.

21. At the organizational level

In view of the urgency and complexity of the problems and the weak state of central administrative organization, the first step to be taken by the educational authorities was regional decentralization.

Proof of the efficacy of this important decision soon followed. It was particularly striking in the development of school accommodation, which practically doubled within the space of a year. Through local and individual efforts, the effective capacity of the system was increased almost ten-fold (750,000 new places were established in primary education alone), while a variety of different models was introduced as a means of breaking down the whole system of previous habits.

Parallel with this historic achievement with regard to school enrolments, a mass of new ideas emerged concerning the teaching of science and technology, literacy and the education of the masses, and political and social advancement; these measures, although affecting only given sectors at the outset, very rapidly became established as part of the educational pattern.

22. In regard to content

The same drive that had, at the organizational level, resulted in the diversification and decentralization of the educational system, brought about far-reaching changes in the content of instruction.

The Arabic language and Arab-Islamic values - the prime factors in restoring Algeria's national identity - assumed, from the beginning an important place in school curricula (occupying approximately one-third of the time) which had, up to then, been focused on Western civilization subjects, using French as the language of instruction.

Training for citizenship, and scientific and technological education, in their turn, were either given a substantially increased place in the time-table or had their aims reviewed, with a shift of emphasis.

23. In regard to staffing

The small proportion of native teachers and the mass exodus of French teachers immediately after Independence, the access to the system, from the commencement of the first academic year, of a school population numbering twice as many in primary education, three times as many in secondary, general and technical education,

and ten times as many in higher education, combined to produce a serious shortage of teaching staff.

Scarcely one tenth of the number of primary teachers required could be provided. Recourse to foreign aid enabled part (about a third) of the needs at the secondary and higher levels to be met. But the shortage could be made up only by means of large-scale, systematic action in regard to the staffing pyramid.

In fact, the qualifications and traditional pattern of school and university teaching staff had to be deliberately sacrificed in order to meet the massive needs created by the system. Two parallel operations involving the systematic advancement of existing teachers and the recruitment, particularly at the elementary level, of new categories of assistants (relief teachers, instructors, educational advisers) made it possible to balance the ratio between teachers and pupils.

Thirty thousand new teachers were recruited in this way; almost all the 60,000 staff involved, however, found themselves facing responsibilities for the discharge of which they had had no previous specific training.

3. The rationalization phase

After almost two years of constant effort to remedy the many imbalances from which the system suffered as a result of the exceptional expansion affecting its basic components, the time had come to make an initial assessment of the action taken and to embark on a new policy that would take account of a number of factors that had come to light at the operational level and ensure that the components of the system were consonant with the basic facts of the Algerian revolution.

In the light of the technical, ideological and political considerations prevailing, a new and coherent policy began to be defined for dealing with the problems of organization, curricula and training.

31. Technical considerations

The introduction of more rigorous techniques was required in order to ease the burden of the new needs created by the policies that the launching phase had dictated, and to increase the potential of existing facilities through standardization and co-ordination.

A systematic inventory of the resources available was, in fact, required in order to establish the practical basis of the new system. Attention was directed more especially to the development of facilities and buildings, the production of teaching materials, and the general extension of arrangements for the pre-service and in-service training of teachers.

Experimental units were, in fact, set up centrally to deal with such subjects as school buildings, teaching methods, use of new methods (radio, television, correspondence courses, community development), the general and professional training (full-time and part-time of newly recruited serving teachers (a chart showing how such training was organized is annexed to this document), literacy teaching and out-of-school education.

and the education of the handicapped.

32. Ideological considerations

The development of socialist man calls for the application of a process that will bring out all the latent powers of the individual. In practical terms, this means that the conception of education must be widened to include every aspect - intellectual, ethical, civic, biological and physical - of such development.

Similarly, education must be recognized by society as a dynamic factor in community development, inasmuch as the educational system is, in itself, a factor in this development.

Adoption of these guiding principles resulted in a radical transformation of syllabuses, which were non conceived, over and above their specific content, as integral components of a comprehensive, unifying approach to training for citizenship.

With regard to organization, a number of new features have been introduced into the educational system with the object of promoting new types of educational experiments with marked social implications: education in nutrition, organization of sports and cultural activities, introduction to politics and technology, participation in activities of social or national importance.

33. Political considerations

Having regard to the aims of the national education system as such, it has become apparent to everyone (and to the administrators of the system in particular) that if the national political ideal was to be served effectively - if the leaders so badly needed by the nation were to be trained, and if the country's own resources were to be developed - the essentially empirical methods so far employed must be replaced at the earliest possible moment by a planned approach.

The first result of this new awareness of the problems in regard to methodology was to be seen in the fixing of priorities and their incorporation in the first sectoral plan established by Algeria prior to the launching, three years later, of the first attempt at planning on a national scale (1967-1970 three-year preliminary plan).

The list of these priorities is a sufficiently significant indication of the new purposes of the system as a whole:

- Teaching of Arabic and the "Algerianization" of curricula
- Literacy and adult education
- Promotion of general, agricultural and vocational instruction in rural areas
- Development of education for girls and women, and assistance in the emancipation of women
- Promotion of the teaching of science and technology
- Relating the school to life

4. Institutional provision for research

The preparation of the four-year development plan (1970-1973) ushered in a new phase in the integration of the educational system with the overall process of Algeria's industrial, agricultural and cultural revolutions.

For the first time, the concept of human resources emerged as an essential operative factor in the process of remodelling the country's educational institutions. The vital need to develop the nation's human resources, and its implications for the progress of society as a whole, brought about a radical change in the approach at every level of the educational system, together with far-reaching changes aimed at ensuring the highest possible degree of practical efficiency.

4.1. Decentralization and devolution

The decentralization policy instituted in 1965 led to the establishment of a three-level administrative organization, national, regional and local. Executive power itself has been similarly distributed, since each of these levels represents a real democratic participation structure.

The authorities established under this system have given a rational and dynamic basis to the sacred principle of administration of the nation's affairs by the people. Their jurisdiction extends to all political, economic and social aspects of development and development planning.

The educational system is a logical and consistent reproduction of this model, the central authority being the government and the competent ministries; the regional authorities, the directorates of education and cultural in the provincial departments (co-ordinated with the People's Assemblies in the Wilayats or departments), and the local authorities, the educational services (co-ordinated with the People's Assemblies in the communes).

4.2. Relation between education and employment

The trained specialists and key workers needed could only be supplied by means of an educational system focused on the development targets planned. But it is obvious that the growth rates of politico-economic and educational systems do not coincide. In particular, changes in national education institutions are always slow in comparison with the growing needs of a society undergoing rapid transformation.

Conscious of this lack of correspondence, the Algerian authorities have tried to devise a variety of ways and means of meeting needs to a reasonable extent in the key development sectors. Concurrently with the necessary reform of the existing educational system, it was decided, in conformity with the guiding principle of the cultural revolution, to have recourse to a number of exceptional measures designed to impart substantial impetus to the educational movement as a whole.

This resulted in such measures as the statutory obligation in the economic sector to provide training in every economic unit employing over 100 workers, designation of substantial groups of

the population to receive literacy training at the regional and local levels, the establishment of new institutions for the education of the people at large (Institutes of Technology, National Literacy Centre, National Centre for General Education).

43. Educational technology

It was the four-year development plan (1970-1973) that, more than anything else, made it possible to overcome most of the psychological barriers raised in all the previous operations by the question of the relationship between education and technology. The educational authorities, encouraged by certain national and international experiments but also bound by the dictates of the situation, were readier than they had been in the past to face the issue of technological development in their sector, against a more coherent background.

The new structures provided an opportunity for making a systematic analysis of the functions of education and in defining the strategies for their accomplishment. The technological institutes are designed to serve as instruments for supporting innovations of this kind and are already receiving special attention from the authorities concerned.

III. THE INTERACTION between "formal school education" and informal out-of-school education"

The transformation of the system which has been in progress for ten years past reflects, in its quantitative indicators, a rapid and continuing advance that has, in fact, been made possible only by the extraordinary impetus given to the education movement by the political authorities and the people at large.

The underlying standards on which the system was based have, through the force of events, been profoundly affected. Even secondary and university education - reputedly the most rigidly entrenched traditions of the former system - have, like compulsory elementary education, felt the effects of the explosion brought about by political and economic independence.

Nevertheless, it is generally admitted that, in spite of the striking changes that have been made, the system has not basically altered. The all-embracing reforms that have been undertaken so far have as yet produced only scanty results. The main features of the educational movement are still not closely enough co-ordinated with the new purposes of the educational system.

The conception of education adopted as an aim of the Algerian revolution is one that, by definition, seeks to take in the whole of society (1). But the scanty facilities at present available, the admittedly slow process of changing attitudes of mind, and the too often harmful forms of traditional education cannot, in themselves, bring about any real regeneration of the system.

The chief merit of the appreciable number of attempts made so far under the name of "reform" has been, to my mind that they have produced a relatively keen appreciation of the limitations of action from within. It has been found that the system is not equipped to carry out its own revolution by itself. As this is essentially a dialectical process, a conflicting force to be introduced: this has been found in the system of informal out-of-school education.

1. Their purposes

Where under-development exists, ideological pressures are often most eloquently reflected in the aims assigned to the overall educational system. In Algeria this phenomenon is particularly evident as soon as the revolutionary aspirations of the masses are compared with what the classical system of education can offer.

The leeway to be made up in school enrolments and the population explosion, the build-up of investment in the social and cultural sectors and the stability of the labour force, the technical transformation of the means of production and the archaic state of educational methods, make it increasingly necessary for education to delegate a substantial part of its responsibilities to a new sector in the social environment - out-of-school education.

(1) "When books begin to play their part...and circulate like blood through

11. The political argument

The democratization of culture in its broadest sense is both a factor in, and an essential pre-requisite for the Algerian revolution. When applied within the specific context of our society, quantitative considerations come sharply to the force, compelling attention to be given to the raising of the standard of the people at large.

The traditional school is, by its nature, open only to the youngest section of the population, and therefore cannot cater for adults - of whom 75% are illiterate. It has not, so far, been able to take in more than 50% of the school-age population, while the drop-out rate continues high 40%.

The decision to develop out-of-school education is thus warranted by the existence, outside the scope of formal education, of a mass of people with a generally low level of education, representing, moreover, at least six times the school population. Not only must all these individuals receive some general educational grounding, but they must also be given knowledge of an active kind that will intensify their national consciousness and enable them to take their place within the country's productive sector.

12. The economic argument

The take-off point in economic development depends on the judicious use of national resources, including financial and human resources. Socialist philosophy recognizes the dynamic power of every individual in society and aims at making all its potential energies effective.

Expenditure on school education and traditional forms of training is becoming increasingly subject to strict control by the economic sector. In Algeria, as in many other countries, a threshold in investment has been reached and probably cannot be passed for some time. Increased resources depend on a marked expansion of the labour force. The traditional form of education hardly seems able to achieve in this respect a rate of expansion comparable with that of the industrial sector.

Out-of-school education makes nonsense of the reactionary concept of "wastage in education". It brings home to us the real waste implied by the exclusion from the traditional training system of the section of the population and particularly the young- which has been arbitrarily checked in its evolution at a level that dooms it to remain apart from the process of social and economic development. Its mission is to prove that this waste can be avoided by modest additional expenditure on the establishment of regular facilities for providing a second chance in education.

13. The educational argument

Traditional education is inevitably up against a blank wall because of the steadily increasing rate of advance in science and technology. Not only is knowledge constantly expanding, but the extraordinary development of the communication media is depriving the full-time professional teacher of his age-old position as the sole dispenser of knowledge.

(1) cont.....lingering superstitions, then society can aspire to the higher forms of culture...schooling education all-out literacy work, giving people some idea however elementary, of the modern world and, in particular, its underlying spirit - these are some of the paths

Traditional education, however - and this is a universally established fact - instead of adopting this technological innovation for itself, mistrusts and fights against it. It appears justified, in part at least, in what it takes to be the battle for its future, by the nature of the new approach to inter-personal communication which, if not strange, is at least foreign.

One of the tasks of out-of-school education is to challenge the traditional school system in their common sphere of influence vis-à-vis the individual and to free it from the numbing effect of traditional administration. In its sophisticated form, this conflict is reflected in the establishment of appropriate models of integrated educational units.

Out-of-school education seems here to enjoy an inestimable advantage over the traditional system in that it is developing in an environment in which the resources of the new technology, and particularly sociological and technological media, are available as a matter of course.

20. Their aims

The establishment of the specific purposes of the educational system depends on the identification of aims, in order of priority and the initiation of action designed to achieve them. The systems of formal and informal education interact here as well in regard both to the quantitative and to the qualitative aspects.

21. The quantitative aspect

Whatever changes may have occurred in social structures, the national education institution is, generally speaking, still far from losing its importance as an instrument for transmitting certain group values to the rising generations. In this respect, the place falling to it in the process of securing the integration of the individual at certain periods of his development, is, and will necessarily remain, important in relation to the general responsibilities assumed by society.

From this it follows that, in the abstract, the relationship between the scope of formal education and that of out-of-school education depends on the age of the population, and subsidiarily and economic factors. In fact, however, the structural imbalances affecting the societies of the developing countries reflect a situation that differs fundamentally from this theoretical division, since while the various units of social and educational action have specific functions of their own, transfers of responsibility from one to the other are often to be noted.

Out-of-school education, for its part, seems in many respects bound to make up the short-comings of the traditional system rather than to launch out on a course of action of its own to develop and onliven the educational background of a population that is functionally integrated in the process of the society's growth.

Algeria's case is a particularly striking example of this strategic constraint since, for the four-year period 1970-1973, the traditional educational system is expected to absorb a total school population of 2,500,000 pupils, while out-of-school education and training facilities have to cater for roughly the same numbers in literacy work, "second chance" courses, and basic technical training.

22. The qualitative aspect

The relationship established in quantitative terms between formal and out-of-school education is further defined and strengthened from the qualitative standpoint. Indeed, either because of the nature of the population involved or because of the resources being utilised, existing systems cannot escape the essential constraint imposed by the previous development pattern of the educational structure.

In most cases, the traditional system carries on with its model based on the antithetic relationship of education and change. Innovation is thus regarded and accepted only as an aid to the formal exercises of the teacher-power. Its performance and its organization alike are marked by this obstruction and make it very difficult for outside action to have any impact.

Out-of-school education, based on the principles of a philosophy of change, strives to apply its strategy to the radical transformation of the whole educational pattern. But at the same time it finds itself compelled to operate in an environment which is the product of the school system, and to a large extent to use that system's facilities.

This is the real field of action of out-of-school education. If it is to constitute the vector of change that we would like it to be, it must be imbued with a particularly forceful logic, based essentially on the power of the technological process to break down psychological barriers.

3. Systems of influence

Critical comparison of the "craft" and the scientific management approaches as applied to the educational sector clearly brings out the whole set of contradictions that the traditional system is constantly producing within itself because of its inability to "get away from itself" as regards the whole range of means supporting it.

The contribution that is expected of out-of-school education is in fact the creation of objective conditions for the necessary liberation of the system. There is a vague feeling that neither the process of interaction among decision-makers nor administration in the proper sense of the term really meet the requirements of the technological approach; but at the same time the overriding force of the system is such that the effect of this questioning is lost in the subtleties of formal argument.

How, in fact, on the basis of phenomena alone, can we discern the real nature of the democratic policies of the educational system when we know that the same principles are involved by those most in favour of centralization as well as by those for whom participation at all levels is an article of faith? How can we overcome, without recourse to deliberate and organised machinery, the difficult problem of evaluation in systems where the educational relationship is controlled exclusively by the teacher, the cornerstone of the whole system?

31. The process of interaction in decision-making

In any scientific management system, the process of decision-making takes place at appropriate levels and moments in the planning and initiating of action. Consistent following through from the policy-planning stage to practical decision-making on action and the general line it is to follow is closely dependent on the existing organizational

The political and administrative organization described in paragraph II.41 covers, as has been seen, the educational system. From the formal standpoint, the corresponding executive authorities have indeed all been established. In operation however, the machinery is coming up against serious difficulties in changing traditional attitudes and reactions probably because the approach to implementation is still not sufficiently critical.

Out-of-school education, while adopting the same form relates indubitably to new situations which are, thus, free from the influence of pre-established models. The scope for experiment which lies before it should be a source of hope both for out-of-school and for school education.

32. Mobilization of resources

The many shortages that affect the educational systems of the so-called developing countries represent a very serious obstacle to the progress of school enrolment. There is very little hope of this situation's changing so long as procedures and the kind of means employed remain as they are. The administrators of the system have increasing difficulty in making the resources with which they are supplied meet the immense needs of development.

New methods are required to salvage the educational enterprise which, as each day goes by, is running further aground. The social environment can provide the additional possibilities required. The reason why this has not been satisfactorily achieved is that the deeply entrenched dichotomies between the school and society have scarcely changed. Out-of-school education is, it is felt, more likely to be able to overcome this handicap and to take systematic advantage of these potential resources, while ensuring that they also become available for use by the traditional school system itself.

IV. TRENDS IN DEVELOPMENT CONDUCTIVE TO LIFE-LONG EDUCATION

As stated in the Introduction to this document, the idea of life-long education did not make its official appearance in the Algerian educational system until the launching of the 1970-1973 four-year plan. This was due to the fact that the said plan, for the first time, made allowance at the operational level for the requirement of overall development co-ordinating the industrial, agricultural and cultural revolutions as a whole.

The introduction of the key theme of life-long education into development operations, over and above the actual meaning of the term itself is significant of a dynamic practical transformation of the educational system hitherto built up. Whereas at the outset the trend toward a life-long education seemed to point rather to the introduction of machinery that would gradually be extended; leading, through constant improvement, to the full institution of life-long education, direct practical experience of the contradictions inherent in the system has bred the conviction that action to promote life-long education is both a philosophical necessity and a strategic constraint.

This essentially dialectical approach to the problem of transforming the educational system according to the life-long education pattern is of crucial importance if the current development process is to be understood and the real import of the pressures introduced by the national political aims is to be appreciated. The historical review given in the earlier parts of this document will now make it possible to situate more accurately the whole range of problems that the Algerian educational system has to face.

1. A few general observations

It is, in fact, only logical that there should be differences - sometimes very marked - in the procedures adopted for arriving at what would seem to be a coherent pattern of transformation in educational systems. The reason for this is that the organizers of the educational movement, while having one and the same ideal in view, are nonetheless involved in widely differing situations, from those constraints they cannot escape.

Politically, economically and socially, Algeria has specific features which are reproduced - consciously or otherwise - by the educational system and which are implicit in any strategy that seeks to transform it. Once again, the preceding pages provide sufficient illustration of this state of affairs, making clear both the motives for this or that course of action and the form such action is to take.

It is still a fact, however, that if we try to go a little more closely into things and endeavour to look beyond the letter to the spirit governing the action taken, we can scarcely fail to see that the premises of action, can, as often as not, be applied more generally.

II. The concept of life-long education

Whole it is true that the concept of life-long education is, in the literal sense, easy to grasp, it is equally true that, when its practical import is considered, it is found to contain a number of ambiguities, which experience soon shows to be parasitical adjuncts interfering with policies for re-casting the educational system.

The fact is that, in seeking to translate the concept into operational terms, educational systems tend to consider only the instrumental aspects, which are sometimes regarded as necessary, but beyond the jurisdiction of the authorities concerned, and sometimes as subsidiary and, therefore not carrying any priority in regard to capital expenditure.

At a higher level of reflexion, all agree in recognizing that life-long education is, more than anything else, a response to the many challenges directed at educational systems in regard to their role in the development of the individual and the community, i.e. the challenges of the expanding society, of the modern mass communication and information media, of the overwhelming and unconditional need for democratization, of the population explosion, and of modern youth.

But the pre-requisites for the required transformation are, for their part, still insufficiently controlled and approach models are still too antithetical; even sometimes within a single system.

12. The notion of system

The problem of the organic unity of educational systems is a general one encountered in every country and affecting all educational structures. It is all the more acute since "national education institutions" are to-day a long way from satisfying all educational needs, considered in general.

There is an educational "system" everywhere, and formal or informal structures for education and training within the sphere of social activity itself. But glaring distortions appear in their operation, both within the educational system and from the point of view of its relationship with the whole range of out-of-school educational units.

This makes it particularly difficult even to use the concept of "system", fundamentally different levels for the consideration of different cultural milieux being, in most cases, confused.

13. The technology concept

The technology concept is equally dangerous in educational innovation strategies. Behind the general spread of its use, there is, in fact, an infinite variety of attitudes and ways of harnessing the material resources of technical progress to be seen. Only rarely do we find examples of educational technology fulfilling anything more than an auxiliary function.

It is a frequent error to believe that appreciation of the concept of educational technology depends on the intensity of educational crises and, hence, that the developing countries - because they are subject to the greatest pressures - are better placed for deriving benefit from educational technology.

I am convinced that - in much the same way as is the case for the concept of life-long education - the notion of technology has not yet found its place as a mental disposition implying in essence a critical and systematic process of analysing educational work. It still has too strong an overtone of "hardware" about it, the mystic prestige of which is, perhaps, more marked in the developing countries.

2. Development towards a system of life-long education

All the above remarks apply to the Algerian educational system. The scope of this study does not, unfortunately, allow of describing their exact impact on the system itself.

The time has come to identify - in the light of the evolution that I have tried to trace simply through what seem to me to be its salient points - some at least of the positive or negative trends observable in the system as we come to the end of the initial planning experiment and are about to start on a new phase in the preparation of a national plan, already distinguished by the priority assigned to the technological revolution.

21. Choice of indicators

It is clear that the main trend in the development of the Algerian education system is the effort to find an institutional framework for functional education whose objectives are, and will remain, democratization, "Algerianization" and modernization. This implies the continuation and intensification of the ideology introduced in 1962 as well as the technical remodelling of the system in order to ensure that all citizens develop their potential to the utmost and can be smoothly and satisfactorily absorbed into a society whose growth is closely linked with that of the educational system itself.

The volume of investment achieved so far will be maintained, in spite of the heavy burden it puts on national resources as a whole. But there must be a greater degree of rational utilization in order to secure maximum profitability. The reconciliation of needs and resources depends on a more extensive effort to expand the potential labour force. The effects of this policy should be felt primarily in the following four areas: development of organization, of content, of methods and of teacher education.

22. Development of organization

The Algerian educational system has found it necessary - first of all by the force of circumstances and then by the deliberate policy of the revolutionary executive - to adopt a course of decentralization and devolution in the same way as all the country's other political and administrative structures. As we have seen, formal responsibility is today shared among the local, regional and national authorities.

Similarly, the interaction established between the formal education system proper and the out-of-school educational structures calls, sooner or later, for the removal of these divisions between the various units that are meant to constitute one and the same system of education and training for all individuals.

Concurrently, measures are being introduced at the various levels of the existing system in order to re-define its educational functions and its organic links with the employment world (e.g. the reform of higher education which has been going on since 1971, the independent status and polytechnic Institutes of Educational Technology which aim at becoming essentially functional training structures).

This development, required and supported by the political authority, has, however, encountered certain obstacles in practice, the most important of which are psychological. The inadequate training of the organizing staff and the insufficient knowledge of the field of operation, have combined to create ideal conditions for attempts to rehabilitate the centralizing and compartmentalized model, the spectre of which at times appears in the guise of opportunism and at others in the subtler form of operational logic.

23. Development of content

The reform of content designed to adjust curricula more closely to the national aims of modernization, multi-purpose training and the stimulation of individual creativity is not a new policy in the Algerian educational system. Many of the measures described below reflect the importance that the educational authorities have always attached to achieving these aims.

This attitude has been demonstrated most clearly in the introduction of radically new content both in the so-called "general background" subjects such as history, civics, literature and philosophy, and in those with a wider application in developing the pupil's personality, such as cultural and sports activities and initial technological training.

But the era of radical transformation is, it must be admitted, an aspiration rather than anything else, countered as often as not by a whole series of resistances which, in essence, represent the still vigorous

defence reactions put up by the traditionalist approach to the transmission of knowledge. But this situation is due not so much to attachment to established ideas as to the fact that there are no sufficiently convincing operational models to show the potency of experience in the building up of knowledge; educational research is, in fact, hesitant in its approach to such models.

24. Development of methods

Development of methods, though closely linked to the development of content, attracts the attention of educationists more readily and gives rise to a greater number of experiments. The Algerian educational system has been particularly noteworthy here since so far most research, in the true sense of the term, has been predominantly or even exclusively concerned with methodology.

The idea of education centred on the individual and seeking, first and foremost, to involve him in his own education, is now practically accepted. Not only have the leading techniques in this field been tried out experimentally, but in many cases they have been applied on a general basis (activity methods, group work, multi-media systems, and so on).

But because research into content has not been developed to the same extent, technical innovation has, in many cases, consisted of mere make-shifts to give the impression of an up-to-date system and there is, from this point of view, some danger of seeing a continuation of the conventional attitudes which are so prejudicial to the whole of this system.

25. Development of teacher education

The question of teacher education and the training of administrators has, from the outset, been regarded as the cornerstone of the educational development policy. A dense and varied network of general and professional training facilities (pre-service, in-service, full and part-time) has been steadily developed since 1962.

The establishment of the Institutes of Educational Technology is, from this point of view, an event of capital importance in the process of strengthening the dynamic function of teacher education, with the purpose of opening up the educational system as a whole to innovation and making it more functional. Now that the specific character of the science of teaching has thus been recognized, the Algerian educational system has a great asset for the effective development of the system in the direction of life-long education.

Experience with these Institutes of Educational Technology is still too recent for a value judgment to be made. We may, however, legitimately raise such issues as the real influence still exercised on their structure by the model of the former teacher-training schools (écoles normales) whose place they have taken; the threshold of reform in teaching methods that must be reached; the nature of the Institutes' operational resources (including staffing); and lastly, their real capacity to serve as centres whose influence on teaching methods will radiate outwards and as foci of life-long training.

V. Conclusion

At the end of this rapid and, indeed, incomplete analysis, a conclusion is needed to summarize the salient points in the development of the Algerian educational system, while at the same time recreating - for the purposes of objective appraisal - the particular context within which the work of educational reform is establishing itself more firmly day by day.

The first idea that must strike anyone observing Algerian experience is that the radical change in the pattern of the national educational system as a whole cannot, intrinsically, be explained in terms of the resources available alone. The fact is that the motive power in the education sector (as, on a larger scale, in political and economic life) has been and still remains the ideological force of the Algerian revolution. The driving force of this philosophy is not easily amenable to the instrumental parameters of scientific evaluation and at times, in fact, is strongly at variance with them.

The second idea is that the concept of life-long education appears to merge organically with the philosophical model to which the Algerian revolution is directed with regard to the development of human resources - hence the undeniable methodological difficulty of interpreting the specific development features of the present educational system from the standpoint of strategy alone.

This leads on to the third idea, which is a corollary of the second. In the present phase of the aggregate progress of the Algerian revolution, the strictly technological approach - although best calculated to rationalize the development of the system - can be adequately applied only by the most meticulous planning possible. But the instruments at present being used for such planning in the Algerian context are still insufficiently sophisticated, particularly with regard to the integration of the education sector.

The most obvious repercussion of the planning machinery is to be seen in connexion with methodological policies, which are urgently needed for development strategy in regard to the educational system. The insufficiently critical nature of the processes followed in the educational undertaking is reflected, at the practical level, in the persistence of the basically psychological and logical barriers of which examples have been provided above.

A N N E X

ORGANIZATIONAL CHART OF OUT-OF-SCHOOL TRAINING

