

TEACHER EDUCATION: (°) **PREPARING FOR THE TWENTY - FIRST CENTURY**

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THANKS AND APPRECIATION

To all friends and colleagues with whom we have shared concern over many things that are projected to take place in the twenty-first century.

To individuals and groups with whom we have discussed these matters, briefly or at length, at various times and in varying surroundings.

To the company of men, women and children with whom we look to tomorrow with hope and anticipation of the wonders that tomorrow will bring.

When talking about teacher education, in preparation for the twenty-first century, we must remind ourselves that it is not difficult to try to be dramatic. Science-fiction, based on actual or exaggerated technological achievements, through mass media, tends to warn us of expected shocks.

But Man in a state of shock may be in no position to confront such a situation. Preparing for the future actually means that we should start now; so that change, even if it turns out to be fast and surprising, will not be traumatic.

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No matter how different things turn out or how fast changes take place, tomorrow starts today and the future builds itself up gradually. Events are related to time.

The twenty-first century will not emerge out of the blue; it is but an extension of this century. It will not be alien to or independent of us since our thoughts and actions are largely shaping it. We are not just waiting for the twenty-first century to see what it brings, and then trying to deal with it; we are preparing for it now through our thoughts, actions and expectations.

The twenty-first century is less than twenty years ahead. A goodly number of us should have the chance of welcoming it. The future teachers and leaders of education at the beginning of the next century are now already born. Most of them are and will be, in various degrees, influenced by ideas and concepts commonly accepted today about education, schools, technology and social change. Most of them, to some extent, will be familiar with "Learning to be", the works of the Club of Rome and similar communities and will have certain reactions to them. Names such as: English, Lieberman, Rosove, Brent and Harris, Razik, Manjara, Kousi and others will continue to be familiar to them.

The speed of social change is restricted. While dynamic and relative, there is a limit to the speed and direction that can be tolerated.

When we talk about the direction and speed of change we note that we are limited by the main party, with respect to a process and a product. That main party is Man. While acknowledging that Man as a system - an entity of interacting elements - is dynamic, growing and active, there are limits to what he can and cannot do.

There are no perceptible limits to growth, but there are certainly limits to the speed of growth, which man can tolerate and adjust himself to meet. Change calls for effort, imagination and for dealing with the unknown. Changes normally cause insecurity, and Man's insecurity increases with accelerated change. Nevertheless we are facing serious and dramatic change; change unprecedented in its speed. This change is due to explosions in important areas such as : information, technology and population. All three are interrelated with respect to causes and with

respect to interactions among themselves and with other elements, as well as with resulting chain reactions.

Knowledge and information and the advances in technology and the application of it, including commercialization, are highly related to systematic and systemic research in various areas. Technology, while a vehicle for innovation, is also one of its causes. Technology is more than products, hardware and programmes. Technology is a system and a state of mind.

One of the important differences between developed and developing countries, with respect to the way technology is viewed, is that in the less developed countries, technological advances primarily mean less work, then more production, while in the more developed countries it is greater production and what goes with it that comes first.

Changes do not necessarily occur in logical sequence. When we talk about areas of change we refer to change at various speeds, depending on the cultural receptivity to change in different areas. And as we have to refer to dramatically fast changes in certain areas and societies we have side by side to refer to very slow changes also.

When we talk about change as an outcome of a human process of reconsideration, we mean reconstruction, further intended change, and reinforcement of some of what is in existence.

The world of tomorrow, more than at any time in the past, is more unified and diversified at the same time. Technology and sophisticated communication media will further effect growing gaps between the developed and developing nations, from the standpoint of production as much as potentialities; and growing understanding and closeness from the standpoint of aspiring to finer and more up-to-date consumption models which will create a unique new human community. More people are living together, yet they are further from each other than ever before.

Unless interaction among these different parties on international levels as well as among internal unequal groups is based on efficient communication and communication systems, conflict would seem to be inevitable. When we fail to communicate we are tempted to impose our will by other means, including force. But both in international relations

as well as in societal internal relations, no individual or group can command sufficient resources to impose their will forever. The result is a building-up of tension and a metastable peace. Peace Education can have a growing role in managing conflict. It also will require that educators adopt a new role to cope with the situation both at present and in the twenty-first century.

Cultural change will lead to the need for developing new exacting modes of communication and new technical languages. Mastery of those languages in the twenty-first century will make a major difference between the developed and the developing countries and will aggravate the situation among their communities. Such languages will increasingly use quantitative approaches based more and more on mathematics. Statistical techniques are already a common denominator in most modern developed disciplines - not only in science and technology.

Mathematics is basically a logic characterized by precision, conciseness and personal detachment and such elements, approaches and logic are at present at many different stages of development in developing countries where the individual and the society are not yet decidedly committed to a direction.

But while the characteristics of the new language are contributing greatly to faster change or progress, precision for a logic and a language is also a restriction. To define is to limit.

Even when we are discussing the language and logic of the future we must realize that some degree of flexibility will exist, no matter how precise the language should be. Individuals will continue to understand and interpret a statement or even a word differently, even with the use of mathematics.

Gifted with insight, the sensitive person with artistic taste, knowledge or philosophical background would prefer-even insist on - using different words to express similar meanings more fully. An artist, a philosopher, a man of greater knowledge, may use some of his words with obsession and sensitivity, as if he were in love with those words.

Vagueness or the loose use of words and terminologies are not advocated. But on the other hand, exactness and preciseness are means

and not ends. We need to be definite, but we must allow for individual differences. We are not all equally intelligent, imaginative, thoughtful or attentive. This will continue to be one of the limiting factors in Man's ability to adapt to this particular aspect of change.

Detachment, also, could convert people into figures and statistical tables, thus making them lose to some extent, their significance as human beings. We must guard against that. If the sense of humanity is lost then absurdity will take over.

At the present time one of the greatest cultural challenges is related to the limited natural resources in material and energy related to the state of present technology. Under the circumstances, the modern technological development which is taking place is largely restricted to the people of the West.

Increased resources, including microbiological techniques bear along with them a promise to liberate mankind, largely people of the Third World, from such limits. These concepts are almost identical with President Mitterrand's statement when recently addressing the Summit leaders :

“New microbiological techniques will allow proteins to be used primarily for human consumption...and furnish new hope for an assured food supply in the Third World.”

His reference to the Third World is not without significance, but is open to a variety of interpretations.

It is obvious that more resources could mean the availability of a greater share to more people, and that they would be enjoying a better life, thus achieving further development and progress. But this is not the only possibility. Further widening of the gaps between those peoples living in different conditions is also a possibility that will never fade away.

This latter possibility applies to both international and internal relations. Justice in internal and international politics is a function of opportunities accorded to and/or available to peoples to grow and develop. Degrees of justice and democratic policies on both these levels and, in fact, at all levels take place relative to the existence, in varying degrees, of certain conditions.

So far, the dialogue between the North and the South has taken place along political, commercial and economic lines, but with the establishment of some kind of stronger common cultural ground, not only would progress be reflected in the political and economic areas but in other aspects of human life too.

Thus in the mutual interest of the North and the South, co-operation in the area of socio-cultural change should be achieved through education and development.

What we expect twenty years from now is not entirely a matter of guessing. However, we cannot have final insights of what is going to take place. Toffler, in his "Third Wave" eloquently elaborated this in spite of all the wealth of information, statistics and computer science.

We must plan for tomorrow, by which I mean we should not only use our minds and human logic, but also the imagination of the artist in us.

Preparing for the twenty-first century is not like building a house where, having drawn a blueprint one can stick to it. The young of today cannot be moulded to fit in with a complex and fast-changing world. One simply cannot anticipate the frontiers of the future and programme people with the necessary knowledge, skills, values, and attitudes necessary and sufficient to deal with it. A dynamic situation is not to be met with static mentality and concepts. Preparing for the twenty-first century must be based on affecting the growth of the young in a way where they can dynamically and as successfully as possible, deal with the unknown and unknowable at a certain stage and adjust themselves to acquire what is necessary.

Since change has become institutionalized through research, development, innovation and accumulation of scientific and technological knowledge, it has become part of the duties of a modern teacher to participate in making sure that individuals and communities include this fact in their calculations.

Something also that should be remembered is that with the widening gaps between world societies and cultures and even the sub-cultures within each, we will be missing more and more the already limited consensus about the concept of the school and the role of the teacher.

The role of the teacher is changing more and more in speed and direction along with the concept of teaching and learning and the creation of the so called "learning society" which we prefer to call the "teaching-learning society".

Adult education, continuing education, life-long education and all those concepts that we were discussing, and reflecting upon in 1972 during the Unesco World Conference on Adult Education in Tokyo, are now, ten years after, more common and meaningful. It is settled that a simple implication of these terms refers to the individual who has to deal with fast occupational changes during his adult life.

In other words, a person who is fit for such fast-changing conditions should be in touch with education all through his life, forming with others the "teaching-learning society". And an education that is relevant to such conditions must, while keeping an open eye on the goals of meaningful, worthwhile human life, make use of all available resources including, of course, educational technology. Preparing the teacher for such a system requires changes in attitudes, skills and knowledge.

In preparing teachers closer relationships will be required between university and school, promoting research and development in all areas with special reference to the use of technology, for the purpose of continued feedback. Under the circumstances, the changing role of the teacher will affect the allocation and budgeting of his time towards giving less time to lecturing and presenting information and subject-matter and more time to instructional management with special reference to group discussion, counselling and guidance and all the possibilities for individual needs, interests and differences.

Important aspects might be motivating learning, behaviour modification and value reconstruction. All three elements are basically dependent on general agreement and acceptance of proper formulation of objectives and on their precise statement. Obviously, such conditions are not solely or purely educational.

The shift from the traditional role of the teacher has implications with respect to selection and preparation of young people heading for the teaching profession. The role of "instruction manager" working alone or with a team on technostructure, directing students' learning, including

individualized settings, is not as clear and concrete as the traditional one. While the relative lack of structure gives some teachers the opportunity to be more creative, demonstrating their abilities to develop and introduce new ideas and techniques, it is known that less secure people need more direction. Some teachers will be less satisfied and more insecure, with negative attitudes and lack of insight concerning the importance of the basic skills necessary for a rich education.

In this regard the role of the headmaster should be emphasized as a team leader and head of a differentiated technostructure. Selection training and the retraining of staff, the clarification and definition of roles for different staff members will be some of his central responsibilities. Thus staff members may direct their energies towards serving and achieving the purpose of the structure to which they belong, but which primarily belongs to them. Such a concept should be an exercise in democratic procedure or else it would turn out to be a rigid self-consuming phenomenon. It either will be an asset or a burden, it will not be neutral.

A modern school is any school that can help a student to be motivated to learn, to look for knowledge in the correct place and acquire the ability to use it intelligently and wisely and to enhance it; to have with dynamic clarity a sense of history, a meaning for life and an image of his way of life as well as that of others. Interaction with other cultures and ways of life is healthier when based on confidence in one's own culture and roots. In the twenty-first century, more than even before, Man will need an education preparing him for a cultural interaction based on reciprocal respect and sympathetic understanding and appreciation, in place of prejudice, bigotry, false feelings of superiority and the age-old temptation to impose on others one's beliefs and way of life.

Finally, every change in concept, goals, societal structures, resources and capabilities brings change in curriculum, organization and teacher education. Some basic considerations, in preparing for the twenty-first century call for action along the following lines :

1. Screening and recruiting good students to join the profession, on the basis of their abilities and potentialities, and not only on their grade-point averages, or needs for jobs.
2. Governments and communities should take a direct, leading role in developing a new image for teachers and educationists. The existing

and growing trend indicative of a disinclination to enter the teaching profession handicaps the selection of candidates. Therefore, all necessary measures to bring about this new image should be taken including using mass media, campaigns, as well as moral and financial incentives.

3. The best education should be available to colleges of education with special reference to teaching staff, organization, buildings, equipment and above all, clear concepts and philosophy.
4. "Training" is not the proper term for teacher education. Mere training is not enough for the proper preparation of teachers; it is a total process. It is development, enhancement, complete growth and change. It is education including :
 - 4.1 value reconstruction based on thought **guidance** and not thought **control**;
 - 4.2 dynamic religious education setting the anchor points for change and growth;
 - 4.3 achievement motivation;
 - 4.4 individualized learning and social interaction;
 - 4.5 counselling and guidance, since in the light of expected challenges to emotional stability of Man and society, huge development in the areas of mental hygiene will take place;
 - 4.6 career guidance, experience and skills;
 - 4.7 a system for activating and up-dating concepts and programmes;
 - 4.8 a new suitably adjusted type of education sensitive to beauty, art and a rich life. At the end of the day it is Man that counts and the quality of **his** life. Technological advances, knowledge, theories and sciences are all means.
5. For teacher education to be fruitful it should include: creativity, dynamism, openmindedness, and the qualities of an interactive, reliable and responsible human being with faith in his heart based on his religious commitments (without impositions from outside), emotional stability, and an interest in others and concern for their affairs.

6. With the declining role of the traditional teacher, in teaching and in acquiring subject matter and facts, due to computerization and communication media, the education of teachers must stress the concepts and skills of leadership and management. Leadership is not a mere declaration, but a quality to be demonstrated. Leadership qualities are not basically inherent, they must be taught and developed. Static verbal education versus active, dynamic and action-orientated education, is the greatest danger in the systems of developing countries. Not only does it not serve the purpose, but it inhibits progress.
7. With more advanced technology, the twenty-first century will bring more leisure to individuals and institutions. Teacher education will pay more attention to the concept of time and how to manage it. Time allocated for reflection and to programmes for re-creation is basic for any further innovation progress and a meaningful worthy life. Advancements in medical sciences, for example, have enabled Man to extend life expectancy and prolong the life span, and genetic engineering offers great promise. Yet what is Man doing with the extra time? What is the difference between living fifty years or five hundred years? What is a man's concept of self-realization?

The twenty-first century is approaching and while it will be characterized by change, other elements will remain constant. The role of the teacher is also changing, yet it will continue to have as a constant, the quality of interaction between teacher and student. The form and style of teaching are changing but the substance, so far, is still a point of fixity.

With an expected greater rate of change, the twenty-first century might bring about situations very remote from our thinking and even wildest imagination today. So preparing for the coming century means educating both young and adult alike, inside and outside school, in a way that will develop their abilities to deal with the novel, not only successfully but even enjoyably.

Our confidence in the teachers of today and appreciation of their efforts are indicative of the quality of the teacher-education designed for the twenty-first century.

Constructive optimism is faith in solid bases and wisdom is to know one's limits.