This seminar paper presents an analysis of the many complex issues inherent in planning and implementing those educational interventions designed to accelerate human change so that it matches the pace of external change in traditional societies. After establishing the importance of sensitive periods when learning can be massive and intervention is most likely to be rewarding, two maxims for intervention are stipulated. Subsequently, problems inherent in bringing about change are addressed and their implications for different styles of innovative change are examined. A number of basic propositions concerning the nature of change are advanced and linked to the problem of psychological stress engendered by change. Criteria thought to be crucial for judging any innovation project (i.e., criteria related to individual coping and personal security) are expanded upon in subsequent passages. An educational model based on habilitation is put forward as preferable to the usual, implicit model based on rehabilitation. Implications arising from the analysis for planning, implementing, and evaluating educational interventions are briefly explored in terms of the need for preliminary information, and determination of aims and objectives, as well as consideration of the type of intervention strategy, leadership style, and experience-based assessment and revision of the intervention model used. Several conclusions based on the presentation are offered. (Author/RH)
It is clear that for all of us in our work the ultimate target is the child and the young person throughout the two decades it takes in most of our societies to prepare a human being for adulthood. With young children certainly, and also to an extent with older ones, the immediate target has to be all those in direct contact with them: mothers and fathers, other "care-takers", and also all kinds of other institutions, groups and individuals who, because of their function, discharge an educational task. These may include schools, health and social services, youth groups, peer groups of various kinds; among individuals included may be policemen, craftsmen, shop-keepers, power figures and even rogues. All these provide models which may have an educationally powerful influence on children and adolescents. These institutions, groups and individuals in different degrees and in different ways, perform three functions:

(a) they embody and transmit to the young the values of the society;
(b) they foster or inhibit cognitive and personal growth;
(c) by encouraging and favouring select skills and activities they help to determine the kind of person the child will become.

2. From this we can identify two of the major problems with which we are invariably faced in innovative work:

(a) First, what is the best point of entry through which to influence the development of children over two decades, bearing in mind that we wish such influence to be institutionalized and sustained?
(b) Secondly, in the matter of values, what are the choices that should be made among the many that could be? Should the priority be respect for culture - even if this may mean stagnation? Or should we be guided by some idealized models of man, e.g., between the Western individualist and others?

Beyond this are other weighty questions concerning how we can influence the nature, direction and above all the speed of change itself. We are in the business of accelerating human change to match the pace of external change. To win the race between education and catastrophe we have to do in two or
three generations what has hitherto taken six or seven where it has been even moderately successful.

3. In practical terms, it is clear that, first, the primary educators throughout the first two decades are those who care for and discipline the child. They begin by being the buffer and the bridge to his surrounding culture. They are the mediators of the culture and against their influence few other individuals or groups can prevail.

4. Secondly, formal educational institutions in present circumstances are the guardians and transmitters of the cognitive skills needed to gain entry to the store of experience built up by the particular culture and by mankind. They are usually also the mediators of a wider culture than the family provides, and offer a first and structured apprenticeship to community living outside the family. The school system, where it exists, is the only organized structure so far conceived which is in contact with all children and their parents during at least one decade of growth. All other systems are partial.

5. Any discussion of points of entry must raise issues of "when" as well as "where". There are sensitive periods when learning can be massive for good or ill and when intervention is most likely to be rewarding. These are:

(a) the early years presided over uniquely by parents or caretakers;
(b) the period when the child first shows clear signs of thinking in concepts and of reasoning;
(c) the two phases of adolescence:
   (i) puberty, with the personal/social disturbance involved, and the potential rise of abstract thinking; and
   (ii) later adolescence, when the personality is reorganized around physical, sexual, social and vocational issues.

6. The early years are clearly a sensitive period in all cultures; they are massively influenced by biological factors (as Professor Axton has reminded us). The subsequent periods are much more dependent on culture and its demands. Adolescent role anxiety, for example, is a very significant factor in Western Cultures, but there may be no such manifestation in other cultures in which social structures exist for formal induction into adulthood.

7. The conclusions we might draw from this brief analysis of where to intervene are not particularly novel. We are left with the following two maxims: first, to capitalize fully on existing institutions rather than invent new ones. This may mean consolidating, or extending, the role of the school especially in rural societies where it may be the only institution to hand; secondly, to intervene at sensitive points but not to neglect the support systems in between.

8. Let us now address the problems inherent in bringing about change and examine their implications for different styles of innovation. There are a number of basic propositions: change is not just technological, though technology may be one of its causes. It is concerned more closely with:
human behaviour and human relationships within groups and between groups;

changes in ideas about man, about his status, responsibilities, rights and the ways in which man is perceived by himself and others; and

the kinds of competences which are valued and rewarded by modern society as distinct from traditional societies.

All these mean that habitual and traditional personality structures, modes of perception, valuations of human activity and value systems can become counter-productive. In the past, change took the form of slow evolution and muted conflict of generations. Now, in many cases, the rate of change exceeds the capacity of human beings to adjust and adapt. Hence, there is increased inter-generational conflict, increased delinquency and other signs of stress: psychosis, alcoholism, drug abuse, etc. There is breakdown of the traditional family structure. Education (formal or home-based) tends to be conservative (i.e. anti-revolutionary) because it is based on adjustments to an earlier state. Schools tend to teach the "old values and virtues"; homes tend to reflect the experience of parents - in a past situation. Tolerance of the stress engendered by change and the ability to change with the times depends upon:

1 personal security and belief that problems can be mastered;
2 flexibility rather than rigidity, i.e. acceptance of a degree of change rather than total resistance to it; and
3 the necessary cognitive skills to analyse the problem and adopt suitable strategies to meet it.

If the analysis so far is approximately correct, it has profound implications for any innovation project. The educational style and content (whether at home, at school or in the community) must be judged by two main criteria:

(a) does it enhance the acquisition of those coping skills and styles of thought that are required to meet rapidly changing situations, as distinct from training in a particular skill bound to a particular setting? Is it forward-looking and generalizable; constructive rather than conservative and specific to its own situation?

(b) does it contribute to the enhancement of personal security on the basis of taking risks and tolerating uncertainty and novelty? All in all autonomy is very difficult and it does not make for a quiet life either for the individual or for his group.

The answers to these questions raise, at once, questions of values and of conflict between the new and the traditional. Questions concerned with the preservation of cultures, respect for other ways and so on. Hence the problem of facing and deciding upon what the priorities shall be. For example, if, traditionally, women are very differently educated and treated from men this may be affectively good for their children but cognitively depriving. If respect for age and authority is the cultural norm, then certain aspects of creative thinking and behaviour which are often thought of as prerequisites for self-fulfilment will be especially difficult. Rule following, role
learning, traditional belief systems inhibit the full development of certain styles of thought - the abstract, judgmental or hypothesis-testing. Some "values" may well be preserved within quite dramatic change; some may reinforce change, others may block change and invite explosion. These kinds of issues have to be faced by any innovator and he/she has to attempt an honest and applicable set of working principles. Otherwise he may fail, or resort to manipulation, or indeed, more usually, both.

11. These broad statements and questions must seem to some to be so abstract and theoretical as to have little to offer for practice. But they do have hard practical consequences. We fail to heed them at the peril of doing more harm than good or what is perhaps even worse, using cosmetics to cover a potentially lethal wound. What is more, and referring particularly to the so-called "Third World", it is probable that failure to examine these issues in depth accounts in large measure for the relative failures of technical assistance projects and many national development schemes which have marked the post-war decades. Doing good, meeting an immediate problem, tackling part of a problem situation, are all probably necessary, but they certainly are not sufficient, conditions for successful change. Nutritional and medical care programmes are necessary just as it is important to pull a drowning man out of the water. They preserve life but do not necessarily enhance it. Economic development is important too as a means of proving the society's possibilities and chances, but it is not itself a sufficient cause of improvement, and may in fact be the reverse. Perhaps crucial to development of any kind is human change towards dynamic adjustability, a state of preparedness to adapt to a changing world not adjustment which is temporary, static and likely to be ultimately counter-productive.

12. One further statement is in order, linked to what has just been said but not directly flowing from it. The resources brought into the less developed situations of the world - funds and/or manpower and materials - can never be more than pump-priming; and they are (even on a world-wide scale) finite. The ills and deprivations from which those quarters of the world will be ameliorated ultimately by those who suffer from them. It therefore follows that innovative efforts have to serve two purposes: to show how people can be enabled to help themselves and thus to develop some of the means whereby innovation can be self-sustaining when outside resources are withdrawn. This may be a profound truism but it is frequently neglected because our implicit model is medical - the cure of a diagnosed evil - rehabilitation rather than the educational model which says that human beings can take themselves from state A to state B by a learning process, that in changing them enables them to change their circumstances - habilitation.

13. This then leads on to what we should be doing when planning, conducting and evaluating our work, i.e. the title of this theme "Looking Forward".

Initial Intelligence

14. First, we must make sure that we know what our problems are within the framework I have just outlined. This means carrying out a thorough survey of the needs of the situation in which we propose to work, distinguishing, as far as possible, the more general and typical conditions from those which seem most crucial in the particular context, and making an assessment of
present status and resources, including fundamental attitudes and values, especially among those who are likely to be the principal actors in change.

15. There should also be a thorough survey of those with power to help or hinder any action: institutions, professions, officials, religious and political leaders, organizations and services. Who or what must be changed if change is to be sustained? What resources are there which can be mobilized to sustain change? Universities, voluntary bodies, parent associations, teacher groups, etc.

16. Finally, we must make an analysis of those values and traditions which are likely to stand in the way of change, or which can be adapted to support change; and we must attempt to answer the ethical (and practical) questions thus raised. Successful innovation which touches hearts and minds must necessarily challenge at least some aspects of the existing order.

Determination of Aims and Objectives

17. It is a function of the results of the preliminary survey to determine aims and objectives. They will initially be rather broad, though not for this reason vague. In addition to more specific objectives, such as, for example, raising the quality of family care to improve the competence of children, one will always be concerned with three other matters:

(a) the creation of permanent skills, attitudes and structures which will remain after the initiating stimulus from the outside is withdrawn;
(b) to achieve success in this will require the development of autonomous and indigenous leadership within the target groups themselves; and
(c) an accretion of systematic knowledge of how innovation and change may successfully be managed.

18. Thus from any action-research project one expects two outcomes: first, the development of a clearly documented plan for change which may or may not be transferable but should be operationally extensible in its own broad setting; and secondly, the distillation of strategies and principles of much wider application.

Strategy of Intervention

19. We must consider carefully the actual strategy of intervention in bringing about change. Two things have been learned: first, that one cannot achieve much in the long run by doing things for people (this is palliative and may be necessary in the short run, but in the long run it increases dependence). Things have to be done with people. Secondly, in any system, if we work with one group only, there is a high risk of failure because the non-involved levels tend not to understand, to feel threatened and to resist. There should, therefore, be two crucial aims: first, we must seek the participation of the client group; secondly, given that almost any group of people - teachers, parents, management - are part of larger systems of dynamically interacting groups, intervention planning must include representatives from all groups within the system who have the power to help or hinder it: the "integrated" approach therefore.
Leadership Style

20. Another crucial consideration is the style of leadership required in bringing about change. Many cultures and their systems have strong traditional cultures of authority, based upon position in the system rather than upon knowledge or experience. Individuals tend to be dependent rather than autonomous. In other systems, the individual is subjected to the pressure of the group. Few cultures really allow autonomous individual participants to negotiate their own role in relation to common problems and interests. Thus careful thought has to be given to an initial leadership style to be adopted by the innovator (individual or group) which is seen to be valid in terms of the expectations of all levels in the system. Equally careful thought has to be given to the ways in which leadership style might change over the period, to the training of indigenous leadership and to the weaning of the project from dependence on the initial innovators. Here we are concerned with two kinds of autonomy – that of the individual client in a culture that does not necessarily favour it; and autonomy of the project, its capacity to maintain and extend itself within the system.

21. The first of these, individual autonomy, is usually more difficult since it involves the individual in most cases in a profound personal change affecting his or her self-image, his range of competences and his belief that he can control his own destiny. The second, project autonomy, is more concerned with the personal skills needed to bring about the institutionalization of change: the support systems of intellectual resources, finance, management and public and bureaucratic acceptability.

Process

22. How can we ensure that our own attempts to bring about change are efficient learning experiences with effective operational impact on future styles of intervention? What is important is that our plan of action should be so designed, and its implementation so charted that we get a blow-by-blow picture of its successes and failures, of the modifications brought about by experience, and of the unexpected as well as the expected outcomes. In short, as the project comes alive and works, we are concerned to do two things: to compare our initial implicit or explicit model with reality; and to refine, analyse and state the model as it emerges from experience. Action of any sort, too, implies and embodies a set of principles which govern our choice of methods, styles and objectives. These may or may not, initially, be very explicit or articulated; some may be contradictory. They are all, however, of the nature of hypotheses and most can be tested in action in some way; and indeed our "model" of action is to some extent an affirmation of principles to be put to the test. Finally, if education is to win the race against catastrophe, a front-runner in that race must be the education of ourselves, as innovators.

Conclusions

23. After this rather lengthy and perhaps circuitous examination of where we stand and where we might go, what are we left with to guide our efforts for the future? Quite a lot, I should say, little of it novel in itself but in combination a fairly clear set of guidelines, principles and working hypotheses.
(i) change affects all societies and is increasing to the point where fewer and fewer people can, without overwhelming personal and social stress, digest or control;

(ii) the individual and therefore his society can only hope to adjust to and constructively use change if he commands the tools to do so and possesses the personal confidence and security which permit continuous adjustment and tolerance of stress;

(iii) the structures and organizations within which men and women work and which frame major aspects of their lives tend to be, despite ideological debate, conservative and to change too slowly if at all. The same goes for powerful and deep-rooted traditions and attitudes on which they, and the lives of the individuals who compose them, rest. One cannot ignore this since it sets limits to what can be achieved in a given time and should modify our immediate aspirations. A modest favourable shift is better than an ambitious failure which results in a powerful closure of the institutions or individuals against any change whatever;

(iv) respect for culture and its values implies respect for the institutions, attitudes and rules which embody them. However, some aspects of these institutions, attitudes and rules are inhibitors of worthwhile change; some values are incompatible with others. Hence we have closely and carefully to examine the culture, its institutions and its values, and consciously seek to bring about the kinds of changes which are desirable and desired;

(v) the child is our primary target: the improvement of the next generation. But since the child is often socialized and educated through adult mediators (the parents, the school, community figures, community climates and community institutions) it is through these for the most part that we must work.

(vi) we know that there are periods in the first decades of life when the growing individual and those directly in touch with him are more sensitive and more sensitized and, therefore, more likely to learn. This suggests that early childhood and mid-adolescence are likely to be more favourable points of entry than other periods;

(vii) all existing institutions which touch children and their families have at least an aspect which is educative - though the influences at present exerted may well be negative. Both economy and sound sense suggest that these institutions (schools, churches, welfare, nutritional, health and social services as well as para-official organizations and non-governmental bodies) should at least be influenced and if possible should become the vehicles of our action. It is often more cost-effective to change an existing service in a favourable direction than it is to invent a new one. It is also more likely to sustain change and remain when the innovators have departed;
(viii) on the same principle, the trained expert is likely to be more effective if he transfers his skills and knowledge to others (and supports them in their exercise) than if he guards his mystery and exercises it himself. This implies a difficult role change for such experts as teachers, psychologists, social workers, medical officers and so on. They have to distinguish between the technology of their craft in which they are the expert and therefore the "authority" and its exercise by others in human contacts for which they become the facilitators of others' learning;

(ix) intervention at any one point in the developmental cycle may well have an immediate pay-off, but, equally, may not be sustained later. (Witness the disappointing long-term results of many isolated intervention programmes from Head Start to Farm Settlement Schemes in Africa). Specifically, improving early parenting is, by and large, a good thing to do; but will be robbed of much of its effect if we forget that the influence of the child's home background is paramount, throughout at least the first decade and a half, over all other influences... it is essential to sustain parenting skills beyond childhood;

(x) the whole system has to be modified, if change in a part of it is not to be rejected. Hence involvement of people of all levels in shared responsibilities is critical;

(xi) All our projects should be designed as:

(a) action research efforts aimed at testing hypotheses concerning the behaviour of individuals and groups in social systems and ways of acting to secure favourable change and ways by which it can be sustained, spread, and become self-generating and self-supporting.

(b) cost effective exercises in that they seek to minimize the necessity for outside resources of expertise, material and money, by redeployment of existing resources, mobilization of voluntary effort, transfer of skills from professionals to users, modification of the climate and of existing services and institutions.

(c) ultimately seeking to be weaned from dependance on the original innovation group. This means the creation of innovative styles in at least some of the permanent members of the community.