

IGNOU-M.Ed

SECOND YEAR

STUDY MATERIALS

MESE-055 :

COMPARATIVE EDUCATION:
NATIONAL
AND
INTERNATIONAL PERSPECTIVES

PREPARED BY
K.K.DEVADOSS

MATERIALS AVAILABLE AT

www.kalvisolai.com

MEANING OF COMPARATIVE EDUCATION

- ♣ Edmund J. King, an international scholar in comparative education, has defined comparative education as "a systematic collection of data about educational systems of countries and a study of context in which educational systems developed.
- ♣ " Study of educational systems of countries in a comparative perspective would help the policy makers of a country to make informed decisions about school reforms.
- ♣ Such a study provides an insight into factors, which are common in the countries studied It also points out the differences in the systems and the underlying reasons for similarities and differences.
- ♣ Comparative education developed as a field of study and is devoted to the study of education in the countries under comparison.
- ♣ While studying educational developments in different countries, the philosophical, historical and social factors are taken into account.
- ♣ The theories and methods of these disciplines are also applied to study international problems in education. It could be said that comparative education is primarily an interdisciplinary approach to the understanding of educational problems.
- ♣ While studying educational problems of countries in the context of wider social, political and economic concerns, the comparative educationists would emphasize the following:
 - why do educational systems and processes vary in different countries?
 - how does education relates to wider social, economic and political factors and forces?
 - how do educational processes work in a particular context, and to what extent are they effective or ineffective? and
 - how would the influences exerted by the socio-economic factors on education would impact the concerned societies and countries?
- ♣ Different approaches were adopted by scholars of comparative education to study the educational systems of different countries.
- ♣ The different approaches adopted gave a wider perspective for understanding the meaning of comparative education .

ORIGIN AND DEVELOPMENT OF COMPARATIVE EDUCATION

The origin of comparative education can be traced back to the accounts of travellers who in their travelogues described about the educational institutions along with the accounts of political and social conditions and the administration prevailing in countries visited by them. Hitien Tsang, the Chinese traveler who visited India, gave some account of education in Buddhist Monasteries then being imparted to learners in India. However, comparative education as a distinct field originated in 1817, when the French scholar Marc-Antoine Jullien published a series of articles in which he propagated a method of comparison of educational systems of different countries. His method comprised collecting information through standard questionnaires and arranging this information in comprehensive tabular form. The idea was to have an analytic view of similarities and differences of educational systems of different countries at a glance from the tabular data.

Jullien wanted to give a scientific base to understand the similarities and differences in the educational systems of different countries. He believed that by analyzing the educational data of countries, certain rules and principles could be deduced. As pointed out earlier, the travelogues gave accounts of educational institutions. These travelogues, as sources of data on education, were much earlier than the method suggested for the systematic study of educational systems by Jullien. From the beginning of the twentieth century, due to availability of easy transportation facilities, the frequency of the visit of foreign travellers increased considerably. The foreign visitors pointed out the economic and social progress in the countries visited by them and tried to link the social and economic developments to certain educational factors. Thus, through the accounts of travellers a basis has been formed to establish the relationship of education with social and economic factors, particularly when they compared the progress in social, economic and educational fields in countries visited by them with their own countries. Although Jullien laid the foundation for systematic international studies of education early in the nineteenth century, his impact on comparative education was felt much later. It would be convenient to discuss the development of comparative education through different stages. These different stages described below are broad generalizations which mark the emergence of a particular event.

First stage (1817-1900)

The first stage falls between the period 1817 to 1900. During this stage due to the influence of the ideas of Jullien, a strong belief grew that countries could benefit if educational experiences were shared among them. Thus, educational data were collected from different countries and comparisons were made by analyzing the data. Some principles were conceptualized from the analysis of data, which could be applied in organizing and understanding of the educational systems of countries. However, the cultural, political, economic and social conditions prevailing in different countries were not taken into account specifically. On the other hand general principles were applied towards the understanding of a particular development.

There was an understanding that by studying the educational systems of other countries, the educational system of one's own country could be improved. Eminent persons like Victor Cousin of France, Mathew Arnold of England, Mann of America, Tolstoy of Russia and Sarmino of Argentina contributed to the thinking that the study of the educational systems of other countries could help in bringing about reforms in education in one's own country. Special mention may be made of Mathew Arnold who in his reports on France, England, Switzerland and Germany between 1861 and 1888, addressed the requirements for the comparative treatment of educational data.

Second stage (1900-1945)

We have seen that in the first stage, social, economic, political and other factors were not taken into account, while comparing the educational systems of other countries. It was only at the turn of the 20th Century that comparisons of educational systems of different countries were viewed in a different light. In a public lecture delivered in 1900, the well known English educationist Michael Sadler observed, "We cannot wander at pleasure among the educational systems of the world, like a child strolling through a garden, and pick off a flower from one bush and some leaves from another, and then expect that if we stick what we have gathered into the soil at home, we shall have a living plant". (Sadler, 1900). Sadler emphasized that there is a close relationship between the

educational system of a country with its social environment. He was of the view that simple descriptions of education systems would not reveal the factors which uphold the system and are peculiar to a particular country. It was necessary to examine the social context in which schools function. The comparative studies in education would be meaningful only if intensive studies of school-society relationships were taken up. Sadler's approach in comparative education was supported by Issac Kandel of America, Robert Ulich of Germany and Joseph Lauwerys and Nicholas Hans of England.

During the period between 1900 and 1945, two World Wars took place and the conflicts that emerged thereby retarded the growth of comparative education. Ideological biases generated as a result of these conflicts also influenced the comparative studies. However, the period is marked by the establishment of some institutions which contributed a lot in the development of comparative education. The notable among these institutions were the International Institute at Columbia University, Teacher's College in the United States and the Institute of Education at the University of London. The studies conducted in these institutions covered national systems of education of various countries and comparisons were made in terms of organizational structure, teacher training and methods of instruction. It may be noted that though more countries were included in comparative study, the method of analysis of educational issues was not given its due priority. The contribution of Kandel during this period on comparative education is noteworthy. His classic book, 'Comparative Education' was published in 1933. He argued that for making comparisons between national systems of education, common problems and concepts should be studied so that differences between these systems are understood. Kandel focused on such problems as Church and State, Rural Education, Adult and Higher.. Education.

Third stage (1945 onwards)

After the Second world war. There was a rapid increase in studies conducted in the field of comparative education. Reconstruction of countries which bore the brunt of destruction caused by war was urgently needed. The United Nations Organisation (UNO) and other International Agencies came forward to provide assistance in all fields of life including education. Fresh insights were developed about the working of different nations, the ways of life of the peoples in different countries, the complexities of their social life etc. The purpose of comparative education also expanded to include the role of education in economic development and its influence on the social structure. An analytic approach was adopted to understand the complexities of the relationship between education and social forces. Due to rapid development of science and technology, scientific analysis gained priority over other forms of inquiry and comparative education could not remain unaffected by this trend. Bereday who discussed the comparative methods in education in detail in his book, 'Comparative Method in Education' (1964), called this period as, 'the period of analysis'. The main feature of this period was to emphasize that before adopting any features of the educational system of a country, stress should be laid on the economic, political, social, and religious conditions of the country is are to be studied. Only then decisions should be taken to adopt/adapt any feature of the educational reforms of another country.

From the isolated study of school systems of different countries the focus shifted towards the study of the role of education in economic, social and political developments. For example, the study of science and mathematics by the -girls in our country has led to the opening of careers in science and technology. This was not the case a few decades ago.

This period is also marked by the role of international agencies in the development of comparative studies in education. The role of multinational agencies, particularly that of United Nations (UN) and World Bank needs special mention. UNESCO, Institute of Education conducted a pilot study comparing the achievement of 13-year olds in mathematics across a dozen countries. Cross national studies of achievement in Science, Reading, Literature, French and English as foreign languages followed (United Nations Organizations: Research and Service in Comparative and International Education). In India also a major study, "Survey of Achievement in mathematics" was conducted in all the States and Union Territories.

New approaches to comparative education

It is important to understand the various intellectual and other currents that have shaped the field of comparative education after the Second World War. The developing nations in the third world inherited the educational systems of their past colonizers. The newly independent countries were trying to shape their educational systems according to the aspirations and needs of their people. For this they needed huge finances which they were not in a position to provide. Hence, there was funding from international agencies like the World Bank, UNESCO and others. To understand the development of education in different countries it is necessary to understand the relative influences of funding agencies and the donor countries. The donor countries were interested in assessing the impact of financial assistance given to those countries and the way development was taking shape. Nation-wide studies were conducted to assess the impact of education on modernization and development. Researches were conducted to determine what levels of education should be expanded and what type of education most contribute to change. These researches produced conflicting findings. Some suggested that the expansion of primary education maximized a nation's ability to modernize; others argued that it was dysfunctional in development.

Macro analytic approach

- the international structure of capitalism has placed the Third World in a situation of dependency and this has affected all aspects of society including education;
- some countries formerly in the list of developing nations have crossed over to the group of developed countries;
- the educational policies and practices are determined by forces beyond the nation - state ;
- the Third World educational realities are shaped in part by the heritage of colonialism, and in part by the relations between the 'core' and 'peripheral' world forces.

Micro-analytic approach

The micro analytic approaches have taken two directions. One urges regional and local analysis within a nation, arguing that variation in educational practices and school-society relations is greater within a nation rather than between different nations or states. The other reason for the use of micro analysis is that school-society relations and instructional practices cannot be understood solely with reference to broad educational policies pertaining to teacher-training, resource allocations for schooling, years of education completed and scores in achievement tests.

Those who make use of micro analysis approach are more interested in studying the educational reality being structured in the setting of schools; how knowledge is defined, legitimated and tested and how meanings are constructed by students and teachers. The studies also lay emphasis on why certain schooling practices are accepted or rejected in different cultural settings.

Merger of macro and micro approaches

The recent trend has been a merger of macro and micro approaches. A combination of macro and micro approaches would insist on analysis of structural factors such as social class relations or the degree of centralization of political authority and international factors such as adopting the curricula and textbooks of other countries which affect the learning outcomes in a particular cultural setting.

A brief review of comparative education as a distinct field of study is given below:

- the origin of comparative education can be traced back to the contribution of Marc-Antoine Jullien who devised a method of comparison of educational systems of different countries;
- the first stage of development of comparative education is between 1817 and 1900. In this stage it was believed that by studying educational systems of different countries, the educational system of one's own country could be improved and benefited;
- the second stage of comparative education was between 1900 and 1945. This stage was marked by the emphasis given to the prevailing social, economic and political conditions particular to a country and their relationships to educational development;
- the third stage of development of comparative education was after the year 1945. An example of this approach are the reforms in India which were proposed to be done on the basis of a report submitted under the convener ship of John Sargant, the then Educational Advisor to Government of India. An analytic approach was taken to understand the educational systems of countries, taking into account the social, economic and political structure.

SCOPE OF COMPARATIVE EDUCATION

In the previous section we have discussed the origin and development of comparative education. In this section, we will discuss the scope of comparative education. The development and the scope of comparative education from the year 1817 till this date, are interrelated. In the initial stages comparative education as a field of study was confined to collection of educational data from different countries and making comparisons on various aspects of education. Thus, its scope was limited to making comparisons on various aspects of educational developments in different countries. The method followed was to identify and analyze the similarities and differences so as to take decisions on educational reforms in one's own country on the basis of experiences of other countries. Since its origin, comparative education has adopted two broad approaches. The first approach has been to generate strictly educational data and on the basis on this data, to compare the educational systems and the practices followed. This approach views education as an autonomous system. Thus, the scope was limited to the study national systems of education on the basis of educational data only and then makes comparisons on various aspects of education such as growth of different sectors of education, teacher training, and evaluation system and so on. The second approach is interdisciplinary, which lays emphasis on educational-societal relations. In this approach social, political and economic functions of education are examined and studies undertaken to find out whether the tasks entrusted to the school by the society are being fulfilled. Thus the scope of comparative education is enlarged when education is viewed in the larger social context. It may be pointed out that while comparing educational systems of different countries, certain considerations have to be kept in view and these considerations indicate the scope of comparative education. These are given below:

- o the educational systems of different countries are analyzed to understand their educational problems and issues and the solutions proposed to solve these problems, and study whether the proposed solutions could also be made applicable to one's own country;
- o to understand the philosophical background of the country, as the educational system of a country is influenced by its philosophical background;
- o to study the political, economic, social and cultural conditions of the country whose educational system and problems are being examined;
- o to study the administrative structure, whether it is a centralized or decentralized one, to what extent local autonomy is permitted and how all these factors are influencing the educational system;

INTERNATIONAL EDUCATION

Meaning

This kind of education develops knowledge and attitudes relating to the need to adopt innovations in their national systems of education in the students. International education (IE) brings together the students, the teachers and scholars from different nations who learn about and from each other. They meet at the places of study and at venues of international conferences where they share their findings with each other. Scholars of international education are experts on international exchange and interaction. Activities based on the knowledge of international education, are conducted by the students. Halls (1989) has categorized international education as a sub-field of comparative education, consisting of international pedagogy. This would include such items as the following:-

- i) Education for international understanding.
- ii) Internationalization of teaching norms and performance of students.
- iii) Study of international education institutions.
- iv) International education as applied field attached to comparative education.
- v) Studying and sharing reports produced by international agencies.

Scope

International education tends to focus on descriptive information about nations and societies and their educational systems and structures. International educators use findings derived from comparative education to understand better the educational processes they examine and make policy relating to programmes such as those associated with international exchange and understanding.

Use

International education tends to know about the educational developments taking place in different countries in such components as curriculum development, teacher training, distance education, educational media and materials, examinations and learning assessment.

In this section the different types of qualitative studies, as are available in literature, are listed first and then their implications in comparative education are pointed out. It is not that each type can be used in developing the content of comparative studies. Mertens (1998) points out that though there are as many as 26 different types of qualitative researches, yet only seven are considered most significant from the point of view of CE. These are: ethnographic research, case study approach, phenomenological research, grounded theory, participative inquiry, clinical research, and focus group technique: These qualitative methods are used in those researches which are required to provide an indepth description of specific programmes, practices or settings of different countries.

What is a qualitative study?

According to Denzin and Loncoln (1994): "Qualitative research is multi-method in focus involving an interpretive, naturalistic approach to its subject matter. Qualitative researchers study things in their natural settings, attempting to make a sense of (or interpret), phenomena in terms of meanings people bring to them".

Practical reasons for using qualitative methods

Study of literature indicates that there are three major reasons for the use of qualitative approaches:

1. Many educational and psychological programmes in different countries are based on humanistic values. Therefore, the intended users of research might prefer personal contact and the resultant data which emerges out of a qualitative study.
2. Qualitative methods may also be used when no acceptable, valid, reliable and appropriate quantitative method is available for the desired outcomes of a programme.
3. The third reason for choosing qualitative methods might be to add depth to a quantitative study. For example, in survey research, respondents commonly indicate their answers by encircling a numerical number on a Likert-type, 5-point scale.

Strategies/types of qualitative research studies

As indicated above, out of a number of strategies that are available in qualitative research, the following seven types are quite common:

- (i) ethnographic research;
- (ii) case study approach;
- (iii) phenomenological research;
- (iv) grounded theory;
- (v) participant inquiry/observation;
- (vi) clinical research; and
- (vii) focus groups techniques

The concept of ethnography can be defined as a research method designed to describe and analyze practices and beliefs of cultures and communities. Culture can be defined as the knowledge, beliefs, ideas, and behaviour of a particular group of people. The ethnographic research typically includes a study of a group's history, geography, kinship patterns, groups' structures and social relations between group members, rituals, symbols, politics, economic factors, educational systems, socialization patterns etc. Margaret Mead's well known work on 'Coming of Age in Samoa'¹ where she conducted observational studies of girls and their socialization can be cited as one example of this approach. The foreigners often gave money to the people on the streets. This act quite often destroyed the original ways of their living and working. In this context Margaret Mead made certain observations. She observes: "A single act of kindness destroyed the whole culture of Samoa". Ethnographic approach can also be illustrated by describing the growth and development of Normal Training School at Godhra in the beginning of the 20th Century.

Case study of ethnographic research: growth and development of an institution

In 2004 the writer had the chance to go to Godhra in Gujarat state for the inspection of a 100 years old Teacher Training College, running a Diploma in Education Course, with an intake of 30 trainees. The institution had applied to the National Council for Teacher Education (NCTE) for the enhancement of intake of students from 30 to 50. The NCTE had assigned this task to a two-member committee to assess the adequacy of facilities for the additional seats. The Committee was surprised to find that the institution could not be upgraded to B. Ed. Degree level even in a century's time, despite the vast physical and academic resources acquired over a period of ten decades or so. Given below is a description of the evolution of the institution. Gujarat, including Godhra, had a great famine during the period 1898-1900 which led to destruction of forests and left the remains of dead people and cattle lying scattered everywhere. The famine had left a great impact on the people. By 1902, more than 300 girls, whose parents had died in the famine, were brought to Baroda where due to insufficient buildings, 100 girls between 14 to 16 years of age, were shifted to Godhra to be placed under the charge of a Women's Forum of Missionary Society. The policy statement of the Board of Education of this Society says, "Godhra was opened as an Evangelistic Centre in 1895 with Mr. T.E. Motion as the first missionary.

The excerpts from the speeches made by different persons present at the McCabe Memorial Dedication Ceremony hold on January 18, 1940 throw light on the growth of the institution and demonstrate the immense value of the historical method in international education efforts.

- *Beginning of normal school:* Many of the girls were without discipline. Being village girls, they had been accustomed to work according to their own sweet will. Many of them were married and their husbands had died in the famine. Some were married and their husbands were still living, who later came to claim them. I was too ignorant to know all that was involved in that and did all I could to prevent them being reclaimed by their Hindu relatives (Anna Agnes Abbot, 1940)
- *Building, nature study and Swedish drill:* I was sent to Godhra Girls' School to fill in a vacancy caused by the death of a teacher (Miss Kate O Curtis). The school consisted of 270 girls (KG and Classes I to V). There was an Industrial Development unit in which weaving was taught to the girls not attending school classes. There were no designated Headmaster/ Headmistress in the school and no Matron in the hostel for taking care of the girls. The primary school again came into my direct charge as a practising school with a trained Headmaster and a trained staff with whom it was a joy to work. Happy memories of tadpoles in glass jars, of rabbits, cocoons, flowers etc. were triumphantly brought in for display to the children to record in drawing their observations of nature and life of the 'left right, left right' of marching, and the "one, two, three, four" of the new Swedish drill came to me as memories from the school room in 1917-1920. (Laura F. Austuin)
- *First normal training class:* Looking back 30 years finds me in Godhra dreaming of the Normal Training School about to be started in April 1909. The School Inspector, Miss C. Kery, was as keen as we were to have a teacher training school as the Govt. School at Ahmedabad could not fully cope with the situation. Under her guidance we started a preparatory class with 16 girls. They were too old for the Anglo Vernacular School and unequal to the study of English. By 1911 a First Year class had been started. Since then the school has had six Principals and it is rather remarkable that they were not only all working in Gujarat but all were present in the function. I salute you and thank you for the wonderful care. (Margaret D. Grouse)
- *Normal school grant - normal school building:* I arrived in Godhra in December 1909 and 1910 was the First year of the opening of Normal Training College. The college was registered in 1911. In 1912 we had our first visit from the DPI, Mr. Lorry. Wherever he went he carried his chair. After inspection we came to the bungalow for lunch. But his chair was left on the verandah. Shortly after his return to Puna, we received a grant of Rs.300/-. The next year we were allowed to open the 2nd year of Normal Training College, and granted the privilege of our own examinations. In 1915, I went home and raised Rs.6000/- for the new Normal Training College Building which was built later. (M. Ross)

FOCUS GROUPS

Focus groups methodology is a recently developed technique of data collection on an

issue through face-to-face interactions in group situations. More than one focus group can be set up to deliberate on an issue. Recently, the NCERT set up different focus groups in the task of curriculum development at school level. There is a Coordinator who notes down the interactions and identifies the core issues discussed and decisions taken. Focus groups can be viewed as a data collection method through interaction within a group. The interactions are intended to elicit participant's points of view. This research strategy would be appropriate when the researcher is interested to know as to how individuals form a scheme or perspective of a problem. Focus groups have been used extensively in market research. But they can also be used for assessing the training needs of teachers teaching different subjects. One of the advantages of focus group research is to gain additional insights from the interaction of ideas coming up from the group of participants. Kruger (1988) has identified six characteristics of questions which should be asked in focus group interviews:

- 0 Usually, focus group interviews include less than 10 questions and often a total of around 5 or 6 questions.
- 0 Focus group interviews use open-ended questions. So instead of asking, "Does your child play at the playground?" ask, "Where does your child usually play?"
- 0 Avoid using "Why" questions. These questions can set off a defensive reaction by the respondent. Modify the question, such as "What prompted you to want to participate in the programme?"
- 0 Carefully develop the questions, Brainstorming sessions with colleagues or audience members is one way to generate questions. Many questions can be generated this way and then priorities can be established to determine critical questions.
- 0 Establish the context for questions so that the participants are ready to respond. Provide sufficient clarity in each question so that the participants understand what you are asking for.
- 0 Questions should be arranged in a logical order, sometimes from general to specific.

Examples of focus group's agenda

- 0 A focus group may be set up to determine training needs of elementary school teachers
- 0 Another focus group may identify projects under Quality Assurance (QA) in different subjects.
- 0 Vocational training needs of drop-out children can also be studied through this method.
- 0 English language learning needs of foreign students.

UNITED NATIONS INTERNATIONAL CHILDREN'S EMERGENCY FUND (UNICEF)

After World War II, European children faced famine and disease. UNICEF was created in December 1946 by the United Nations to provide food, clothing and health care to them. In 1953, UNICEF became a permanent part of the UN. The UN General Assembly extended UNICEF's mandate indefinitely. UNICEF began a successful global campaign against *yaws*, a disfiguring disease affecting millions of children, and one that could be cured with

penicillin.

The UN General Assembly adopted the Declaration of the Rights of the Child, which defined children's rights to protection, education, health care, shelter, and good nutrition. In 1959, following more than a decade of focus on child health issues, the UNICEF expanded its interests to address the needs of the whole child in 1961. Thus began an abiding concern with education, starting with support to teacher training and classroom equipment in newly independent countries. UNICEF was awarded the 1965 Nobel Peace Prize "for the promotion of brotherhood among nations." The International Year of the Child (1979) was marked by celebrations around the world, people and organizations to reaffirm their commitment to children's rights. The Convention on the Rights of the Child was adopted by the UN General Assembly and it entered into force in September 1990. It became the most widely and rapidly accepted human rights treaty in history. A World Summit for Children (2000) was an unprecedented summit of Heads of State and Government at the United Nations in New York City which set 10-year goals for children's health, nutrition and education.

In 2002, a Special Session of the UN General Assembly was convened to review progress since the World Summit for Children in 1990 and re-energize global commitment to children's rights. It was the first such session devoted exclusively to children and the first to include them as official delegates.

Purposes

UNICEF is the driving force that helps build a world where the rights of every child are realized. It has the global authority to influence decision-makers, and a variety of partners at grassroots level to turn the most innovative ideas into reality. That makes it unique among world organizations, and unique among those working with the young.

Nurturing and caring for children are the cornerstones of human progress. UNICEF was created with this purpose in mind - to work with others to overcome the obstacles that poverty, violence, disease, and discrimination place in a child's path and advance the cause of humanity. UNICEF advocates for measures to give children the best start in life, because proper care at the youngest age forms the strongest foundation for a person's future. In promoting girls' education it ensures that the girls complete primary education as a minimum - because it benefits all children, both girls and boys. Girls who are educated grow up to become better thinkers, better citizens, and better parents to their own children.

The Organization acts so that all children are immunized against common childhood diseases, and are well nourished, because it is wrong for a child to suffer or die from a preventable illness, and works to prevent the spread of HIV/AIDS among young people because it is right to keep them from harm and enable them to protect others. It involves everyone in creating protective environments for children, relieve suffering during emergencies, and to take care that no children are threatened or exposed to violence, abuse, or exploitation.

The Executive Board is UNICEF's governing body. Its 36 members, operating through consensus, are responsible for overseeing UNICEF's activities and for approving its policies, country programmes and budgets. The Board's work is coordinated by the Bureau - the President and four Vice-Presidents, who represent the five regional groups of Member States at the United Nations (Africa, Asia, Eastern Europe, Latin America and the Caribbean and Western Europe and other States).

UNICEF publications

With analyses and information of interest to governments, civil society, the media and others concerned with the well-being of children, UNICEF publications play a critical role in fulfilling the organization's mandate to advocate for the rights of every child everywhere.

Three flagships

Every year, UNICEF publishes the State of the World's Children - the most comprehensive and authoritative report on the world's youngest citizens, combining analyses, human interest stories, country profiles, maps and statistical data for 195 countries and territories.

In 2004, UNICEF published the first issue of Progress for Children, a report-card-like series, scheduled to be published two to three times each year, on the progress being made towards achievement of the MDGs in 2015. UNICEF's Annual Report, issued mid-year, spotlights the significant results achieved by UNICEF and its partners on behalf of children around the world.

Other major publications

In addition, each year UNICEF publishes or co-publishes a number of other major publications. In 2004, for example, titles included Girls; HIV/AIDS and Education; Sport, Recreation and Play; Vaccines, Handled with Care; and Meeting the MDG Drinking Water and Sanitation Target.

INTERNATIONAL INSTITUTE OF EDUCATIONAL PLANNING (IIEP)

A centre for training and research - specialized in educational planning and management, the International Institute for Educational Planning (IIEP), was created by the UNESCO in 1963 in Paris, France. It is supported by grants from UNESCO and by voluntary contributions from Member States and others. The IIEP is an integral part of UNESCO, yet

it enjoys a large amount of autonomy. HEP's goal is to help Member States improve the quality and effectiveness of their educational systems.

HEP headquarters located in Paris, and a regional office in Buenos Aires was established in 1997. It provides support to countries of that region in their efforts to improve their educational systems.

Main activities

The Institute's core activities are training and research. It also provides services to Member States on request. Recently, the HEP has signed bilateral partnership agreements with some 20 institutions and set up a number of networks. Adapting IIEP's expertise to countries' needs, the UNESCO Member States on demand are requesting for increasingly IIEP's services as they face growing challenges. These challenges include: demographic changes; a need for equitable access to quality basic education; brain drain and international competition in the education market; new technologies; and decentralization and meeting the emergency situations.

Hence, the HEP organizes operational activities tailored to provide support and meet countries' specific needs. The operational unit, set up in 1997, carries out expert missions, implements projects and develops customized training for education officers - in close collaboration with HEP experts. All HEP units serve Member States in different ways - disseminating planning concepts, methods and tools, through IIEP's publications.

Governing board of HEP

The board consists of 12 members selected from amongst educators, economists and other specialists of international repute. The teams of professionals provide complementary skills and know-how, as they bring together economists, sociologists, statisticians, planners. For meeting the needs of countries in the development of their education systems, a centre for training and research, specialized in educational planning and management; HEP builds capacity of Member States through three main interrelated tasks: - Research and observation

- Services to UNESCO's Member states.

Other essential elements of IIEP programmes are networking activities and communication of results and ideas mainly through publications. More than 5000 experts and education officers have been trained by IIEP and training is IIEP's primary activity. In order to meet different needs, a variety of possibilities are provided - full-year courses, shorter intensive training programmes, distance education and customized courses. Results of research studies provide methodological and technical support to policy-makers. Research includes case studies on policy issues and on technical and methodological aspects, allowing identification of priorities, best practices and innovations. The TIER increasingly organizes operational activities on request. Special programmes have recently been launched to assist governments confronted with emergency situations. The Institute mainly undertakes projects of moderate cost, but may also carry out comprehensive surveys. Results are widely disseminated and are translated into teaching materials. The institute is continuously monitoring trends and updating its activities in order to respond to planners' needs. Current fields of research include 'emergency situations' and 'ethics and corruption'.

IIEP programmes

In recent years IIEP programmes have focussed on:

- enhancing capacity of higher education in developing countries
- restructuring university administration, finances, and technology to adapt to the new dynamic environment
- new mechanisms for assuring quality in the global higher education market
- managing changing university-industry linkages
- ICT and the 'virtual university'
- improving professional education and facilitating the transition to the labour market.

As part of an international and mobile team, IIEP staff members represent a wide range of nationalities. They carry out technical support, training and research missions worldwide.

BEIJING DECLARATION OF THE E-9 COUNTRIES

Adopted by the E-9 ministerial review meeting Beijing, China, 21-23 August 2001

Recognizing that education is a fundamental right and key to social and economic development, we, the Ministers and representatives of the nine high-population countries, have come together in Beijing to review the

progress made in education for all (EFA), since the World Education Forum (Dakar, April 2000), to assess the challenges posed to EFA by the swift development of the global information society and to reexamine the strategies for developing EFA.

We solemnly reaffirm our commitment to the goals set by the World Conference on Education for All (Jomtien, March 1990) to the Delhi Declaration (December 1993) and the Dakar Framework for Action (2000) to meet the basic learning needs of all our peoples.

We will ensure in our national action plans that due attention is given to provide equal access to quality education for all. The Beijing declaration of the E-9 countries analyzed the achievements, challenges, and strategies of achieving the goals of Education for All with new and tried out strategies.

The role of the international development partners

We recognize that the E-9 countries will have to rely primarily on their own abilities as well as use the synergies generated by the E-9 Initiative to constantly enhance self-development. However, realizing the major concern and constraints in the promotion of EFA goals and appreciating the commitment of the international development partners, made in Dakar, towards external financial assistance, we urge international financial organizations as well as bilateral and multilateral agencies to make a concerted and practical effort to fill the resource gap through the instruments of debt relief, debt cancellation and debt swaps by a standing mechanism.

The support and collaboration from our international development partners are of utmost importance and provide tremendous impetus to our national and collective efforts. In view of the concentration of illiterates in the E-9 countries and in line with their commitments made in Dakar, we invite all international development partners to further expand their co-operation with the E-9 countries.

Special concerns

We urge:

- developed countries to consider it their moral obligation and duty to play an active role in bridging the digital divide, so as to promote international co-operation, mutual understanding and peace;
- sponsorship by UNESCO together with other agencies of holistic early childhood development and education programmes. This initiative should invest in full the potential of the windows of opportunity for achieving the full capacity of our children and will constitute a solid base for optimal human resource development for achieving excellence. It should also take measures to ensure the participation of other concerned sectors of the society including the medical profession, social workers, media, the family and the civil society.

GLOBAL LITERACY PROJECT, INC. (GLP)

Global Literacy Project, Inc. (GLP) is a private organization supported by private donations from its members. The project began in 1999 with a small group of individuals who were "driven by a humane desire to help people in economically poorer countries acquire literacy, education and development." Without literacy, people can not

take advantage of many opportunities available at work place and in their surroundings. The project carries out its mission by collecting, sorting, and shipping large number of books to developing countries. The initial project began with a shipment of 170,000 books in summer 2000 to Africa. Since that time, the project has been expanded to Caribbean countries, and is to include Asian countries in the near future. In addition to literacy goals, the project also started several initiatives in science, mathematics, and humanities such as organizing competitions for students, offering workshops for community leaders and teachers. The project is also engaged in sending computers and scientific journals for schools and universities in many developing countries. There is also an awareness of the need for preserving environment as described in their motto: "Books for 'brain fills' not landfills."

THE INTERNATIONAL BOOK PROJECT (IBP)

The International Book Project (IBP) is located in Lexington, Kentucky (USA) and was started by one person, Mrs. Harriet Van Meter, after she visited India and saw long lines of people waiting, not for bread, but for the chance to read a book. "Moved by her experiences, she returned to Kentucky to start her own person-to-person literacy project in the basement of her Lexington home. Her initial ad in an Indian newspaper received over four hundred replies and grew exponentially." IBP has supplied over 5 million books so far donated by individuals and organizations. Books need not perish but get re-circulated by their original owners to provide someone else a chance to be exposed to new ideas and information or for leisure time reading. It is an excellent example of what one person with ideas and initiative can do to affect the lives of millions of people.

Books sent to other places include "an extensive array of basic subject textbooks for pre-kindergarten through graduate school levels, general library books, nursing and other specialized medical texts, as well as popular and technical journals, reference materials, and fiction. (The) partnering organizations include primary and secondary schools, universities, libraries, hospitals, churches, orphanages, and Peace Corps volunteers... IBP sends books for institutional use to virtually any location in the world that has access to mail." IBP has a commitment of promoting better understanding for each other. Thus a first bag of books is generally a start of a lifelong inter-cultural dialogue.

EDUCATION INTERNATIONAL (EI)

Education International (EI) is a large Global Union Federation made up of nearly 350 separate organizations located in approximately 166 countries. The main mission of this federation is to provide an organized voice for over 29 million teachers and education workers who are engaged in providing education throughout the world. "Be it a remote village or cosmopolitan city, (it) promotes the rights of every teacher wherever they are, and the rights of every student they educate." Although the main headquarter office is located in Brussels, Belgium, there are five Regional offices located in different parts of the world. The office located in Malaysia coordinates activities in Asia- Pacific region. There are at least five different Indian teacher and education organizations (school and higher education level) that are members of the Education International.

Main activities

Aside from promoting solidarity among teacher organizations in different countries, this federation distinguishes itself in a wide array of publications that touch upon significant aspects of education, health, and human rights. The Asia Pacific Regional Center publishes a periodical Bulletin (online, and print editions) that keeps members abreast of recent trends, success stories, programs, and areas of concern. A series of research papers on a variety of topics are prepared annually by experts at the Education International. An important purpose » behind such reports and/or publications is to encourage informed discussion and formulate official positions on various topics in education and major needs of the countries. Some significant areas of interest in the past have included: Gender Equality, Education for All, and HIV/AIDS. Recently, in response to Tsunami floods in eight Asian countries affecting millions of people, Education International launched a large Tsunami Relief Fund with the help of donations from all its members.

EDUCATION UNDER COLONIAL ADMINISTRATION

The early years of the East India Company and the ensuing colonial administration were devoted to

. expanding the Company's commercial interests; and

- consolidating the hold on the newly acquired colony by, among other things, defeating in wars the local kings and chieftains, thereby reducing their hold on local populations; and
- by engaging in winning battles with the Portuguese and the French.

Consequently, little attention could be given to activities that would ensure and enhance welfare of their subjects and much less to their education. The earlier years of the Company and colonial rule were characterized by the controversy between those who favoured classical learning through the classical languages of Sanskrit and Persian and those who wanted English as the medium of instruction. In the context of this controversy between the 'orientals' and the 'anglicists', even the small amount of one lakh rupees sanctioned in 1822 did not prove to be significant in promoting education among the natives.

The controversy was set at rest by Macaulay's Minute of 1835 which recommended that the administration's effort be limited to the promotion of western learning through the medium of English language. The major reasons for this recommendation would seem to have been:

- i) the ignorance of Macaulay of the diverse and rich cultural heritage of India, and
- ii) the basic objective of the colonial policy to keep the local population at a low educational and economic level. Macaulay held the view that "single shelf of good European library was worth the whole literature of India and Arabia". The objective of educational policy in his view had to be to transform the natives into "English in taste, in opinions, in morals and in intellect while continuing to remain Indian in blood and colour". William Thackeray, a member of the Board of Revenue, held the view that "we do not want generals, statesmen and legislators; we want industrious husbandmen".

As a consequence of the deliberate policy to promote western learning through the medium of English and the dwindling local support, indigenous and vernacular system of mass education virtually disappeared. In the pre-colonial period, *Madrassas*, *Tols* and *Pathshalas* provided avenues for children to gain literacy and receive a rudimentary form of education. These institutions were generally supported by the local zemindars and teachers generally received remuneration in kind. Although limited in scope - education being confined mainly to learning of three R's and religious texts - these educational arrangements provided the basic foundation to further education for those whose households could afford to send the children to the district level educational institutions or the town high schools.

The foundations for what might be termed as the modern system of education in India were laid by the Charles Wood's Despatch of 1854 from the Court of Directors of the East India Company. Among others, the Despatch recommended:

- the creation of the departments of public instruction in the provinces;
- the establishment of universities in the three Presidencies of Calcutta, Madras and Bombay;
- a system of grant-in-aid to promote private effort in education; and
- the desirability of promoting mass education and two branches of education - one leading to further education and the other providing for 'the teaching and learning of vocational skills'.

UNIFORMITY OF STRUCTURE AND ITS IMPLEMENTATION

While uniformity of structures and processes does not ensure their quality, it is desirable

that services and their modes of delivery have a degree of similarity. This is important for many reasons. For example, the grade composition of various stages of education facilitates interstate migration of students without having to repeat grades which they have completed elsewhere. It enables institutions - at least a large majority of them - to accept students from other institutions without formally determining their suitability. Except for some high quality institutions, which have designed their criteria to judge the suitability of students for their courses (for instance, all-India or state-level tests for such courses as engineering, management, medicine etc.), the large majority of institutions accepts students on the basis of transfer certificates. Even in the case of high quality institutions there is a move to allow students appear in selection tests provided they have secured a prescribed percentage of marks in the qualifying public examination irrespective of the Board, which has conducted it.

Uniformity allows employers to use completion of stages/courses as a screening device for hiring prospective employees. Of course, initial screening of applicants might be followed by more elaborate procedures for determining competencies and suitability of candidates for their organization.

Although uniformity of structures is important in determining a general equivalence of competencies acquired in different institutional settings, it is the quality of content and the processes used to transact it that determine an individual's ability to function in different situations. There are considerable variations among schools and colleges in the quality of education and how it is delivered. The Boards of School Education differ in the criteria that they use to grant recognition and affiliation to secondary and higher secondary schools and allow them to provide education. These criteria generally lay down the conditions that institutions must fulfill - e.g. availability of adequate land and, buildings, competent teaching and supporting staff, condition of infrastructure, financial resources available to the institution, etc. Similarly, the universities prescribe criteria for recognition and affiliation of colleges. Universities, Boards of Secondary Education and administrators are expected to continuously monitor and evaluate the functioning of institutions to ensure that their affiliated institutions function effectively and they continuously make an effort to improve the quality of their programmes. In actual practice, however, many of the prescribed criteria might be violated resulting in the availability of schools and colleges of sub-standard quality. Academic supervision and guidance of school teachers are seldom undertaken. This is largely because of the inability of the state governments to strengthen field level administrative machinery in proportion to the increases in number of institutions, teachers and students.

ROLE OF STATUTORY AND AUTONOMOUS ORGANISATIONS

Both central and state governments have set up a number of statutory, autonomous and

regulatory organisations, the formed through acts of legislatures. Among the prominent statutory organisations are the University Grants Commission (UGC), All India Council of Technical Education (AICTE) and the National Council of Teacher Education (NCTE). These organisations perform regulatory functions and are directly concerned with recognition of institutions and their courses and development plans. UGC provides financial support to universities and colleges eligible for its support - maintenance and development grants to central universities and their constituent colleges and development grants to state universities. Although these organisations are not directly involved in the administration of institutions, they perform important roles in preventing establishment of institutions of doubtful quality and managed by those who have few credentials to provide worth while services. These organisations often develop long and short terms of educational needs and assist the Ministry to "prepare five year and annual plans and seek funds to meet sectoral requirements.

Among the important autonomous organisations set up by the MHRD are the National Council of Educational Research and Training (NCERT), National Institute for Educational Planning and Administration (NIEPA) and National Institute of Open Schooling and Rehabilitation Council of India (RCI) set up by the Ministry of Social Justice and Empowerment. NCERT undertakes research, training and extension activities for enhancing the quality and relevance of school education, conducts short and long duration courses, undertakes periodic surveys of the status of education, prepares quality teaching and learning materials, prepares audio-visual materials for reinforcing class room transactions and generally advises the Ministry and state governments on policies and programme interventions. NIEPA organizes short and long term training programmes for personnel who have responsibility for educational planning and administration. NIOS organizes educational and training courses for those who are unable to enroll in regular institutions. The RCI conducts training programmes for the teachers of disabled children in collaboration with state open universities. At the state level State Councils of Educational Research and Training and District Institutes of Education prepare teaching learning-materials and organize training to enhance and upgrade the competencies of school teachers.

CENTRAL ADVISORY BOARD OF EDUCATION (CABE)

The Central Advisory Board of Education (CABE) provides a mechanism for arriving at a consensus on significant

policies and programmes of educational development and on strategies for implementing them. Such a consensus is important considering the diversities and multiple authorities governing education. The C.A.B.E. was first established in 1920 for promoting a wider discussion of the educational effort of the government. It was dissolved in 1923 'as a measure of economy' but revived in 1935.

In 1945, the C.A.B.E., under the leadership of John Sargent submitted a report known as 'postwar Educational Development'. His C.A.B.E. report comprising of nearly 100 pages, contained recommendations for all stages of education in India. However, these proposals could not be implemented fully as India became independent in 1947. John Sargent, as a follow up, reviewed their implementation in 1965.

Although C.A.B.E.'s meetings were not held frequently, it was regarded as an important agency for serious consideration of educational proposals. The National Policy on Education, 1986 has; stated: "The Central Advisory Board of Education will play a pivotal role in reviewing educational development, determining the changes required to improve the system and monitoring implementation" (NPE, 1986).

Subsequent to a change of the government at the centre, an effort was made to design alternative mechanisms for consultation with state governments, various official and nongovernmental organisations and other stakeholders concerned with education (such as parents groups) had a stake in it. Meanwhile while hearing a petition on the National- Curriculum Framework for School Education 2000, prepared by the NCERT, being against the Constitutional mandate, anti-secular and without consultation in the C.A.B.E., one of the judges of the Supreme Court (Justice H. K. Sema) stated in his judgement: "In the case of C.A.B.E., the term of nominated members is only for three years but for ex-officio members there is no fixed term of office. This would mean that the existence of the Board, as such, is in perpetuity". And further :

"In my view, side stepping of such an important Advisory Board as C.A.B.E. on the plea of non-reconstitution of nominated members is not proper. There is yet another reason as to why consultation of the Board is highly essential on issues like relating to the state and central coordination in evolving a national consensus pertaining to national policy on education which require implementation in all the states as the education has now been to the Concurrent List b 42nd amendment the Constitution. This would dispel the lurking suspicion in the minds of the people and also to project transparency and purity in the decision making process of the as possible, and in any case, before the next academic session" (Supreme Court of India Judgement 12 September, 2002).

In the light of the above judgement, the government of the day (U.F.A) decided, vide Government of India Resolution dated July 4, 2006, to reconstitute the C.A.B.E., although it had continued to be in existence but had not been reconstituted after the expiry of its extended term in 1994. The main functions of the Board, as listed in the Resolution are:

- a. to review the progress of education from time to time;
- b. to appraise the extent and manner in which the education policy has been implemented by the Central and State Governments and other concerned agencies, and to give appropriate advice in the matter;
- c. to advise regarding coordination between Central and State Governments/UT Administrations, State Governments and non-govern mental agencies for educational development in accordance with the education policy; and
- d. to advise, sou moto, or on a reference made to it by the Central Government or any State Government or a Union Territory Administration on any educational question". (Government of India Resolution dated July 6, 2004).

The Board has a tenure of three years. Its comprises Union Minister of Human Resource Development as Chairman, State Minister of Human Resource Development as Vice Chairman, eight representatives of the Government of India {Ministers of Information and Broadcasting, Science and Technology. Health and Family 0057elfare, Labour, social Justice and Empowerment, Tribal Affairs, and Youth Affairs and Sports and Member (Education) of Planning Commission), Education Ministers all States and Union Territories, 15 ex-officio members, 31 members representing different interests and 10 permanent invitees (Secretaries of different Ministries of the Government of India). The Secretary, Department of Secondary and Higher Education of the Ministry of HRD is the Member Secretary of the Board. The Board works through Committees, which are constituted to consider different issues and concerns of educational development. Recently one major task of the C.A.B.E. was to approve the revised national Curriculum Framework (2005) of the NCERT.

Entry 66 of the Constitution makes the Union Government responsible for "coordination and determination of standards of institutions of higher education and research and scientific and technical education". The UGC provides a mechanism to the central government to discharge its constitutional obligations. The Commission was first established in 1945 on the basis of the established with a full time Chairman, a Secretary and eight members. It was given a statutory status in 1956. The Commission at present consists of 12 members and a Chairman and Vice Chairman, all appointed by the Government of India (J. L. Azad).

The Commission has the general responsibility of coordinating and promoting university education and ensuring that standards of university education - teaching, research and examination - are maintained. For performance of these roles it provides grants to universities and eligible colleges - maintenance and development grants to central universities and their colleges and generally development grants to other universities and some selected colleges. While maintenance grants are generally for meeting expenditure on staff salaries and maintenance of facilities, development grants are given for such activities as creation of new facilities (for instance, hostels and laboratories), research projects, organisation of Academic Staff Colleges activities for upgrading competencies of teaching staff, restructuring of courses and of degrees etc. A study of the role of UGC in financing university education indicated that between 1991 and 2002, the share of central universities in the Commission's grants ranged between 76 per cent to 86 per cent and that of state universities ranged between 14-15 per cent to 24 per cent (Furqan Qamar, 2005).

Given the general constraints of resources, particularly for higher education in the context of elementary education being given higher priority, the general complaint voiced is that in spite of the Constitutional mandate of determining and coordinating standards of higher education provided by all universities and colleges UGC's involvement in ensuring quality of education provided into state level institutions of higher education is marginal, mainly because bulk of the amount at its disposal is expended to meet the needs of central universities and their colleges. The lack of powers to prevent the establishment of substandard universities has resulted in the setting up of many 'fake universities' in regard to which its only action has been to issue statements that the degrees awarded by them are not recognized for further education and employment.

UGC has all along shown a consciousness of its responsibility to enhance the quality and relevance of university education and designed courses for emerging and frontier areas, particularly in sciences. Some of the significant measures that it has taken and provided for include: establishment of six university centres for specialized research; support to 488 centres of excellence; support to autonomous colleges which have been allowed to decide upon their courses and scheme of examinations and issue of degrees; establishment of National Eligibility Test (NET) passing which has become compulsory for Junior Research Fellows and for appointment of Lecturers in universities and colleges; establishment of 17 media centres for preparation and transmission of teaching learning materials through terrestrial and satellite channels; establishment of a National Assessment and Accreditation Council (NAAC) which grades institutions according to the quality of their programmes and performance; Academic Staff Colleges for upgrading competencies of teaching staff of colleges and universities; introduction of vocational courses at undergraduate level etc. In spite of these and other measures, the impact of the UGC in promoting the quality of education seems to be limited. Anand indicates that "even a cursory examination of the functioning of the UGC would reveal that 15 odd central universities have been lavishly funded to the near neglect of hundreds of". Since all its members are appointed by the government, the Commission often has to follow the government's policy;

- Although the Commission is expected to tender advice on the establishment of new universities, its advice is neither requested nor accepted;
- Without any restraining mechanism, it has not been able to curb the tendency of the state governments and private managements to establish universities and colleges, resulting in unplanned establishment of institutions;
- It has not been able to halt the establishment of fake universities;
- It has no responsibility of determining and coordinating standards of other sectors of higher education (technical education, agricultural education, medical education etc.)
- In its support to higher education it has tended to completely ignore the requirements of colleges despite that they account for more than 70 per cent of the total enrolment in higher education.

A recent development has been the establishment of universities for imparting professional education in the disciplines of agriculture technology, medicine and law. This development has led to the lightening the load of state universities. They are now mostly taking care of general education.

The study concludes that "there is need for drastic revision of the UGC Act so as to make it an effective instrument of quality improvement of higher education" (Azad).

NATIONAL COUNCIL FOR TEACHER EDUCATION (NCTE)

In its non-statutory form, the National Council for Teacher Education was established in the NCERT with its Department of Teacher Education and Extension providing a Secretariat. With the support of various departments

of the NCERT, The NCTE was able to initiate a number of activities for improving the quality of teacher education. Among these included: surveys of teacher training imparted in training institutes of education schools and colleges for identifying their infrastructure and staff resources; preparation of a curricular framework for teacher education in 1978 which, apart from suggesting improved modes of teacher preparation, recommended 'working with the community' and intensive long duration internship for prospective teachers as important components of quality teacher education programme etc. Since the Council had no regulatory authority, it could not prevent mushroom growth of teacher education institutions and colleges with few resources to provide an effective programme of teacher preparation. It could also not prevent some universities to institute correspondence courses enrolling thousands of students; these courses were often introduced to augment financial resources of the universities. The courses offered did always not have facilities for face-to-face contact or effective teaching practice sessions.

The NCTE as a statutory organisation came into existence in 1993 through an Act of the Parliament with its main role being to "achieve planned and coordinated development of teacher education system throughout the country and the regulation and maintenance of proper norms and standards in the teacher education system". The Council has since its inception:

- created a data base of teacher education institutions and their programmes;
- worked out norms of buildings, infrastructure, staff resources, financial resources and quality of teacher preparation courses that institutions have to fulfil before they are recognized by the Council;
- fixed limits to the number of students that can be enrolled by an institution, including those that can be enrolled in correspondence courses of universities;
- prepared a curriculum framework for all categories of teacher education courses;
- brought out teaching learning materials for use of teacher educators and prospective teachers.

The Council has established four Regional Offices at Bhopal, Jaipur, Bangalore and Bhubaneswar which, apart from implementing academic activities organize inspection of institutions requesting their recognition by the NCTE. The organisational structure of the Council consists of a general body of 43 members, a 19 member Executive Committee and various departments. Each regional office is guided by a committee of which has a chairperson and a Regional Director as head of the office. The Regional Office works under the direction and guidance of the Chairman of the NCTE.

Although the Council has been in existence for more than a decade, its impact on the quality of teacher education has yet to be experienced; a major reason seems to be non-availability, on a tenure basis, of professionally qualified staff that would continuously monitor the functioning of teacher education institutions and the quality of the programmes that they offer. While it has developed improved formats of teacher preparation, it has not yet made a serious effort to invoke its regulatory provision to see that these formats are introduced.

Further, it has yet to provide a lead in instituting teacher education courses which are effective and which would respond to new developments (such as emergence of information and communication technologies), that have significant implications for transaction in and outside classrooms. Conventional modes of teacher preparation have yet to be replaced by more effective and efficient modalities; or by a systematic plan for upgrading the competencies of teachers and teacher educators.

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING (NCERT)

The National Council of Educational Research and Training is a very large autonomous organisation that the Ministry of HRD has set up to provide research, training and extension support to school education. It has a staff complement of about 3000 of whom about 300 are professionals (Lectures, Readers and Professors, specialists in production of films, audio and video teaching learning materials and their transmission through terrestrial/satellite channels, experts in production of textbooks etc.).

Freedom struggle, achievement of independence and the adoption of a democratic polity created expectations that the new government of independent India will extend people access to education by creating facilities for education of the masses, who had received scant attention at the hands of colonial administration. The creation of a large system of education at Central and state levels catering to the needs of different segments at different levels of development required working out of policies, programmes and intervention strategies for ensuring that every one in the country had a fair chance of receiving relevant education of good quality. Policy and programme decisions required competent professionals. The then Ministry of Education, therefore, established a number of institutions, each specializing in a significant and specific aspect of education. These institutions included: Central Institute of Basic Education, Central Institute of Education (now a part of the Delhi University), Bureau of Textbook Research, Bureau of Educational and Vocational Guidance and Directorate of Extension Programmes for Secondary Education (DEPSE). The professional staff of these institutions expected to identify needs of the education system, propose for government's consideration of policies and programmes and to monitor their implementation of these policies and to provide assistance to state governments and state level institutions.

It was soon realized that educational development often required multi-disciplinary consideration, that education plans could not be drawn piecemeal and that policies and programmes should generally be so designed as to reinforce each other so that their impact is enhanced. The Government of India, therefore, decided to establish national council (NCER as an autonomous organisation by integrating different institutions under one management. The Memorandum of Association lists the Council's functions would be to: undertake, promote and coordinate educational research; organize pre-service and in-service training mainly at advanced level; organize extension services for research and training institutions; act as a clearing house of ideas and disseminate educational information; advise state governments and other institutions on matters relating to school education; prepare teaching learning materials for use of teachers and students; and generally to undertake activities which will enhance access to school education and improve its quality and relevance etc (Memorandum of Association : NCERT).

As at present, The NCERT has a number of departments under the umbrella of National Institute of Education, five Regional Institutes of Education (Ajmer, Bhopal, Bhubaneswar, Mysore and Shillong), a Central Institute of Vocational Education and a Central Institute of Educational Technology. The major functions of these five major units and constituent units are briefly indicated below:

NIE departments

They undertake periodical surveys of the education system and research in education to find out the status of access to education, in the form of enrolments of different groups and gross enrolment ratios, availability of teachers and of infrastructure in schools. They undertake research which helps in deciding upon the interventions that are required to enhance the quality and relevance of school education. They train key resource staff of SCERTs, DIETS and other institutions who can on their own undertake much larger programmes of training of teachers and teacher educators. The departments assist the Ministry and state education departments in formulating suitable policies and programmes of educational development. They prepare teaching and learning materials, particularly textbooks, teacher guides and work books which are published and supplied to wholesalers for sale. These textbooks are used in CBSE affiliated schools and other institutions. Some of the states have adopted them with some adaptation in relation to local contexts.

Regional Institutes of Education (RIEs)

They organize training courses to train teachers; many of these courses are innovative and trend setters although in view of the rather chaotic situation in teacher training, there have been no takers for them. Initially set up to prepare teachers for diversified courses for multipurpose higher secondary schools, recommended by the Secondary Education Commission, 1953 - a programme which was replaced with the adoption of 10+2 pattern recommended by the Education Commission, 1966 - these Institutes continue to offer a few pre-service training courses, liaise with states governments and their institutions, conduct research in educational problems, collaborate with state level institutions in training of teachers and preparing teaching learning materials.

Central Institute of Educational Technology (CIET)

It was initially established in the form of a department of the NCERT. It was transformed with larger scope and functions, into an autonomous Institute. In addition to preparing audio-video cassettes for reinforcing classroom teaching, it prepares materials for transmission through Gyan Vani and Doordarshan and radio network. It has experimented with use of satellite and teleconferencing for upgrading competencies of teachers and teacher educators.

NATIONAL INSTITUTE OF OPEN SCHOOLING (NIOS)

In developing countries increasing access to schooling is a major task of educational development. Poverty compels many households to utilize child labour to contribute to the subsistence resources of the family; so that their parents or older siblings are able to engage in paid work, girls are retained at home to attend to domestic chores. Even when enrolled many children tend to drop out of the system prematurely as soon as they attain what might be called the working age. India is reported to have about 18 million child workers, many of them working in hazardous conditions. These and other conditions require alternative systems of delivering educational services at convenient hours and affordable cost. Further in present day world workers find it necessary to upgrade their skills or learn new skills so as to remain in demand for remunerative work. They are unable to afford leaving work place to enter institutions - even for short duration - to undergo a systematic course of education and training. For such people alternative arrangements for education and training are necessary. Non-formal education centres and distance education are the two principal modes to enable people to receive education and training without having to enroll in full time institutions as regular students trainees.

Before the National Open School (now designated as NIOS) was established many school education systems had established open schooling as an alternative for providing education to those children who could not attend regular full-time schools. For instance, in 1965 Madhya Pradesh Board of School Education instituted correspondence courses for completion of grade X education. Other states like Delhi, Haryana, Rajasthan and Uttar Pradesh followed suit. In their correspondence courses the curricula and scheme of examinations was similar to those of the formal system; the discriminating feature was that students could study at their own time, pace and place.

A beginning at the national level was made in 1979 when the Central Board of Secondary Education (CBSE) initiated open schooling as a project aiming at open entry, open choice and open time and place. Apart from providing education through alternative means, the project aimed at sustaining literacy of the newly made literate and continuing education through post-literacy centres. The NIOS in its present form was set up as an autonomous organisation in 1989. In 1990 it was vested with the authority to examine and certify students up to the pre-degree level; the first secondary and senior secondary examinations were held in 1991 The main objectives of the organisation are:

- to provide opportunities for continuing and developmental education at the school stage;
- to provide consultancy services to the Government of India and States;
- to serve as an agency for effective dissemination of information related to distance education and open learning;

DECENTRALIZATION OF SCHOOL EDUCATION

The discussion on decentralization of authority in education seems to have largely remained confined to governance of elementary education. The advocacy for involving communities in educational decision-making is on many grounds: the desirability of promoting pro-active role of families in education of their children in view of the importance that they attach to it; India, with its size and diversities, requires contextual policy formulation and programme development which can be possible with the involvement of (the people at grass roots level; the people, in groups or through their representatives can monitor the functioning of local institutions and the performance of their roles; association of people can promote enrolments and attendance; with the involvement of people the possibility of mobilizing additional resources for education increases.

Decentralization in a real sense requires:

- Specification of roles and functions
- Partial or absolute authority to take decisions
- Resources to implement decisions that have been arrived at through deliberation and consensus
- Capability to take decision (for instance development of worthwhile and feasible projects which meet needs, knowledge of procedures etc.) and to ensure their implementation.

Although India has a long tradition of involving people in education - municipal committees, district school boards, institutional managing committees etc, - a serious attempt to create representative bodies and entrust them with educational functions was made in 1952 in community development programme. A block of about 100 villages was designated as the lowest unit of administration and for the formulation of programmes aiming at community development. Both at the block and the district levels functions were specified and provided for through a schematic block budget, indicating the resources that a block had for various activities. "The community development programme did not fulfil its objectives, particularly that of promoting people's involvement and participation in the development process since block development became a bureaucratically controlled activity. The same experience was duplicated at the district level. The system, conceived and implemented, turned out to be a top-down model of bringing about rural change rather than adopting a bottom-up approach where local communities' perceptions and proposals provided the main inputs for formulating plans for development of local communities" (Dhar, 2001).

The second important event was the appointment of a team under the Chairmanship of Balwant Rai Mehta. The 1957 Report of the Team for the Study of Community Projects and National Extension Service is a major landmark in deciding upon the nature and form of democratic decentralization. The Team emphasized the need and desirability of the government divesting itself completely of some duties and responsibilities and devolves many of its tasks to a body, which can take complete charge of development work under its jurisdiction. The Team recommended a three tier administrative system: village panchayat constituted on the basis of an election, block level panchayat samiti formed through indirect election and district level zila parishad consisting of presidents of panchayat samitis, local MLAs and MPs and district level officers. Since it suggested block as the basic unit for all departments, panchayat samiti occupied a significant place.

GLOBALIZATION: IMPLICATIONS FOR SCHOOL EDUCATION

The distance between nations has shrunk, literally and metaphorically and in more senses than one. That the world has become a global village portrays the disappearance of distances among peoples. Events and incidents in one country affect the lives of people in other countries. A great deal of economic integration of world economies has already taken place. The process of economic liberalization and pervasive media messages have hastened the process although the pace is yet to gain momentum in many parts of the world. The young seem to have common interests. Economic and to a substantial extent, cultural integration of the world seems to be taking place; the emergence of market oriented competitive economies has compelled planners and policy makers to look at their production processes and the extent to which they apply scientific and technological developments in upgrading productivity and diversifying occupational composition of communities. Since nations are at different stages of development - many of them dependent on primary products - market orientation of economies is placing many countries at a disadvantage. At the same time there is greater desire on the part of the world community to help those who have fewer means to ensure sustainable development. Education for All is an instance. Globalization has also resulted in global action in combating natural disasters and meeting needs of the poor; the response of the world community to Tsunami and the recent earthquake in Kashmir are instances of growing concern for each other's well being. AIDS has led to worldwide cooperation and action.

The nature and forms of globalization are not only economic. It has significant social and cultural implications. The electronic media portray life styles, which are in many ways alien to indigenous cultures and traditions. The alienation of the young has become a major concern in many countries including India, which has a much longer cultural tradition and where social institutions tend to be strong preventing complete rejection on the part of the young of indigenous traditions, social practices and life styles. The educational implications of globalization are many and varied. They require a critical look at the content and processes of education, with emphasis on an awareness, understanding and appreciation of nation's culture heritage, the promotion of enhanced competencies to be able to function in a world where responses to changes have to be quick and meaningful, the ability to withstand competition by using knowledge and skills, continuous up-gradation competencies of students and the work force, efficient and effective management practices and use of resources, continuous and critical of practices and so on. School education in India has yet to fully understand the implications of globalization much less make to an adequate response.

A facet of globalization is the world-trade in services under the World Trade Organization. In WTO two areas have been identified for multilateral agreements: goods and services. The assumption is that liberalization and pro-market reforms, enabling free movement of goods and services across continents and countries will contribute to faster growth of economies.

GOALS OF EDUCATION SYSTEM IN UK

The U.K. has a long tradition of non-interference by the central government in most aspects of education. Education in the U.K. is often known as a "national system, locally administered". Elected local education authorities are responsible for day-to-day running of the system. It is decentralized and hence authoritative government statements on the expected role of schools is quite rare. A consultative document issued in 1977 by the government proposed the following aims for schools (Secretary of State for Education and Science, 1977):

- to help children develop lively enquiring minds: giving them the ability to question and argue rationally, and to apply themselves to tasks;
- to instill respect for moral values for other people and for oneself and tolerance for other races, religions, and ways of life;
- to help children understand the world in which they live, and the interdependence of nations;
- to help children to use language effectively and imaginatively in reading, writing and speaking;
- to help children to appreciate how the nation earns and maintains its standard of living and properly to estimate the essential role of industry and commerce in this process;
- to provide a basis of mathematical, scientific and technical knowledge, enabling boys and girls to learn the essential skills needed in a fast-changing world of work;
- to teach children about human achievement and aspirations in the arts and sciences, in religion and in the search for a more just social order; and
- to encourage and foster the development of the children whose social or environmental disadvantages cripple their capacity to learn, if necessary by making additional resources available to them.

The higher education system is seen by the government as having a triple role of developing knowledge, applying it to contemporary problems, and training highly skilled human resources] Recently, a fourth role of updating knowledge of adults in science, technology and business subjects, has been given prominence.

You will notice that the aims stated above reflect the changes which have taken place due to scientific and technological advancements and the role a citizen is expected to play in the fast changing human and natural environment. It is interesting to note how the aims of education are conditioned by the demands put by the society on the education system.

GOALS OF EDUCATION IN USA

The following factors need special mention with reference to the education system of U.S.A.

- Due to a combination of geographical and demographic characteristics, there is a great diversity within the country. There are large states like Alaska with a territory of 590,000 square miles but very small population (406,000 persons) while Rhode Island has a territory of only 1,214 square miles. The great difference in size and population of different states creates widely different conditions and problems in providing schooling.
- In some cities like New York, Washington, Chicago, Detroit and Los Angeles, there is a large concentration of the poor, unemployed, non-English speaking ethnic minorities. This creates a major problem for providing adequate schooling.
- The number of people employed in technology and related trades has increased substantially as a proportion of the labour force.
- Due to highly developed technology and its rich land and natural resources, the standard of living in U.S.A. is very high.
- Democracy is deep-rooted in the system of government as well as in the public psyche. Any violation of individual freedom and liberty is greatly resented.
- The constitution of the U.S.A. delegates substantial powers to the fifty states of the nation. Each state has its own constitution, legislature and judiciary.
- Education is one of the major responsibilities devolving upon the state which in turn delegates considerable responsibilities to the local units of government, counties and local school districts.
- The American education system offers the most diverse set of education options in the world.
- There is large scale participation by the community representing various sections of people from business, labour, parents, and other pressure groups in curriculum formation.

The rights of the States in managing education according to their special conditions and needs is provided for in the Constitution. Federal interference is least. As such there is least scope for laying down national goals of education. However, there is a consensus among states regarding the goals of education and there is a broad agreement about the expectations of the education system regarding the type of citizen that will evolve out of it. The United States has been largely successful in providing 12 years of free and compulsory education to its children. The students, after completing secondary education have the opportunity to go in for higher education at low cost and enhance their capabilities in various fields. As there is a large participation by the community representing various sections of society in educational matters, the goals of education reflect the values, aspirations and needs of the different segments of society. The general goals of education emerging out of interactions among educationists and various segments of society are as follows:

The education system should be able to:

- help in developing a sense of world citizenship,
- help in developing vocational and entrepreneurial skills so that the individual is capable of ensuring his/her economic development and also contribute in the nation's economic development, and
- help in developing a sense of belonging and devotion to the nation.

Keeping in view the broad goals of the education system, various committees have laid down the aims of education for different stages of education. At the primary level the stress is on the following goals:

- create sociability and cooperative feeling
- create a national spirit,
- create a consciousness of keeping the body healthy,
- develop a spirit of freedom,
- develop harmony between individual and social needs,
- develop self-reliance, and
- develop creativity.

While all these aims continue to matter at all stages of education, emphasis varies at different stages. At the secondary stage, developing vocational ability, civic education, worthy use of leisure, moral education, and worthy home membership are emphasized. At the higher education stage advancement of knowledge, independent research, preparing oneself for probable future needs, and increasing specialization are stressed. It may be pointed out that from the primary stage of education, independent thinking is encouraged. Students are motivated to take up projects in their area of interest and search for relevant information for which facilities are available. The initial training of self-study and developing independent thinking among students from early stages of education helps them to be self-confident and creative when they pursue higher education and take up professions.

INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT (IEA)

IEA is an important international organization that is designed to conduct comparative studies on educational achievement in various countries. Although it had the backing of UNESCO in the beginning, it eventually became an independent organization in 1967. Today, the members include various national research institutions and governmental research agencies. IEA headquarters are located in Netherlands.

Underlying belief and the mission

A basic belief guiding the work of this association is that educational decisions need to be based on *data* regarding the *outcomes* of knowledge, attitudes, and participation. By providing a consistent basis for looking at outcomes over a period of many years and across nations, it is easier for a single nation to adopt or modify educational policy and programme decisions based on research data.

The basic mission of IEA is described as follows:

- 1.To provide international benchmarks that may assist policy-makers in identifying the comparative strength and weaknesses of their educational systems.
- 2.To provide high-quality data that will increase policy-makers' understanding of key school and non-school-based factors that influence teaching and learning.
3. To provide high-quality data which will serve as a resource for identifying areas of concern and action, and for preparing and evaluating educational reforms.
4. To develop and improve educational systems' capacity to engage in national strategies for educational monitoring and improvement.

THE WORLD BANK AND EDUCATION

World Bank supports advancement of education in developing countries as the world's single largest provider of external funding for education. At present the priority areas of World Bank are (i) Education for All (EFA), (ii) Education for the Knowledge Economy (EKE), (iii) Economics of Education, (iv) School Health and Nutrition, and (v) HIV/AIDS and Education.

Education for all (EFA)

Education for All (EFA) is an international commitment first launched in Jomtien, Thailand in 1990 to bring the benefits of education to "every citizen in every society". Partners comprised a broad coalition of national governments, civil society groups, and development agencies such as UNESCO and the World Bank. In response to slow progress over the decade, the commitment was reaffirmed in Dakar, Senegal in April 2000 and then again in September 2000, when 189 countries and their partners adopted two of the EFA goals among the eight Millennium Development Goals (MDGs). The EFA commitment is specifically to: Ensure Universal Primary Education (UPE) for all children by 2015 (an MDG); eliminate gender disparities in primary and secondary education (an MDG); improve early childhood care and education; ensure equitable access to "life skills" programmes; achieve a 50 percent increase in adult literacy by 2015; and improve all aspects of the quality of education. Although the MDGs refer only to the issues of UPE and gender disparity, the World Bank recognizes that achievement of these goals will require support for the full EFA commitment.

Why is EFA important:

Despite considerable progress in recent years, at least 52 of the 154 developing countries will not achieve universal completion of primary education by 2015 unless efforts are accelerated substantially. Though gender gaps in primary and secondary enrolment are narrowing, at current trends 30 developing countries will not achieve gender parity in primary and secondary schooling by 2015, with low-income countries facing the greatest challenges. The quality of education remains far too low, and few children receive adequate childhood care and education, particularly among poor and marginalized groups. Literacy skills of the adult population are in all probability even lower than what is currently reported.

Achieving EFA goals is critical for attaining all the MDGs—both through the direct impact of education on child and reproductive health and environmental sustainability and by creating a body of experience in multi-partner collaboration toward the 2015 targets. Conversely, achieving other MDGs, such as those dealing with improved health and access to clean drinking water, decreased poverty and environmental sustainability are critical to the achievement of the Education MDGs.

The past five years have seen considerable momentum toward achieving universal primary education.

What is the World Bank doing to achieve EFA?

World Bank lending has helped provide expanded school opportunities for children around the world. It has increasingly focused on delivery of good learning experiences to all children.

The World Bank supports EFA efforts primarily through the following five multi-dimensional efforts

- Increasing access and equity as well as quality and learning outcomes.
- Focusing on girls' education to improve dropout and retention rates, as well as learning outcomes.
- Helping education systems cope with HIV/AIDS.
- Promoting early childhood development.
- Protecting EFA prospects in post-conflict countries.

Education for the knowledge economy (EKE)

The EKE refers to World Bank assistance aimed at helping developing countries equip themselves with the highly skilled and flexible human capital needed to compete effectively in today's dynamic global markets. Such assistance recognizes first and foremost that the ability to produce and use knowledge has become a major factor in development and critical to a nation's comparative advantage. It also recognizes that surging demand for secondary education in many parts of the world, creates an invaluable opportunity to build up on large scale a workforce that is well trained and capable of generating knowledge-driven economic growth.

WORLD COUNCIL FOR CURRICULUM AND INSTRUCTION **(WCCI)**

World Council for Curriculum and Instruction (WCCI) was started in 1970 by a group of educators who held strong belief that there was and continues to be a serious need for educators from different countries to discuss educational issues of peace and human rights. As the mission statement of WCCI states, "(It) is a transnational educational organization committed to advancing the achievement of a just and peaceful world community...promote a person-to-person contact and professional relationships." WCCI is an NGO of the United Nations. Currently there are over a thousand members (teachers, higher education faculty, educational institutions, and students interested in global education and peace education) from nearly fifty countries.

Mission

The Preamble statement of the WCCI constitution contains a concise statement of its mission. It states:

"As individual educators from all over the world, we join together in ...person-to-person, non-governmental, non-profit global organization committed to active participation. As educators in the world community, we have responsibility to ensure that education contributes to the promotion of equity, peace, and the universal realization of human rights. To this end, all curricular and instructional programs should strive to facilitate in every person the development of (1) a comprehensive sense of respect - of self, others, and the environment and (2) the capacity to participate at all levels of world society from local to global. As individuals, we commit ourselves to strive toward these ideals and fulfill the purposes of the organization within our professional responsibilities and in our organizational relationships."

Activities

WCCI Secretariat is currently located at San Diego, California (USA) where it moved from Cincinnati, Ohio (USA) recently. The governing body of the organization is an elected Board of Directors representing different parts of the world. In addition to an international headquarter, WCCI National or Regional Chapters are found in many countries of Asia, Europe, Africa, North America, and South America. There is an active chapter of WCCI located in India with members from Pakistan, Bangladesh, and Sri Lanka. Two of the international Presidents of WCCI have been from India.

The main activities of WCCI include:

- A biennial international convention in different parts of the world. Two next conventions are planned in Philippines (2006) and Turkey (2008). This is a recent change from the earlier Triennial conventions - the last one being in Australia in 2004. The triennial convention in 1995-96 was held in Amrilsar, India. After the first convention in United States, other conventions were held in England, Turkey, Canada, Netherlands, Japan, Philippine, Egypt, Thailand, Spain, and Australia.
- Publication of annual International Journal of Curriculum and Instruction.
- Publication of quarterly Newsletter for members.
- A new Listserv for all its members with email addresses to collaborate with each other.

International Society for Ecology and Culture (ISEC)

International Society for Ecology and Culture (ISEC) is a non-profit organization that concerns itself with the protection of biological and cultural diversity in different parts of the world. The organization has been responsible for creating awareness that globalization efforts in different countries need to be balanced by preserving local cultures and ecology – something that might be ignored unless closely monitored. The organization has its main offices in United States, and United Kingdom. Three small offices are located in Germany, Sweden, and India.

Activities (ISEC)

ISEC is an activists' organization that considers all available avenues for creating awareness among masses as well as political and business leaders for the need to protect local environments. Accordingly, the organization publishes books, and reports on various topics related to local issues, produces films (DVD), and organizes its own conferences in different parts of the world. One of the approaches used by ISEC is to develop networks with similar thinking individuals across the nations by making numerous presentations in various forums available at local levels. With a focus on local awareness and action, ISEC encourages Community Study in different areas. These involve small local group meetings attended by interested persons who become familiar with the strengths of their local culture, and seek ways for preserving the strengths of their communities and the local economy and ecology.

Some of the notable ISEC publications include: Shifting Direction:

From Global Dependence to Local Interdependence (2000), Bringing the Food Economy Home: The Social, Ecological, and Economic Benefits of Local Food (2000), and Ancient Futures: Learning from Ladakh (2000). In addition, ISEC has produced two films and DVDs focusing on Ladakh culture (Ancient Futures: Learning from Ladakh, and Paradise with Side Effects). ISEC has an ongoing project since 1975. (More on the Ladakh project in the next unit) We are next including two prominent organizations that are identified as "National" rather than "International" in their titles. However, these organizations have a large participation from international educators who collaborate on various development and research projects. The most important reason for including them in this unit is due to the scope of their impact over the past fifty years in changing the curriculum and instructional practices for science and mathematics in schools. Their role is likely to stay strong in determining the direction of these two subjects in the future. Caretaker of the Environment is another organisations based in Netherlands. It has branches in different countries, including India at New Delhi.

National Science Teachers Association (NSTA)

National Science Teachers Association (NSTA) is the largest non-profit organization in the world for science educators at all levels, scientists, and business representatives and others interested in the improvement of science instruction in schools and colleges. It currently has over 55,000 active members representing a multitude of countries. NSTA is located in Arlington, Virginia (USA). There are several smaller organizations that are affiliated with NSTA. Among others, these include: Association for Science Teacher Educators, National Association for Research in Science Teaching, and Council of Elementary Science International.

NSTA has been one of the most influential and active groups involved in the reform movement for science instruction as far back as 1960s when major shifts in curriculum and instructional approaches were formulated first in USA and then by most countries outside the Eastern European countries. Following the sputnik launch by Soviet Union, science and mathematics teaching saw most significant changes in the United States and United Kingdom. The materials developed there soon found their way in other countries in Western Europe, Asia, Africa, and Australia. Inquiry teaching and engaging students in activities that prompted them to "think like a scientist" became the goal for science reform in most countries. Although, much of the funding for such efforts came from governmental agencies, NSTA contributed most for making such teaching acceptable for teachers by providing opportunities for professional growth for teachers through conventions, workshops, publications and recognition programs for outstanding teachers. These innovative ideas about curriculum materials and inquiry approach have been adapted to a degree in India as well since the mid 1960s.

Mission

NSTA describes its mission as "to promote excellence and innovations in science teaching and learning for all."

In addition, it is guided by central principles. These are:

- model excellence;
- embrace and model diversity through equity, respect, and opportunity for all; provide and expand professional development to support standards-based science education; serve as the voice for excellence and innovation in science teaching and learning, curriculum and instruction, and assessment;
- promote interest and support for science education, collaboratively and proactively throughout society;
- exemplify a dynamic organization that values and practices self renewal.

National Council of Teachers of Mathematics (NCTM)

As mentioned earlier, NCTM has been included in this list of academic organizations because it is the single most important organization responsible for ushering in a major change in the scope of mathematics curriculum. The "NCTM Standards" have been widely used to develop mathematics instructions in many countries of the world. The "NCTM Standards" have shifted the focus of mathematics curriculum from simply memorizing the rules of mathematical algorithms to engaging students in mathematical thinking and problem solving. NCTM is the largest organization in the world for promoting the teaching of mathematics in schools and colleges. Current membership is approximately 100,000.

Mission

As a voice for mathematics, NCTM has defined its mission as follows:

- Provide guidance and resources for establishing and enacting mathematics curriculum that is coherent, focused, well articulated and consistent with Principles and Standards for School Mathematics.
- Increase the value and benefits of membership, and support Council growth.
- Engage in political and public advocacy to focus decision makers on improving learning and teaching mathematics.
- Advance professional development by creating a coherent framework of audience-specific products and services.
- Bring existing research into the classroom, and identify and encourage research that addresses the needs of classroom practice.

Activities .

Annual and regional conventions and publications of journals and books

NCTM publishes five regular journals each year. These are: *Teaching Children Mathematics*;

Mathematics Teaching in the Middle School; *Mathematics Teacher*; *Online Journal for School*

Mathematics; and *Journal of Research in Mathematics Education*.

Other special publications include: Books (on a selected theme), Principles and Standards

(outlining six Principles and 10 Standards for guiding the mathematics curriculum in schools),

and Navigations (book series with activities and ideas for implementation of the Principles and Standards).

World's largest mathematics event

Each year activities for students in all grades are featured with a different theme. Teachers are

encouraged to use these while teaching mathematics. Activities from previous years can be

downloaded and use by teachers and members for their use.

United Nations Educational Scientific and Cultural Organization (UNESCO)

UNESCO - The United Nations Educational, Scientific and Cultural Organization (UNESCO) was founded on 16 November 1945.

The origin of UNESCO:

As early as 1942, in war time, the governments of the European countries, which were confronting Nazi Germany and its allies, met in the United Kingdom for the Conference of Allied Ministers of Education (CAME) to reconstruct their systems of education once peace was restored. This project gained momentum and soon took on a universal note. New governments, including that of the United States, decided to join in on the proposal of CAME, and a United Nations Conference for the establishment of an educational and cultural organization (ECO/CONF) was convened in London from November 1 to 16, 1945. Representatives of forty-four countries participated on the instance of France and the United Kingdom, the two countries that had experienced great hardship during the conflict. The delegates decided to create an organization that would embody a genuine culture of peace.

At the end of the conference, thirty-seven countries founded the United Nations Educational, Scientific and Cultural Organization (UNESCO). The Constitution of UNESCO, signed on 16 November 1945, came into force on 4 November 1946 after ratification by twenty countries including India. The first session of the General Conference of UNESCO was held in Paris from 19 November to 10 December 1946 with the participation of representatives from 30 governments which were entitled to vote. Later on other countries like Japan, Germany, USSR etc. joined the organization.

Major goals and functions

For this specialized United Nations agency, it is not enough to build classrooms in devastated countries or to publish scientific breakthroughs. Education, Social Science, Natural Science, Culture and Communication Education are the means to a far more ambitious goal to build peace in the minds of men. Today, UNESCO functions as a laboratory of ideas and a trend setter to forge universal agreements on emerging ethical issues. The organization also serves as a Clearing house - for the dissemination and sharing of information and knowledge - while the helping member states to build their human and institutional capacities in diverse fields. In short, UNESCO promotes international co-operation among its 191 Member States and six Associate Members in the fields of education, science, culture and communication.

UNESCO is working to create conditions for genuine dialogue based upon respect for shared values and the dignity of each civilization and culture. This role is critical, particularly in the face of terrorism, which constitutes an attack against humanity. The world urgently requires global visions of sustainable development based upon observance of human rights, mutual respect and the alleviation of poverty, all of which lie at the heart of UNESCO's mission and activities. Through its strategies and activities, UNESCO is actively pursuing the Millennium Development Goals, especially those aiming to: (i) halve the proportion of people living in extreme poverty in developing countries by 2015; (ii) achieve universal primary education in all countries by 2015; (iii) eliminate gender disparity in primary and secondary education by 2005; (iv) help countries implement a national strategy for sustainable development by 2005; and (v) to reverse current trends in the loss of environmental resources by 2015.

The right to education and the mission of UNESCO

The right to education is one of the fundamental rights proclaimed by the Universal Declaration of Human Rights (Article 26). It is considered by the Declaration not only as a right in itself but also as a means of promoting peace and respect for human rights and fundamental freedoms generally. The mission

- to promote education as a fundamental human right
- to improve the quality of education
- to stimulate experimentation, innovation and policy dialogue

Policies and programmes

The role of education and its development is at the heart of present debates, such as sustainable human development, poverty reduction, the promotion of universal human values and tolerance, and the challenge of new information and communication technologies. Policy and decision-makers are responsible for developing a clear vision and relevant implementation strategies to take up the challenge of achieving the mission they are given, especially in the context of *Education for All*. The formation of educational policies is complex by nature. Compared to other socio-economic sectors, educational development involves more difficult and multidimensional problems. Faced with financial constraints, governments in many countries are not able to meet the broad social demands without adopting restrictive measures within the education sector in order to rationalize the use of allocated resources.

Taking into account the diversity of national contexts UNESCO's support primarily depends on the need expressed by countries themselves. According to the contexts, it can be a question of delivering technical assistance for designing an education development plan, or for the preparation of a programme/project for rehabilitation and rebuilding of an education system in the case of a country in emergency or crisis. In certain cases, the support can specifically relate to the reinforcement of national capacities in the area of policy formulation, educational planning, or in the management of technical, human and financial resources.

UNESCO and the teacher education programme

Well-trained teachers are critical for quality *education for all*. Neither Education for All (EFA) nor the UN Millennium Development Goals will be reached without adequate recognition of the role played by teachers. In this regard, the Teacher Education Section has a mission to contribute to EFA and the goals of enhancing the quality of education by strengthening our capacity building function in teacher training and retraining as a key factor to successful educational reform at all levels, including through the use of Information and Communication Technology (ICTs) and distance education.

The Teacher Education Section continues to mobilize Member States, particularly the developing countries, the less developed countries (LDCs), post-conflict countries and countries in transition, to design and implement viable national teacher training plans and curricula. The Teacher Education section also focuses on curriculum reform, design and implementation of comprehensive teacher education policies, building new skills to help teachers meet the new needs of learners in particular, by training teachers to use appropriate technologies and distance education and development of networks of teacher training institutions for joint activities and sharing of resources and good practice.