CONTEMPORARY ISSUES
IN
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Reviewer

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SYLLABI-BOOK MAPPING TABLE

Contemporary Issues in Education

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INTRODUCTION

The essence of human resource development is education, which plays a significant and remedial role in balancing the socio-economic fabric of the country. Since citizens of India are its most valuable resource, our billion-strong nation needs the nurture and care in the form of basic education to achieve a better quality of life. This warrants an all-round development of our citizens, which can be achieved by building strong foundations in education. In our national perception education is essentially for all. This is fundamental to our all-round development. Education has an acculturating role. Education develops manpower for different levels of the economy. It is also the substrate on which research and development flourish, being the ultimate guarantee of national self-reliance.

This book is written in a self-instructional format and is divided into five units. Each unit begins with an Introduction to the topic followed by an outline of the Unit objectives. The content is then presented in a simple and easy-to-understand manner, and is interspersed with Check Your Progress questions to test the reader's understanding of the topic. A list of Questions and Exercises is also provided at the end of each unit, and includes short-answer as well as long-answer questions. The Summary and Key Terms section are useful tools for students and are meant for effective recapitulation of the text.

UNIT 1 ISSUES IN EDUCATION: AN INTRODUCTION

Structure

1.0 INTRODUCTION

The earliest years of a child's life are critical. These years determine child's survival and thriving in life, and lay the foundations for her/ his learning and holistic development. It is during the early years that children develop the cognitive, physical, social and emotional skills that they need to succeed in life.

These early experiences are largely determined by supportive family and community care practices, proper nutrition and health care, learning opportunities, which in turn are dependent on enabling policies and investments for young children and families.

In India, according to Census 2011 data, there are 164.48 million children of 0-6 years of age. Recognizing the need to provide quality pre-primary programmes, a number of constitutional and policy provisions have been made such as the 86th Constitutional Amendment, which introduced Article 21A on the right to free and compulsory education for 6-14 years old children. The Right of Children to Free and Compulsory Education (RTE) Act 2010 guarantees children their right to quality elementary education.

In this unit, you will learn about early childhood education, measures for promoting women's education, and women empowerment and education. You will also study about education for gifted children and programmes for equalizing educational opportunities.

1.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Explain the importance of early childhood education
- Discuss the measures for promoting women's education
- Explain the relation between education and women empowerment
- Define gifted children and discuss their characteristics and the importance of providing education to them
- Describe the significance of equalization of educational opportunities

1.2 EARLY CHILDHOOD EDUCATION

In this section early childhood education will be discussed. According to UNICEF, early childhood is defined as the period from conception through eight years of age.

Child-centred Approach to Teaching

Meaning of Child Centred Education

A Dictionary of Education (1981) by Derek Rowntree considers child-centred approach/education/teaching as, 'Rather woolly slogan, but its main point is made by teacher who claims 'I teach children, not subjects'. This implies care for the child, his personality, needs and learning style and not just for his or her academic process.'

The Concise Dictionary of Education (1982) by G.R. Hawes and L.S. Hawes defines child-centred education as, 'An educational theory or system that emphasises the pupil and his or her individual characteristics as central in conducting instruction instead of focussing on subject matter, external authority, and educational requirements. Curriculum is constructed according to the pupil's interests and needs.'

In their book *A Critical Dictionary of Educational Concepts (1986)* Robin Barrow and Geoffrey Mitburn observe, 'The essence of child-centred education is, self-activity that the child should be at the centre of concern. ...Explicitly or implicitly, child-centred educationalists tend towards a view of education being a process of leading out rather of imparting knowledge.'

Child-centred education stresses the need for taking care of the child, its growth and development. It requires 'individualisation' of approach, so that one must study each child carefully, keep observations over a period of time, study the growth and development in sensory— motor area, intellectual area, emotional area, social area, language area and so on.

Key Concepts of Child Centred Education

Aim. The aim is development of the total personality of the child.

Programme. Programme is to be activity-based with different teaching strategies.

Pace of Learning. It is to be based on children's needs and abilities.

Teaching-Learning. Teacher's role is that of a facilitator in learning and development.

Discipline. It is to be achieved through the maintenance of positive human relationships between teachers and pupils.

Need for Child-Centred Approach and its Implications

1. The child is the agent in his own learning. Out of the three components of a learning situation; the child, the teacher and the environment, pride of place is to be given to the child. He must become the most important agent in his learning. It means that curriculum must be thought of in terms of activities and experiences which appeal most to the child.

2. Children learn best when they are active. When we consider the child an agent in his own learning, we must provide for him to be active. The medium of learning is the activities undertaken by the child. Learning takes place through a continuous process of interaction between the learner and his environment.

3. Knowledge or information is not the goal. Self-realization is the goal. Personality and character are more important than the subject matter. To possess all the knowledge of the world and lose one's own self is an awful fate in education.

4. Child-centred approach is more psychological than logical. It emphasises the process rather than the product.

5. Child-centred approach gives freedom to the child under the creative and sympathetic direction of the teacher.

6. One single exposure to an experience does not affect all the necessary co-ordination of the physical and mental faculties of a child to preserve the net value of exposure. Hence there has to be repetitive exercises and drills to give a certain knowledge and the efficiency and tenacity of a skill and value. It is here the child becomes a trainee and the teacher becomes a trainer or the child an educand and the teacher as an educator.

7. A child is a unique being and can function only by remaining in the world in which it has a specific role to play. The teacher's role is to help the child to conform to its unique role, both in its spirit, habitual values, choices and consistent behaviour patterns.

8. The child's sense of wonder and astonishment and his natural curiosity lead to a learning process which should be encouraged by teachers.

Limitations of Child Centred Education

Child-centred education has a few limitations which must be taken care of by the teachers. Too much freedom is likely to engender egocentricism in children. Children may grow to be unwilling to accept reasonable authority. If at all times and at all places, likes and dislikes, preferences, whims and interests of children are elevated above the mature judgements of parents and teacher, it may result in undesirable outcomes. Adams, therefore, wanted that both the children and their teachers should be on the same footing of importance.

Pragmatically speaking, learning cannot be child-centred always in absolute terms. Child-centred education implies that each child may have a separate learning activity besides a few group activities. Perhaps no nation can afford to spend so much money, resources and time on child centred education. Child-centred learning is confined to the learned discourses of educational thinkers. There are so many children under the charge of a teacher that it is rather impossible to attend to the specific needs of children individually.

Corrective Measures

Of course emphasis on child-centred education tends to free the child from the tyranny of the traditional approach to education which meant 'chalk and talk', 'bookish knowledge' and the 'supremacy of the rod'. Implicit in all the positions of child-centred education is that the teacher must be prepared to give initiative to the learner in the educational encounter. The teacher as well as the child must remain active in the teaching-learning activity. The teachers must take the initiative and find out the limitations of the learner's own spontaneous and undirected activity. The teacher has an obligation to assess the limitations of child's choice of educational activity. The teacher's legitimate role in encouraging self-disciplinary function cannot be over-emphasised.

The role of the teacher in child-centred education may be summed up as under:

- Motivating children
- Developing trust and confidence in children's capacity to learn
- Becoming as a resource for creating meaningful learning experiences
- Accepting the individual and the group
- Participating as a member of the group in guiding learning
- Becoming sensitive to the child's needs and interacting in a way that would provide a sense of feeling and security
- Recognising and reinforcing individual contribution

Principles of Teaching

Educators and philosophers have emphasised certain principles of teaching which the teachers are expected to bear in mind for making their teaching effective, efficient and inspirational. Sometimes these principles are classified as psychological and general principles. This classification is however very arbitrary and both types overlap.

1.2.1 Origin, Definition, Meaning and Principles of Play-way

Let us analyse the origin, definition, meaning and principles of play-way.

Origin of play-way: Play way approach to teaching is based on the philosophical thought of Caldwell Cook. According to him, good work is more often the result of spontaneous effort and free interest than of compulsion and forced application.' This means that teaching should characterise the elements of 'spontaneous effort' and 'free interest' Since these two characteristics are inherent in play, this approach or method of teaching is called play-way. Having discovered the unwillingness and distaste of his pupils for lessons in English literature, he employed a method by means of which the boys showed a keen interest in the subject. The Shakespearean plays/meanings of which were generally memorised without any interest and understanding came to be treated like real plays when 'dramatized' by the pupils. An open-air theatre was organised in the school. Literature now acquired a new meaning for them and lessons acquired the spirit of play. Similarly, activities were planned for grammar and composition lessons. The pupils participated eagerly in the lesson and were allowed to express their ideas freely. Thus, the English period was welcomed with joy. Gradually the scope of play-way became enlarged and it began to be applied to the teaching of other subjects. The play-way approach aims at introducing the elements of freedom, interest, realism and spontaneity into the entire school work.

Definition and meaning of play way: With a view to have a comprehensive understanding of the play-way, it is felt appropriate to consider the definitions of play and the key words understanding this concept.

Crow and Crow observe, 'Play can be defined as the activity in which a person engages when he is free to do what he wants.'

Dewey defines play as, 'Activities not necessarily performed for the sake of any result beyond themselves.'

Froebel notes, 'Play is the purest, most spiritual activity of man at this stage (childhood). It gives therefore, joy, freedom, contentment, inner rest and peace with the world.'

Good defines play as, 'Any pleasurable activity carried on for its sake, without reference to the ulterior purposeor future satisfaction.'

Gullicks writes, 'Play is what we do when we are free to do what we will.' Hurlock states, 'Play relates to any activity engaged in the enjoyment it gives, without consideration of the end results.' Montessori visualized play as 'When a child plays it resembles the never ending activity of the flowering stem of the growing tree.'

Nunn holds that 'play is a profound manifestation of creative activities.'

Ross regards play as 'joyful, spontaneous, creative activity, in which man finds his fullest expression.'

Ryburn writes, 'Play is a way, a means which is used by the self when the different instinctive urges are trying to express themselves.'

Stern regards play as ' a kind of voluntary self-constrained activity.'

Thomson looks upon play as 'the impulse to carry out certain instinctive action.'

Principles of Play-Way

(i) Play-way is based on the principle that learning takes place through doing.

(ii) It is based on the principle that learning takes place in an environment of freedom.

(iii) It is based on the principle that learning should be adapted to life situations and not to books.

(iv) It is based on the principle that the method should be suited to the needs and interests of the students.

(v) It is based on the principle that the child should be freed from authoritarianism.

(vi) It is based on the principle that the child should themselves take upon the responsibility of learning and progress in studies.

(vii) It is based on the principle that ample opportunity should be provided to children for self-expression.

Educative value of Play-Way

Play-way is important on account of the following:

(a) Play-way is a great motivating force. Play-way activities are based on the natural urges of the children. They put their heart and soul into work.

(b) Play-way kills drudgery and boredom. The students willingly undertake to do a piece of work.

(c) Doing and practice occupy the first place and telling the second and an unimportant place.

(d) The method is based on the laws of learning and it provides a great incentive to original creative work.

(e) Play-way provides opportunities for the sublimation of various instincts of children.

(f) Play-way assures maximum freedom for the child with the result that he develops originality, power of reasoning, imagination and insights.

(g) Play-way helps in sublimating the emotions of children. It provides suitable outlets which help in overcoming shyness, moodiness, timidity and sensitiveness.

(h) Play-way provides opportunities to the students to learn to cooperate, to take the lead and also to follow.

Play-Way Materials

These include (1) Gifts of Froebel (2) Sand play (3) Water-play (4) Wooden toys (5) Rubber toys (6) Glass toys (7) Plastic toys (8) Pictures (9) Picture book puzzles (10) Cut-outs (11) Card board games (12) Doll and doll house (13) Play-ground games (14) Story telling (15) Dramatics (16) Art work (17) Excursions (18) Dancing (19) T.V. (20) Community work, etc.

Application of Play-way Attitudes

The application of the principles of play-way is found in all the progressive methods of education and other school activities in one way or the other.

1. **Project Method:** 'Purpose element' is used to secure the interests of the students. The play-spirit pervades throughout the various activities connected with the completion of the project. The students work in an atmosphere of reality, freedom and responsibili ty.

2. **Kindergarten Method:** Froebel's Kindergarten provides a lot of action for children. Doing, singing, acting and playing are its chief characteristics. Gifts are given to the students with the help of which they learn the idea of shape, colour, number and weight etc.

3. **The Montessori Method:** Didactic apparatus imparts training in various fields. With the aid of this apparatus chi Idren learn reading, writing and arithmetic. The Children's Home provides an atmosphere of complete and unrestricted freedom. Children are kept active and playing while learning.

4. **The Dalten Plan:** The children are free from the tyranny of the time-table. They work according to their own rate and speed of learning. They are at liberty to move from room to room and laboratory to laboratory. A sense of self-help and responsibility is generated in the students. 'The students take a real pleasure in studies.

5. **Gary System Winnetke Plan:** All these methods are based on the play-way principles. School becomes the hub of activities in which children take keen interest.

6. **The Heuristic Method:** This method places the child in the position of a discoverer. Thus he acquires and learns some of the most fundamental skills through his own effort. The child is always mentally active as he wants to satisfy his curiosity.

7. **Basic System of Education:** This is a revolt against the verbal and bookish system of education. Here too the child learns by doing and thus derives immense pleasure side by side.

8. **School Life:** The play principle should be at work in all aspects of school life. The work of the educator is to make more and more use of this technique. The following play-way activities may be mentioned:

   (a) Self Government in Schools—This is very helpful in sublimating the various instincts of children—self-assertion, gregariousness, self-submission and pugnacity. Students develop valuable social and civic virtues. They themselves frame their rules.

   (b) The Boy-Scout and Girl Guide Movement—This movement makes the life of children full of activity, competition and cooperation. Students learn valuable social, intellectual and civic lessons through camping and tracking etc.

(c) Dramatics—Students prepare the stage, learn their parts and prepare costumes. They are working, but it is play.

(d) NCC, Excursions, School Celebrations etc. —All these are examples of play-way spirit.

Application of Play-Way to School Organisation and Administration: Lane Homer's school called 'The Little Commonwealth' a reformatory school, A.S., Neill's Summer Hall School and Sri Aurobindo's Ashram Schools are the striking examples of the application of the play principle to the entire administration and organisation of a school. Children studying in these schools are provided complete freedom to manage the affairs of the school according to rules of their own making. Children study and work at different occupations according to their own interests.

Play-way Spirit and Teaching of Various Subjects and Experiences

Play-way spirit can be utilised in many practical ways in the teaching of different subjects.

Languages and Mother Tongue: Dramatics, magazines and games are the different ways of introducing the spirit of play-way in the teaching of the mother tongue and other languages. Mock interviews, mock parliament, debates and panel discussions provide play-way means of training in oral expression in languages.

Mathematics: Running a school shop is the best way of teaching mathematics in a play-way spirit. Homely and practical examples should be selected. Surveys provide many opportunities.

History: The teaching of history provides a great scope for introducing the spirit of play-way. The school library should contain a good collection of books on history. Biographies, letters, historical atlases, historical albums and memories, etc. must find a place in the library or history room. Historical plays should be staged. Visits to picture galleries and museums create an environment of reality. A pageant on the life of Lord Buddha may be prepared. Scenes from the lives of great freedom fighters of India may be depicted. Historical poems may be narrated. Debates on historical events can be made a popular form of activity in schools.

Geography: The use of films and slides is very helpful in providing a clear and vivid picture of the lives of remote and distant areas. Visits to canals, dams and rivers give vivid glimpses.

Nature-Study: Specimens of leaves, flowers, plants and feathers may be collected by children. Opportunities for observing natural phenomena may be provided to the students.

Science: Illustrative scientific journals and books should be made available in the school library. Books on the lives of great scientists and discoverers should find a prominent place. Scientific hobbies should be encouraged. Science clubs may be organised effectively. Experiment work should be taken up in abundance.

Moral and Social Training: Various co-curricular activities like self-government, student parliament, scouting, cooperative store, cleanliness campaigns in the school and the community etc., provide useful training in moral and social values.

Various Play-Way Activities

1. **Dramatic Play:** Dramatic play is basically an exercise of the imagination, at the same time, it can also be a valuable learning experience. To a young child, a doll is not just a doll. It is like a real person. A toy telephone can be used to call and talk with someone.

2. **Games:** Games may be simple games, guessing games or more lively games such as musical chair. Several types of inexpensive educational games are available in the market.

3. **Watching the Television:** Television programmes can be educational-cum-recreational. Conducting of quiz programmes on a variety of topics is very helpful in enriching the experiences of students.

4. **Projects:** Projects provide immense scope for doing and learning.

5. **Celebration of Days:** Literacy Day, Girl Child Day, Aged Day Prohibition Day, Cleanliness Day, and Republic Day etc., are full of providing rich educational experiences.

6. **Educational Tours and Excursions:** All these if property planned and executed are full of educational potentials.

Play-way and Soft Pedagogy

It is wrong to regard play-way as soft pedagogy. It is in the words of Smith and Harrison, 'an all absorbing activity in which initiative, forethought, control and skill can be exercised in full measure.' Emphasis on play does not mean absence of serious work. On the other hand, introduction of the play-way spirit in work reduces drudgery. Play-way is an approach to do a difficult and boring task in an interesting way.

Play-way puts heavy demands on the teacher. It requires a lot of imagination and a real zeal on the part of the teachers as well as students. A teacher has to plan and execute activities, teaching points and projects very carefully and skilfully. Thus play-way is by no means a softy pedagogy. As observed by Griffith, 'Play is the child's characteristic mode of behaviour and any system of education which hampers this natural direction for the expanding of energy endangers the health-mental and physical of the child.' Indeed play-way has a unique place in dynamic and progressive teaching.

1.2.2 Founder of the Kindergarten

Friedrich Wilhelm August Froebel (1782-1852) popularly known as Froebel who was a German educator founded the Kindergarten Method. Kindergarten is a German word which means the 'children's garden' i.e. a place where young human plants are cultivated. Froebel regarded school as a garden, the teacher as a gardener and the children as plants. The teacher like a gardener carefully tends the children under his care and helps them to grow. Before becoming a teacher at the age of 23, Froebel had worked as an apprentice to a forester, a farmer, a clerk, a surveyor, private secretary, a book keeper and a student of architecture.

Son of a village clergyman, Froebel was born in 1782 in South Germany. The sad memories of his early childhood as well as his youth made him very eager in promoting the happiness of children. Having lost his mother when he was just nine months old, he was brought up by a strict father and an indifferent step mother. Rejected at home by his step-mother, scorned at school for his stupidity and repressed by a narrow religion of his father, Froebel grew up into a problem child and seemed to be out of control for sometime. However, at his tolerant and liberal uncle's place in Switzerland, Froebel first tasted of affection, freedom and trust. Froebel served for sometime in military also.

Frobel spent a few years at the University of Jena, University of Gottingen and University of Berlin. He was greatly influenced by the idealistic philosophy of Fichte (1762-1884) and Schelling (1785-1854) great German philosophers. Froebel worked for three years at Pestalozzi's (1746-1827) school at Yuerdum.

The year 1816 was a turning point in the life of Froebel. For in this year he established a small school at Griesheim. The school was meant for the education of small children between the age of 3 and 7. In 1827, the school was transferred to Blankenbug, near Keithan.

The school attracted world-wide attention for its novel approach to methods of teaching. The school was named 'Kindergarten'—a German word which means 'the children's garden. As already stated Froebel regarded the school as a garden and the teacher as a Gardener.

Froebel gave many lectures in different towns in Germany and started regular courses of instruction and training for teachers at Blakenburg and other towns and villages. The great aim and purpose of his life is summed up in his famous saying 'Come, let us live for our children.'

Sad End. Froebel spent his entire life for the cause of child education. The German Government did not approve of his method of teaching and forebade him from establishing any school. This was a great shock for the great educator and he could not survive it. Froebel died in 1852 in agony, misery and poverty. His grave is marked by a slab with a cube, a cylinder and a sphere on it—his gifts representing carefully graded materials for educating the children.

Froebel's important publications are 1. *Education of Man 2. Pedagogy of Kindergarten 3. Education by Development 4. Mother Piny and Nursery Songs.*

Froebel's Philosophy of Education

Froebel's philosophy of education derives its inspiration from the following principles:

1. The law of unity or interconnectedness. The unity of universe is three-fold in nature. (1) Unity of substance; (2) Unity of origin (3) Unity of purpose.

2. The principle of continuous development from within.

3. The principle of self activity.

4. The principle of development of individuality through social institutions.

Functions of Education: The functions of education, according to Froebel, may be summed up as 'Education should lead and guide man to clearness, concerning himself

and in himself to peace with nature, and to unity with God. It should lift him to knowledge of himself, to mankind to a knowledge of God and of nature, and to the pure and holy life.'

Why Stress on the Education of the Pre-School Child: One might rightly ask why Froebel, with his comprehensive training in so many fields of knowledge and his philosophical interest, finally concentrated his efforts particularly on the education of the pre-school child. There are two reasons for it. One is psychological. Froebel reveals an astounding insight into the importance of the early experiences of childhood for the future development of the personality. This anticipation of modern analytical psychology, which he shares with Pestalozzi and Herbart, led him naturally to emphasize the importance of pre-school education. The other reason is of sociological nature. Froebel lived in the period of the Napoleonic wars, with all their destructive influences, upon which followed the early period of capitalism and a series of social revolutions. He saw that in all these crises nobody was so imperilled as the children.

Froebel's Educational Principles

Froebel's educational principles grew out of his ideal ism and these can be summed up as under:

1. The child must be educated in accordance with the laws of his development.
2. Education should enable the child to realize unity in diversity.
3. Directed self-activity through social participation should be the basis of all education.
4. Froebel envisaged the problems of education in the sociological background. 'His kindergarten or school was a little world where responsibility was shared by all, individual rights respected by all, brotherly sympathy developed by all, and voluntary cooperation practised by all,' observed Hughe?
5. Froebel developed both the theory and practice of play in education.
6. Froebel combined play and work.
7. Froebel recognised that head, hand and soul are developed in an integrated way through play-way activities.
8. Froebel advocated that education should be in accordance with the nature of the child.
9. Froebel introduced manual instruction in the school curriculum.
10. Froebel stressed upon religious education.
11. Froebel considered childhood as the most important stage of the development of man and humanity.

Kindergarten and its Working

Meaning of Kindergarten: Frobe discovered much similarity between a child and a plant. He believed that the process of growth and development of the child and the plant is the same. The plant grows from within according to the seed that is inside. In the same way the child grows from within. He unfolds the tendencies and impulses

from within. The teacher in the school is like a gardener who looks after the little human plants and waters them to grow to beauty and perfection. Froebel, therefore, named his school as kindergarten. Kindergarten is a German word which implies a children's garden. Froebel conceived the school as a garden, the teacher as the gardener and the students as tender plants.

Objects of the Kindergarten: In the words of Froebel the object of a Kindergarten is 'to give the children employment in agreement with their whole nature, to strengthen their bodies, to exercise their senses, to engage their awakening mind and through their senses to make them acquainted with nature and their fellow creatures. It is specially to guide aright the heart and the affections, and to lead them to the original ground *of all life,* to unity with themselves.'

Main Principles of the Kindergarten

Main operational principles are:

1. Free Self-Activity. 'Education should provide for free self-activity and self-determination on the part of man, he being created for freedom in the image of God.'

2. Education Through Doing. 'Plastic-material-representation in life and through doing, united with thought and speech, is by far more developing and cultivating than the mere verbal representation of ideas!

3. Education Through Play. 'Play is the purest, most spiritual activity of man—it gives, therefore, joy, freedom, contentment, inner and outer rest, peace with the world. It holds the source of all that is good!'

4. Study of Nature. Froebel wants to study nature 'as life—the plant asdevelopment—theanimalasacting—theorganas functioning'.

5. 'Drawing Out' as the Objective of Teaching. 'The object in teaching is to bring more and more out rather than to put more and more in.'

6. Teaching-Learning a Double Sided Process. 'All true education be simultaneously double sided—giving and taking, uniting and dividing, prescribing and following, ...between educator and pupil.'

7. Religious Education. 'Religious instruction quickens, confirms and explains the feeling that man's own spiritual self, his soul, his mind and spirit, have their beingand origin in God and proceed from God.

8. Discipline Through Love. Froebel believed 'Control over the child was to be exercised through a knowledge of his interest and by the expression of love and sympathy.'

Main Features of Kindergarten

Let us analyse the main features of kindergarten.

1. **Self Activity:** Froebel believed that the growth of the child is directed by inner force in the child. 'Education,' said Frobel, should provide for 'free self-activity and self-determination on the part of man—the being created for freedom in the image of God.' He regarded self-activity as a process by

which the individual realises his own nature and builds up his own world and then unites and harmonises the two. An Inspector reported about this self-activity, 'Self-activity of the mind is the first law of this institution, the kind of instruction given here does not make the young mind a strong box into which, as early as possible kinds of coins of the most different values and coinage, such as are now current in the world that are stuffed, but slowly, continuously, gradually and always inwardly that is according to a connection found in nature of the human mind, the instruction steadily goes on without any ticks, from the simple to the complex, from the concrete to the abstract, so well adapted to the child and his needs that he goes as easily to his learning as to his play'.

The following points should be noted regarding activity:

  (i) It should not be vague.

 (ii) It should be a sublimated or controlled activity.

(iii) Social atmosphere is essential in order to secure meaningful activities.

(iv) Self-activity may take the form either of work or of play.

2. **Play:** According the Froebel, 'Play is the purest, most spiritual activity of man at this stage. ... It gives, therefore, joy, freedom, contentment, inner and rest, peace with the world. It holds the source of all that is good.' Froebel recognised that play needs to be organised and controlled on definite materials so that it may not degenerate into aimless play 'instead of preparing for those tasks of life for which it is destined.' There should be rational conscious guidance. Consequently, Froebel has given seven gifts to children to play with.

3. **Songs, gestures and construction:** Froebel saw an organic relationship between songs, gestures and construction. He regarded hese as three co-ordinate forms of expression in the child. What is to be leant by the pupils is first expressed in a song, then it is dramatised or expressed in gesture or movement and lastly illustrated through some constructive work such as paper or clay. Thus, a balanced development of the mind, the speech organs and the hand is aimed at. These three activities provide exercise to the senses, limbs and muscles of the child.

Selection of Songs. He has given songs in his book. *Mother and Nursery Songs.* These are fifty play songs. The idea of the introduction of songs is to enable the child to use his sense, limbs and muscles and also to familiarise him with the surroundings. The child begins to use language through these songs. Each song is accompanied by a game such as 'Hide and Seek'. The selection of the song is determined by the teacher in accordance with die development of the child. There are three parts in a song.

  (i) A motto for the guidance of mother or teacher.

 (ii) A verse accompanied by music.

(iii) a picture illustrating the song.

The song for drill is:

Let us have a drill to-day,

March along grand array, And whoever steps the best

Shall be captain over the rest, And lead us on our way.

4. **Gifts and occupations:** We have already stressed the place of activity and play. To provide activities, Froebel devised suitable materials known as gifts. The gifts suggest some form of activity and occupations are the activities suggested by gifts. These have been carefully graded. They possess all the novelty of play things. The order of the gift is devised in such a way as it leads the child from the activities, and thought of one stage to another.

The first gift consists of six coloured balls contained in a box. The balls are of different colours. The child is to roll them about in play. The occupation consists in rolling them. The balls are intended to give the students an idea of colour, materials, motion and direction.

The rhymes accompanying the rolling of the ball are:

Oh, see the pretty ball
So round so soft and small The ball is round and
rolls each way,
The ball is nice for baby's play.

Second gift consists of a sphere, a cube and cylinder made of hard wood. These are contained in a box. The child plays with them and notices the difference between the stability of the cube and the mobility of the sphere. He learns that the cylinder is both movable and stable and it harmonises the qualities of both.

Third gift, often called 'the first building box' has a large cube divided into eight smaller equal cubes from which the child can build up a number of artistic forms such as benches, steps, doors and bridges etc. Through these cubes, the child can also gain elementary knowledge of addition and substraction.

Gift four is composed of large cubes divided into eight oblong prisms in each of which the length is twice. The breadth is twice the thickness. This is helpful to the child in constructing different types of buildings and patterns when combined with the third gift.

Gift five is very much similar to gift three. It consists of a large cube divided into twenty-seven small cubes, three of which are again divided diagonally into halves and three into quarters. With these, the child can construct several beautiful forms and patterns by combining the third and fourth gift. Gift five is very helpful in teaching form and numbers to children.

Gift six is again very much similar to gift four. It consists of a large cube divided into eighteen whole and nine small oblong blocks. Children can form several designs from this gift. It is also very useful in teaching numbers.

Gift seven comprises a set of square and triangular tablets made of fine wood in two colours. It provides help in many exercises in geometrical form and mosaic work.

There are several other gifts which can be used in occupations (activities) such as basket making, drawing, embroidery, mat-making, modelling, perforating, paper-cutting, and threading of beads, etc.

5. **The place of teacher:** The teacher is not to remain passive. The teacher has to suggest the idea of occupation when gifts are offered to children. He is also required to demonstrate certain activities to them. He also sings a song with a view to help the child to form appropriate ideas.

While presenting a cube, the teacher sings a cube song, e.g.

Fight corners, and twelve edges see, And faces six, belong to me; One face behind, and one before, One top, one bottom, that makes four. One at the right, at left side one, And that counts six, if rightly done.

While presenting a sphere, the teacher sings the songs of the sphere, e.g.

1. The ball is such a pretty thing,

   About it I do love to sing.

   So round it is, and light and soft, I hold it in my hands full oft.

2. 'T is made of wool, and do you know

   That on a sheep the wool did grow?

   Until some men fleece did take,

   Warm clothes and pretty ball to make.

6. **Discipline:** A teacher has important responsibilities to perform. He has to inculcate sympathetically values like love, sympathy, humility, co-operation and obedience to elders. He has to avoid external restraint and bodily punishment. The child should be made to realize that discipline depends upon his love for order, goodwill and mutual understanding. Froebel stressed that women should be trained for training children at this stage.

7. **Curriculum.**

   The divisions of the curriculum are:

   (i) Manual work

   (ii) Religion and religious instruction

   (iii) Natural science and mathematics

   (iv) Language

   (v) Arts and objects of arts

Merits of Froebel's Kindergarten

1. Froebel laid emphasis on pre-school or nursery education.

2. He stressed the importance of play in the early education.

3. He broadened the concept and scope of the school as an essen tial social institution. He regarded school as a miniature society where children get training in important things of life. They learn the virtues of co-operation, sympathy, fellow-feeling, responsibility etc.

4. Froebel stressed the necessity of the study of child's nature, his instincts and impulses.

5. The gift and occupations of the Kindergarten give a new method of teaching.

6. The inclusion ofproductive work in the school makes children productive workers.

7. There is sufficient scope for activity in a Kindergarten.

8. Various gifts provide sensory training.

9. The inclusion of nature study in the curriculum helps to develop love for nature and world in the mind of the students.

Limitations

1. Froebel expects too much of the child. It is not possible for the child to be able to understand abstract ideas of organic unity while playing with gifts.

2. In the Kindergarten, too much stress has been laid on the development from within. The importance of the environment has not been fully recognised.

3. Songs as given by him are out of date. These cannot be used in every school.

4. The gifts of Froebel are formal in nature. The order of presentation of gifts is arbitrary. They do not serve much purpose of sense training.

5. The kindergarten of Froebel does not provide for the study of the individual child.

6. There is little of correlation in the teaching of various subjects.

7. It is not possible to accept his excessive emphasis on play in education as it is likely to detract the child from serious learning.

8. Philosophy on which Froebel based his method is very complicated. It is very difficult for children to understand his symbolism.

9. It is very difficult to follow the principle of organic unity.

Froebel's Influence on Modern Education

The schools for young children are no more jails and the children are no more passive learners. There is no doubt that all the tendencies in the modern educational thought and practice find their roots in Froebel's conceptions. He helped to make the society conscious of education for very young children. The chief areas in which he influenced the modern education are as under:

1. **Emphasis on pre-primary or pre-basic education:** The present educator fully recognises the importance of the education in the early years. Today we find a large number of schools catering to the needs of such children. Froebel had also realised that until the education of nursery years was reformed, nothing solid-arid worthy could be achieved.

2. **New conception of school:** Hughes says, 'His kindergarten school was a little world where responsibility was shared by all, individual rights respected by all, brotherly sympathy developed and voluntary co-operation practised by all.' His school was a society in miniature.

   The present tendency in education is to regard school as a society in miniature. Dewey also regarded the school as a social institution. The present school is being regarded as a co-operative institution.

3. **Respect for the child's individuality:** Froebel lived for children, worked for children and died for children. He had profound love and sympathy for children.

4. **Stress on the study of the child:** Froebel stressed the need for the study of the nature of the child, his instincts and impulses. Modern education is very particular to see that adequate scope is provided for the free play of the impulses and instincts of children.

5. **Education through play**: Froebel believed that play is the highest phase of self-development. He introduced play-way in the activities of the school. Today we find that the principle of play-way has been accepted by every educator. We teach children through songs, movements, gestures, dramatization, hand-work etc.

6. **Sense training:** Froebel introduced gifts for the training of the senses of children; with the help of these gifts he wanted to give the idea of shape, form, colour, size and number. In every modem school those activities are introduced that help in the training of senses. Audio-visual aids form an integral part of the present system of education.

7. **Activity in education:** Froebel was the first educator to make self-activity as the basis of education. 'Learning by doing' is the slogan of the day. The present school has become a place of activity and joy for children. We provide activities to students so that they may satisfy their instincts of construction, manipulation, curiosity and acquisition.

8. **Nature study in education:** For Froebel nature study was a means of bringing the child nearer God. He advocated a syllabus of nature study to enable the child to understand the world in which he lived and to develop habits of careful observation. This idea has taken such a strong hold to-day that we do not regard any school worthy of name if it does not provide for nature study.

9. **Women teachers at the nursery stage:** It will not be wrong to say that it is due to the influence of Froebel that we find a trend to entrust the education at the pre-primary or pre-basic stage to women teachers who are considered to be more suited for this task of instruction at this stage.

Concluding Remarks: Froebel's gifts and songs can be adopted/ adapted to local conditions. Likewise locally available material can be provided so that it could be made as inexpensive as possible. There is no doubt that kindergarten method as founded by Froebel is, by far the 'most original, attractive and inspirational' method

NOTES

for infant development. On account of this, this method is now used in all the progressive schools of the world.

1.2.3 Montessori Method

Under this the Montessori method of education will be discussed.

Founder of the Montessori Method

The Montessori method derives its name from Maria Montessori (1870-1952), the originator of this method. Maria Montessori was an Italian doctor who later on became one of the greatest educationists of the world. Her entry into the medical profession has an interesting story behind it. In those days, doors of medical colleges were practically closed for women. Montessori had a keen desire to become a doctor. So she thought of a trick. She signed herself 'M. Montessori' when she applied for admission. The authorities could never imagine that a lady could apply in this way. They admitted her thinking to be a man. She became the first Italian lady to get the Doctor of Medicine. This speaks of her imaginative mind and her sharp intellect. While working as a Professor of Anthropology, she became interested in the education of the children. Initially she worked with mentally deficient children. Later on she became the supervisor of schools. Children between the age of 3 and 7 whose parents were mostly out of work attended these schools. The first of these schools was opened in 1907 by her and was named 'Children's House.' Here she developed a new method of educating children. This method was based on sense training. In 1922, she was appointed as Inspectress of Infant Schools by the Government of Italy. She began to impart training to teachers in the new method discovered by her, side by side her job. Teachers from other countries of Europe, including England received training.

Her running away from Italy. Mussolini, known as a Fascist Dictator came to power in Italy. He wanted to educate children for war. Montessori who was an ardent supporter of freedom especially for children, could not work under such a regime. She was obliged to run away from Italy and went to Holland where she established a school.

Montessori's visit to India. Montessori came to India in 1939, and stayed here upto 1946. She spent most of her time at Madras and Ootacamund and promoted her views on early education opening several nursery schools, she trained a large number of teachers for nursery schools. She again visited India in 1948 and spent about 3 years. Maria Montessori delivered the following twelve talks on child training from the Madras Station of All India Radio, during June 1 to 12, 1948.

(1) The Social Question of the Child. (2) The New Born Babe. (3) Incarnation. (4) Sensitive Periods. (5) Further Examination of Sensitive Periods. (6) Order. (7) The Inner Order. (8) Intelligence. (9) Deviations. (10) Training. (11) The Naughty Child. (12) How to Solve the Conflict between the Adult and the Child.

Publications of Madam Montessori:

1. *The Discovery of the Child.*

2. *Education for a New World*

3. *To Educate the Human Potential*
4. *The Secret of Childhood*
5. *The Child, Peace, Education*
6. *Reconstruction in Education*
7. *The Absorbent Maid*
8. *What You Should Know about Your Child?*
9. *Child Training*
10. *The Montessori Method*

Educational Principles Underlying Montessori Philosophy

1. **Education as Development:** According to Montessori. 'Child is a body which grows and a soul which develops—these two forms— physical and psychic, have one eternal front, life itself'. It follows then that 'We must neither mar nor stifle the mysterious powers which lie within these two forms of growth, but we must await from them the manifestation which we know will succeed one another'.

2. **Development from Within:** Montessori believes that education of a child is from within. She states, 'If any educational act is to be efficacious, it will be only that which tends to help towards the complete unfolding of the child's individuality.'

3. **Principle of Individual Development:** In the words of John Adams, Dr. Montessori 'has rung the death knell of class teaching.' She believes that every child is peculiar to himself and he progresses at his own speed and rate and collective methods of teaching crushes individuality. She treats each child as a separate individual and recommends that he should be helped and guided in a manner that helps him in his proper growth and development. The teacher is concerned with his mental as well as his physiological development.

4. **Principle of Self-Education or Auto-Education:** Montessori has shifted the emphasis from teaching to learning. She believes that self-education or auto-education is the only true education. She advocates that the child should remain undisturbed by adult interference. She has devised the Didactic Apparatus which attracts the attention of the children, keeps them busy spontaneously, leads them to learn the powers of movements, reading, writing and arithmetic, etc.

5. **The Doctrine of Freedom or Liberty:** This doctrine is the outcome of the concept of education as development. Her belief is that there should be no hindrance or interference in the way of child's growth and development. She believes that the freedom is the birth right of every individual and she advocates the spontaneous development of the child through full liberty. She does not believe in putting restraints as she thinks that these may 'mar or stifle the innate powers of the child.' She says, 'The school must permit the free, natural manifestations of the child if he is to be studied in a scientific manner.'

6. **No Material Rewards and Punishments:** According to her, they are incentives unnatural or forced effort and the development that comes with their help will also be unnatural. She writes, 'The jockey offers a piece of sugar to his horse that he may respond to the signs given by the reins, and yet neither of these runs so superbly as the free horse of the plains.'

7. **Principle of Sense Training:** Montessori asserts that our senses are the gateways of knowledge and therefore on their training and development depends the acquisition of knowledge throughout life. She pointed out that the senses are very active between the ages of three and seven and that a lot of learning takes place during this period. She advocates that the sensory training is the key to intellectual development.

8. **Principle of Motor Efficiency or Muscular Training:** She has also attached importance to muscular training as a part of the early education of children. She believed that muscular training facilitates other activities like writing, drawing, speaking etc. She takes muscular activity as purely physiological in character. She stresses that running, walking etc. all depend on muscular training.

9. **The Teacher as the Directress:** She replaces the word 'teacher by the word 'directress' as she thinks that the function of the teacher is to direct and not to teach'. Her motto should be, 'I must diminish to let you grow.'

10. **No Place for Fairy Tales:** She would like to banish fairy stories from the curriculum of young children since these tend to confuse children and to hinder them in the process of adjusting themselves to the real world.

11. **Scientific Basis of Development and Education:** She states, 'If a new and scientific pedagogy is to arise from the study of the individual, such study must occupy itself with the observation of free children.'

The Montessori Method

The Montessori Method of teaching may be divided into four parts as given below:

1. **Sensory Training:** Madam Montesssori gives much importance to sensory training as she regards senses as the gateways of knowledge. Different kinds of materials are used to develop sensory training of children. The following will explain the method of sensory training:

Purpose	*Apparatus*
(i) For perception of size.	(a) Series of wooden cylinders varying in height only, in diameter only or in both dimensions; Blocks varying regularly in size and rods of regularly varying lengths.
(ii) For perception of colour.	(b) Pink cubes, brown prisms, green and alternately red and blue rods and coloured tablets, etc.

(iii) For perception of form.	(c) Geometrical insets in metal, wood, a chest of drawers containing plane insets, series of cards on which are pasted geometrical forms in paper.
(iv) For discrimination in 'Weight'.	(d) Tablets of wood similar in size but different in weight.
(v) For discrimination in 'Touch'.	(e) Rectangular tablet with rough and smooth surface etc.
(vi) For discrimination in 'Sound'.	(f) Cylindrical boxes containing different substances. Musical bells, Small Wooden discs for the notes.

Method employed has three stages:

   (i) Association of the sensory percept with the name, 'This is red'.

   (ii) Recognition of the object, 'Give me the red'.

   (iii) Recalling the name of tine object, 'What is this'?

2. **Training in Practical Life:** According to Dr. Montessori exercises are called 'exercises in practical life' because in the Children's House real everyday life is carried on in which all house work is entrusted to the little ones, who execute with devotion and accuracy their domestic duties, becoming singularly calm and dignified. The students are required to sweep their rooms, dust and clean the furniture and arrange it as they like. They learn dressing and undressing and washing themselves. They are expected to hand up their clothes tidily. They lay their tables. The children take turns in various household duties and learn by imitation to conquer their difficulties in the process. 'Enthusiasm and delight, fellow feeling and mutual aid are characteristics of the children learning the jobs.' The students learn how to wash their hands. They learn how to use wash stands with small pitchers and basins. Children learn how to use their own soap and towels. They learn how to comb their hair, cut their nails and brush their teeth.

   The main purpose is to give children training in self-reliance and liberty and also to be independent.

3. **Motor Education:** These practical life exercises are considered to be very helpful for motor education. Muscular education is imparted in connection with the movements of walking, sitting and holding objects. The care of child's own body, managing the house- hold affairs, gardening and manual work and rhythmetic movements provide motor education. Children also learn how to walk in straight lines and to balance them properly.

4. **Didactic Apparatus for Teaching Language and Arithmetic:** Madam Montessori is of the opinion that muscular skill in children is very easily developed and, therefore, the teaching of writing should precede the teaching of reading. According to her, writing is a purely mechanical activity and reading partly intellectual.

(a) *Teaching of writing.* There are three factors involved in writing.

    (i) Movements which help in reproducing the forms of letters.

    (ii) Manipulation of the pen.

    (iii) The phonetic analysis of words in writing to dictation.

The letters of the alphabet are cut in sand paper and pasted on cardboards. The students are asked to pass their fingers on them. The students learn to establish the visual muscular images of the letters. At the same time, the phonetic sounds are also taught in three stages—association, recognition and recall. There are certain exercises through which the students are taught the handling of the pen.

(b) *Teaching of reading.* Montessori is not in favour of reading the sentence aloud. The child is handed over a card on which the names of the familiar objects are written and pasted. The child is asked to translate the writing slowly into sounds and then he is asked to read faster. After some practice the child learns the correct pronunciation of the word. Then the child is asked to attach the cards with the objects lying there.

(c) *Teaching of number.* A 'long stair' is used in the teaching of numbers. It consists of a set of the rods varying in length from 1 to 10 decimetres. It is divided into parts painted red and blue alternately. The child learns first to arrange the rods of size and then he counts the red and blue divisions and names the rods as one, two, three, etc. The signs of the numbers are cut in sand paper and the same procedure of three stages—association, recognition and recall is followed.

The Didactic Apparatus for teaching language and arithmetic consists of the following:

(a) Two sloping desks and various iron insets.

(b) Cards on which are pasted sand paper letters.

(c) Two sets of alphabets of coloured cardboard and of different sizes.

(d) A series of cards on which are pasted sandpaper figures (1, 2, 3, etc.)

(e) A series of large cards for the enumeration of numbers above ten.

(f) Two boxes with small sticks for counting.

(*g*) Drawings.

(*h*) Frames for lacing, buttoning, etc. which are used for motor education of the hand.

Children's House: Nomenclature of the School

'Children's House' is the name given to a school by Dr. Montessori. This House provides all the requirements of a good 'family house'. As a matter of fact, it has all the qualities of a school, a workshop and a home. There are many rooms in the Children's House. The main room of the building is a study room. Smaller rooms—common room, lunch room, rest rooms, room for mutual work, a gymnasium, a lavatory or a children's bath room—are attached to this main room. The rooms are

well equipped according to the needs of the children and spirit of the Montessori Method. The tables, chairs, etc. are especially made for children. They facilitate movement from one place to another. So fasets of different shapes and long row cup-boards are also provided. Children keep their didactic apparatus in the cup- board and their things in a little drawer. The black-boards are fixed in the walls on which the children draw or paste pictures of different kinds, according to their own interests. The students are provided with flowers, toys, pictures, indoor games, etc. The lunch room contains low tables, chairs, spoons, knives, tumblers, etc.

Children are provided with their own little shelf in the drawing room where they keep their soap and towel for washing. There is a small garden as well which is looked after by the students themselves. Shelters are provided in the garden so that they can enjoy the open air, can play and work there, may take rest or sleep. They may have their lunch there if they so please.

Paedometer to measure height as well as a weighing machine are kept in the Children's House to keep a record of the childrens growth.

Discipline in Children's House

Discipline comes by an indirect route, by developing activity in spontaneous work. Every individual is expected to learn how to control himself by his own efforts and through calm, silent activity which is directed towards no external aim but is meant to keep alive that inner flame on which our life depends. Montessori writes, 'In truth, the 'good' are those who move forward towards the goodness which has been built up by their own efforts.' Such discipline can never be attained by way of commands, by sermons, by any of the disciplinary methods universally known.

Role of the Teacher

Teacher as gardener: She thinks that a teacher should care for the child like a gardener who cares for the plant so that the natural growth of the child is properly guided and aided in the process of unfolding itself.

Knowledge of each child: The teacher should have an intimate knowledge of the mind and character of each individual. He should keep the physiological records of each child's development: his weight, height and other measurements.

The directress and not the teacher: Dr. Montessori has replaced the word 'teacher' by the word 'directress' and she thinks that the primary duty of the person in authority is to direct and not to teach. She insists that the directress should have an extensive knowledge of psychology and laboratory technique.

Doctor-cum-scientist-cum-missiotiary: In the words of Montessori, the Directress should be partly doctor, partly scientist and completely religious. Like a doctor she should avoid scolding or suppressing the patient in order to avoid worst situations. Like a scientist she should wait patiently for the results and should conduct experiments with her material. Like a religious lady she should be there to serve the child.

Faith in the personality of the child: She should allow the child to grow according to his own inner law. Her business is to provide for suitable environments. She should provide children with suitable opportunities to think for themselves.

Moral qualities: 'Virtues and not words are the main qualifications of the Directress.' She must acquire moral alertness, patience; love and humility. She must banish anger which is a great sin and which prevents from understanding the child. The soul of the child, which is pure and very sensitive, requires her most delicate care. Her motto should be 'I must diminish to let you grow.'

Merits of the Montessori Method

The principles and practices of teaching advocated by Dr. Montessori almost revolutionized the traditional notions. Madam Montessori's profound love and affection, keen sensitiveness, artistic imagination and exceptional sympathy for children have given a new touch to various aspects of education. In fact, she has ushered in a new era in child education and especially of small children at the nursery stage.

The chief merits of the Montessori method are:

1. **Reverence for small children:** To Madam Montessori 'the child was God.' Her school was the temple and duty of tine temple was the recognition of the essence of childhood. She further writes, 'To-day there stands forth one urgent need—the reform of methods in education and instruction, and he who struggles towards this end is struggling for the regeneration of man.'

2. **Scientific bases of the method:** The method is based upon scientific grounds. Madam Montessori was a scientist and she applied scientific principles based on experienceand observation and not upon prejudices.

3. **Individual teaching:** Individualism is the key-note of the Monetessori method. Her method is a reaction against collective teaching. As observed by John Adams, Dr. Montessori 'has rung the death knell of class teaching.'

4. **Freedom for children:** She ranks among the forefront educators who want to give education in an atmosphere of complete freedom. In her method discipline is that of self-control and self-directed activity.

5. **Sense training:** The Montessori method aims at educating the children through the sense training. It is based upon the maxims 'proceed from concrete to abstract', from 'general to abstract.'

6. **Unique method of reading and writing:** Special importance to the learning of writing has been provided in the method. She takes into consideration the muscular movements in the process of writing. Properly graded and correlated exercises for reading and writing are provided.

7. **Learning through living:** She has provided practical exercises in her school which enable children to learn good habits of cleanliness and order. The students learn the lesson of dignity of labour and self-help by attending to their needs themselves. Many practical lessons are provided.

8. **Training in social life:** Though her method is individualistic in nature, yet it is full of social values. The social value of serving at the table and lunching together and cleaning plates etc. is beyond doubt. The students perform many other activities cooperatively.

Limitations of the Montessori Method

1. **Mechanical and artificial nature of didactic apparatus:** Too much importance has been given to the Didactic Apparatus. The critics argue that the apparatus handcuffs both the teacher and the pupil. The pupil is expected to do different types of exercises with the help of the apparatus and the teacher also has to teach through the Didactic Apparatus with the result that the free expression of the children is limited and so the work of the teacher. The apparatus is unreal and unnatural.

2. **More emphasis on biological aspects and less on psychological:** The teacher in this system takes special care in keeping records of the height, skull, and limbs of each individual child. She hardly observes temperament and other emotional traits.

3. **Transfer of training:** The idea of sense training in the Montessori method is based on the old theory of 'formal training of the senses.' She feels that by training particular faculties through particular senses it will be possible to get advantage of that training in other life situations through transfer of training to the desired field. Modern psychology disapproves of this idea.

4. **Neglect of the training of imagination:** There is no place foi fairy tales in the Montessori system. Fairy tales used in a proper way form part of die literacy training of children and help in the development of imagination.

5. **Lack of suitable teachers.** The successful working of the Montessori system depends upon teachers who possess extensive knowledge of child psychology and acquisition of laboratory procedure. It is not possible to find such teachers in sufficient number.

6. **Little scope for projects and correlation:** The present tendency is to teach all subjects together in the form of projects. Learning by doing is the key-note of the present methods of teaching. In the Montessori method the children have to depend upon the mechanical apparatus.

7. **Very expensive:** It requires a lot of money to set up a school on the lines as suggested by Dr. Montessori. It is very doubtful if we could spare huge sums on such schools.

Kindergarten Versus Montessori Method Similarities

1. **Recognition of the importance of nursery education:** Froebel as well as Montessori have given us a method of educating the infant. They have brought about a revolutionary change in the concept of education at the pre-school age.

2. **Education as development from within:** Both the educators regard education as the development of the inner nature of the child. They point out that the function of the educator is to draw the inner out.

3. **Congenial environment:** Both the educators stress the importance of providing a congenial environment in which the growth of inner nature of the child should take place in a suitable manner.

4. **Reverence and affection for the child:** Froebel as well as Montessori have greatly stressed that there should be an environment of love and affection for the child; his personality should be recognised and even worshipped.

5. **Stress on sense training:** Froebel as well as Madam Montessori have devised apparatus for the training of senses of the child.

6. **Role of the teacher:** The teachers in both the methods play the role of a guide.

CHECK YOUR PROGRESS

1. Write down any two key concepts of child-centred education.

2. What is the role of a teacher in child-centred education?

3. State any one principle of the Play-Way method of education.

4. Write down any one advantage of the Montessori Method.

1.3 GENDER AND EDUCATION

Constitutionally, Indian women and men have been granted equal status and rights, but on practical grounds, women still lag behind men in various life activities due to gender discrimination. Hence, to give better growth opportunities to Indian women, according to their special interests and legitimate demands, courses of study and employment facilities should be provided. The curriculum should be modified in accordance with the unique all-round responsibilities, including domestic demands of Indian women. Co-education should be permitted for better exposure in life and to generate healthy competition. Women should be trained in various professional courses just like their male counterparts.

India requires a large number of women teachers for primary and secondary schools. Hence, more training colleges should be opened for training of women teachers and more seats for women should be reserved in training colleges. Similarly, more seats should be reserved for women candidates in medical, engineering and other professional colleges. This will facilitate the growth of women in various sectors of life. If trained women workers—lady doctors, teachers and so on—are sent to work in rural areas, they should be given higher salaries and facilities like residence and other essential amenities. Safety and security of women is another aspect that needs to be taken care of.

The major problems of women's education in India are as follows:

- **Traditional prejudices**: The traditional prejudices still operate in backward and rural areas to a great extent. The lower and poorer sections of the society fall an easy prey to superstitions and traditional prejudices against women.

- **Absence of separate schools:** Due to paucity of funds, it is not possible to provide separate schools for girls, especially in rural areas. Many rural folks, even in changing times, are not prepared to send their daughters to co-educational schools. In the state of Punjab, where per capita income is the highest in India, people do not mind sending their girls to co-educational schools. But in other states, like Rajasthan, Uttar Pradesh, Bihar or Haryana, parents have objection on co-education, especially at the secondary stage.

- **Lack of women teachers**: There is shortage of qualified women teachers in all states. Even in places were qualified women teachers are available, they are not willing to go to far-flung villages to teach. This is also a reason why separate schools for girls are not possible.

- **Household work**: Girls, generally in all parts of the country, take care of domestic work, partly as a necessity and partly as a training for their future domestic life. Taking care of younger siblings at home also curtails schooling opportunities for a girl child. Such conditions turn into the reasoning given by parents for not sending their daughters to schools.

- **Poverty**: Poverty of the parents compels them to use the labour of their children, either at home or in the fields. A female child is still considered an economic burden on the Indian household, and hence, education of girls is assumed to increase this burden.

- **Child marriages**: Child marriages still take place in rural areas. After marriage at an early age, it is not considered proper for a girl to attend school. Hence, an early marriage prevents a girl child from going to school.

- **Lack of provision on certain subjects**: Previously, while framing curriculum, no attention was paid to the needs of the girls. Even today, the co-educational institutions do not have better provisions on the subjects preferred by girl students. Unless proper care is taken to provide co-curricular activities and special courses based on interest, aptitude and needs of girls, the schools cannot register better attendance and strength in their classes.

We can summarize the problems of women's education in India as follows:

- Lack of proper social attitudes in the rural and backward areas on education of girls
- Lack of educational facilities in rural areas
- Economic backwardness of the rural community
- Conservative nature on co-education
- Lack of suitable curriculum
- Lack of proper incentives to parents and their daughters

- Lack of women teachers
- Lack of proper supervision and guidance due to inadequate women personnel in the inspectorate
- Uneducated adult women and lack of social education
- Social evil practices against women
- Inadequate systematic publicity
- Indifference of village panchayats

1.3.1 Measures for Promoting Women's Education

From time to time, the basic measures that have been suggested for promoting women's education in India are given below:

1. **Creating proper social attitude on education of girls in rural and backward areas**: In this regard, the following measures may be taken:
   - To study the problems relating to women's education and to get detailed scientific data, a thorough research should be taken up by the Institutes of Education and allied institutions in different states and coordinated at the national level.
   - Separate schools for girls at the middle and high school stages should be established when needed.
   - School mothers in co-education primary schools, should be appointed.
   - Crèches and nursery classes should be opened wherever possible.
   - Public opinion in favour of girls' education should be created.

2. **Providing adequate educational facilities in backward and rural areas**: The target should be to have at least one primary school within a radius of one kilometre from every child's home. Following steps need to be taken:
   - Hostel for girls at the middle and high school stages.
   - Maintenance stipend should be given to girls residing in hostels for meeting their lodging and other expenses, at least in part.
   - Subsidized transport facilities, wherever necessary and possible, should be provided.
   - Priority should to be given to the construction of suitable buildings for girls' schools.
   - Free education for girls.

3. **Removing economic backwardness**: A large number of children in the rural areas are under-nourished. They hardly have a square meal a day. Unless the parents are given some kind of economic relief, it will be impossible to promote women's education. Following measures should prove very useful:
   - Free uniforms and free books to the needy and deserving girl students should be provided.

- Attendance scholarships, which serve as a compensation to the parents, should be given. This will also ensure reduction of wastage and stagnation in education.

- Mid-day meals should be made available free of charge.

4. **Provision of suitable curriculum:** Curriculum, by and large, has not met the requirements of women. Following suggestions made by Hansa Mehta Committee (1962) deserve careful consideration:

- No differentiation should be made in the curricula for boys and girls at the primary and middle stages of education.

- Steps should be taken to improve the instruction of home economics.

- Steps should be taken to improve the teaching of music and fine arts, and liberal financial assistance should also be made available to girls' schools for the introduction of these courses.

- Universities should review periodically the provision they have made for the courses designed to meet the special needs of girls, and take necessary action to remove the deficiencies discovered.

5. **Proper incentives to parents and girls:** The following measures have been suggested:

- The number of attendance scholarships should increase.

- The allowance of the school mothers should be enhanced so that qualified women may be attracted to take up the work.

- The rate of maintenance stipend should be adequately increased in view of the inflationary trends in the economy.

- The number of sanitary blocks in co-educational primary schools should be adequately increased.

- Larger allocation of funds should be made in the budget for construction of hostels for girls.

6. **Provision for providing adequate number of women teachers**: In this regard, the following steps are suggested:

- A large number of training institutions have to be provided for women, especially in the backward states. These institutions should generally be located in rural areas, and they should generally recruit their trainees from that area.

- Condensed course centres should be started in these backward areas to open up avenues to the adult unqualified women for employment as teachers. Wherever possible, such centres should be attached to the training institutions.

- A large number of quarters for women teachers in primary schools should be provided, particularly in rural areas.

- All women teachers employed in rural areas should be given adequate rural allowance.

- Special stipends should be given to girls in high schools and in higher secondary schools with aptitude for teaching.
- Whenever possible, husbands and wives should be posted in the same place even if they work in different government departments.
- Free training should be imparted with stipends to all candidates of training institutions.
- In-service education, training should be given to untrained women teachers who have put in at least two years of service. The period of training of education should be treated as on duty.

7. **Proper supervision and guidance**: For providing proper guidance and supervision, following steps should be taken:
   - Increase in the number of women inspecting officers, particularly in the backward states, at different levels including state level and directorate level.
   - Provision of adequate transport for all district women inspecting officers should be laid.
   - Adequate office staff and equipment should be provided.
   - Residential facilities should be given to all women officers at all levels.
   - Adequate funds for rural developments should be available at the disposal of the state councils.

8. **Facilities for education of adult women**: Girl's education and education of adult women suffers on account of lack of social education. This problem can be tackled in the following ways:
   - By opening adult literacy classes in large number.
   - By teaching simple skills like sewing, knitting, handicrafts and teaching basic principles of healthy living.
   - By invoking better attitude towards community, family planning, fighting against superstitions and other social evils.

   This programme can be more effective when the Education Department works in cooperation with other departments concerned, like the Community Development, Health and Social Welfare.

9. **Eradicating social evils**: Eradicating social evils that stand in the way of girls' education, such as early marriage, bounded labour, dowry, domestic violence, prostitution, caste barriers and so on, will help in promoting women's education. Social activists, self-help groups and other voluntary organizations can play a crucial role in motivating people to educate their daughters.

10. **Wide systematic publicity**: For educating the parents to take an interest in the education of girls, press and electronic media may be used extensively.

11. **Awards to panchayats**: Panchayats should be given some motivation to promote education of women in their areas.

1.3.2 Education and Women Empowerment

Education can be used as a catalyst in bringing around change in the status of women. In order to neutralize the accumulated distortions of the past, there is now well-conceived edge in favour of women. The national education system now plays a positive and interventionist role in the empowerment of women. It now fosters the development of new values through redesigned curricula and textbooks; training and orientation of teachers; decision-makers and administrators; and active involvement of educational institutions. Women's studies is now being promoted as a part of various courses, and educational institutions are being encouraged to take up active programmes for further development of Indian women.

In recognition of the importance of education of women in accelerating socio-economic development, the government formulated a variety of measures from time-to-time in this direction. Some of the government initiatives have been discussed below.

1. Committee on Women's Education (1957–59)

At its meeting held in July 1957, Education Panel of the Planning Commission recommended, 'a suitable committee should be appointed to go into the various aspects of the question relating to the nature of education for girls at the elementary, secondary and adult stages and to examine whether the present system was helping them to lead a happier and more useful life'. This recommendation was placed before the Conference of the State Education Ministers (held in September 1957). They agreed that a special committee should be appointed to examine the issue of women's education. Accordingly, the National Committee on Women's Education was set up by the Government of India in the Ministry of Education.

The terms of reference of National Committee on Women's Education were to:

- Suggest special measures to make up the leeway in women's education at the primary and secondary levels.
- Examine the problem of wastage in girls' education at these levels.
- Examine the problems of adult women who have relapsed into illiteracy or have received inadequate education and who need continuation of education so as to earn a living and participate in projects of national reconstruction.
- Survey the nature and extent of material and other facilities offered by voluntary welfare organizations for education of such women and to recommend steps necessary to enable them to offer larger educational facilities to them.
- Major recommendations

The major recommendations of National Committee on Women's Education have been given below:

A. Special recommendations needing top priority

- **Determined efforts**: The education of women should be regarded as a major and a special problem in education for a good many years to come, and bold

and determined efforts should be made to face its difficulties and magnitude, and to close the existing gap between the education of men and women in as short a time as possible. The funds required for the purpose should be considered to be the first charge on the sums set aside for the development of education.

- **National council**: Steps should be taken to constitute as early as possible a National Council for the education of girls and women.

- **Rapid development**: The problem of the education of women is so vital and of such great national significance that it is absolutely necessary for the Centre to assume more responsibility for its rapid development.

- **State council**: The state governments should establish state councils for the education of girls and women.

- **Comprehensive plans**: Every state should be required to prepare comprehensive development plans for the education of girls and women in its area.

- **Cooperation**: It is also necessary to enlist the cooperation of all semi-official organizations, local bodies, voluntary organizations, teachers' organizations, and members of the public to assist in the promotion of the education of girls and women.

- **Permanent machinery**: The Planning Commission should set up a permanent machinery to estimate, as accurately as possible, the woman-power requirements of the Plans from time to time, and make the results of its studies available to the government and the public.

B. Other special recommendations

The other special recommendations of National Committee on Women's Education have been given as follows:

(i) Primary education (age group 6–11)

- Concessions in kind (not in cash) should be given to all girls, whether from rural or urban areas, of parents below a certain income level.

- The government should formulate a scheme for awarding prizes to the village which shows the large proportional enrolment and average attendance of girls.

(ii) Middle and secondary education (age group 11–17)

- At the middle school stage, more and more co-educational institutions should be started.

- Separate schools for girls should be established especially in rural areas, for the secondary stage, at the same time giving parents full freedom to admit their girls to boys' schools if they so desire.

- All girls (and all boys also) of parents with income below a prescribed level should be given free education up to the middle stage.

- Free or subsidized transport should be made available to girls in order to bring middle and secondary schools, within easy reach.

(iii) Curriculum and syllabi

- There should be identical curriculum for boys and girls at the primary stage with the provision that, even at this stage, subjects like music, painting, sewing, needle work, simple hand-work, and cooking should be introduced to make the courses more suitable for girls.

- At the middle school stage, and more especially the secondary stage, there is a need for differentiation of curricula for boys and girls.

(iv) Training and employment

- Immediate steps should be taken to set up additional training institutions for women teachers in all such areas of the country where there is a shortage.

- With a view to inducing women from urban areas to accept posts of teachers in rural schools, women teachers serving in rural areas may be provided with quarters and a village allowance may be given to such teachers.

- The maximum age limit for entry into service may be relaxed, and the age of retirement may be extended to 60, provided the teacher is physically and otherwise fit.

(v) Professional and vocational education

- The employment of women on part-time basis, wherever feasible, should be accepted as a policy.

- Girls should be encouraged to take up courses in commerce, engineering, agriculture, medicine, etc., at the university stage by offering them scholarships and other concessions.

- It is important to organize campaigns to mobilize public opinion for creating proper conditions in offices and establishments in which women can work freely.

(vi) Facilities for adult women

- Education facilities in the form of condensed courses (1) that prepare women for the middle school examination, and (2) those that prepare them for the high school or higher secondary examination, should be provided more extensively in all stages.

- Provision should also be made of condensed courses, which train women for suitable vocation after completion of necessary education.

(vii) Voluntary organization

The services of the voluntary organizations should be extensively used in the field of middle, secondary, higher, social and vocational education of women. The existing grant-in-aid codes of the states need a thorough revision. There should be a substantial and significant difference in the rates of grants-in-aid as between girls' institutions and boys' institutions at all levels. The conditions of aid for girls' institutions should be made easier.

C. General recommendations

The general recommendations of National Committee on Women's Education have been given below.

(i) **Free primary education**: Whenever primary education is not free, immediate steps should be taken to make it free.

(ii) **Wastage and stagnation**: The Ministry of Education should carry out special studies of this problem in all parts of the country. The following steps should be taken to reduce the extent of stagnation in class I:

- All fresh admissions to class I should be made in the beginning of the year and not later than 60 days after the beginning of the first session.
- It should be a specific responsibility of teachers to see that proper attendance is maintained in the school
- The age of admission should be raised to six plus
- Standards of teaching should be improved

The stagnation in classes II to V can be reduced if:

- Attendance of children is increased
- Standards of teaching are improved
- Internal examinations are introduced
- Books and educational equipment needed by poor children are supplied in good time

About 65 per cent of cases of wastage at the primary level are due to financial conditions of the families. It can be illuminated only if provision for part-time instruction is made for those children who cannot attend school on a whole-time basis.

About 25 to 30 per cent of the cases of wastage at the primary level are due to the indifference of parents. This can be eliminated partly by educative propaganda and partly by a rigorous enforcement of the compulsory education law.

(iii) **Employment of teachers**

- The present scales of pay of teachers should be suitably revised.
- There should be no distinction between the scales of pay and allowances paid to teachers in the government and local board or municipal institutions and those that are paid to teachers working under private managements.
- The triple-benefit scheme called the Pension-cum-Provident Fund-cum-Insurance Scheme should be made applicable to every teacher who is employed permanently in an institution.

2. Committee for Girls' Education and Public Cooperation (1963–65)

At its meeting held in April 1963, the National Council for Women's Education endorsed the suggestion made by the Union Education Ministry that a small committee be appointed to look into the causes for lack of public support, particularly in rural

areas, for girls' education and to enlist public cooperation. The Chairman of the National Council for Women's Education accordingly appointed, in May 1963, a committee to suggest ways and means of achieving substantial progress in this field. This committee was named Committee for Girls' Education and Public Cooperation. The Committee submitted its report in 1964 and it was published in 1965.

Recommendations

Committee for Girls' Education and Public Cooperation realized that it is only through a willing, educated and informed public that any progress can be made. Not only is the need urgent, but the ground is also ready for a comprehensive programme for mobilizing public cooperation to promote girls' education and giving it constructive channels for expression. It is essential that official action and the programme based on public initiative must move forward in close harmony. There has to be a sense of partnership and shared responsibility between official and voluntary agencies. There is also the need for a systematic and sustained programme with an adequate organization for mobilizing community effort.

(i) **Public cooperation**: Direct cooperation from the public should be encouraged in:

- Establishing private schools
- Putting up of schools buildings
- Contributing voluntary labour for construction of school buildings
- Helping in the maintenance of school buildings
- Helping in providing suitable accommodation for teachers and students, particularly in the rural areas
- Popularizing co-education at the primary stage.
- Creating public opinion in favour of the teaching professions and to give greater respect to the teacher in the community.
- Undertaking necessary propaganda to make the profession of teaching for women popular
- Encouraging married women to take up at least part-time teaching in village schools and to work as school mothers
- Initiating action and participating in educative propaganda to break down traditional prejudices against girls' education
- Setting up and organizing school betterment committees, improvement conferences
- Supplying mid-day meals
- Supplying uniforms to poor and needy children
- Supplying free textbooks and writing materials to needy children

(ii) **State councils for women's education**: These are the most suitable agencies for providing the organization and leadership for mobilizing community effort. They should function as a part of the network of which the District Councils

at the district level, and the Mahila Mandals and similar voluntary bodies at the town and village levels would be strong and active links. These agencies should look upon mobilizing of community effort and enhancing public opinion on promoting girls' education as the primary responsibility. They should aim at building up in villages and towns, teams of voluntary workers, men and women, who are willing to devote themselves to this cause and work actively for its promotion.

(iii) **State's responsibility**: The state should turn public opinion in favour of girls' education through:

- School improvement conferences
- Seminars
- Radio talks, audio-visual aids and distribution of informative pamphlets
- Enrolment drives, generally in June, and special additional drives for girls' education during Dussehra
- Assisting voluntary, welfare and other organizations, private individuals and associations engaged in the field of education of girls and women

(iv) **School improvement conferences**: These should be arranged widely throughout the states, and particularly in the less advanced states, in order to encourage people to contribute to educational awakening and advancement.

(v) **State help:** The state should continue to help in an abundant measure in providing necessary schooling facilities in all the areas and in the habitations, however small, so that the local population can make use of them.

(vi) **Pre-primary schools:** It is necessary that in rural areas particularly pre-primary schools should be attached to primary schools so that children get accustomed to schooling even at a tender age.

(vii) **Reform and inspection**: The existing functional deficiencies of schools should be remedied by replacing buildings which are totally inadequate to modern educational needs. There should be periodical inspection of school buildings and hostels so as to ensure their structural soundness and suitable sanitary facilities.

(viii) **More attractive school work**: School work should be made more attractive and should present education in ways more engaging for pupils.

(ix) **Recruitment of women teachers**: Concerted efforts have to be made to recruit as many women teachers as possible. Women are in general considered to be better teachers for the primary classes in schools. It should be the aim of all states to appoint women teachers in primary schools and a greater number of women teachers in mixed schools. A school staffed by women will inspire greater confidence in the parents and make them willing to send their children to co-eductional institutions. The recommendations in this regard are as follows:

- **Conditions of recruitment**: The basis of recruitment of women teachers should be widened and their conditions of work should be made more

attractive. Financial incentives like special allowances for hilly, isolated or any other specific backward rural areas should be given to teachers. Each state may specify areas where such allowances would be available.

- **Married women teachers**: Attempt should be made to bring back to the teaching profession married women who have left it in recent years and to bring women from other occupations to supplement the teaching staff.

- **Condensed courses**: Condensed courses should be organized on a large scale for adult women, particularly from rural areas, so that they could take up teaching jobs in the villages.

- **Recruitment age limit**: In order to attract more women teachers, the age limit for the unmarried and married women teachers should be relaxed in the case of those working in village schools. The service conditions of such married women who do part-time teaching work should be made more attractive.

- **Posting**: As far as possible, women teachers should be posted in or near their own villages.

- **Pay scales:** The pay scales of all teachers should be improved and the teachers should be paid an economic wage, so that they may be retained in the profession.

- **Special attention**: Special drives should be organized to attract people in rural areas to the teaching profession as the best form of social service needed for the upliftment of the villages.

- **Training schools**: Training schools, with hostels, need to be located in the rural centres and near 'different' areas where girls from the villages are trained and sent back to work in their own or neighbouring villages.

- **Training**: During selection of trainees for training schools and colleges, special preference should be given to women from rural areas seeking admission.

- **Sufficient facilities**: The training facilities available in each state should be of such a magnitude that the annual output of trained teachers would be equal to the demand for additional teachers.

- **Inspection**: The inspecting staff should be adequate and strong if improvement is to be secured and waste reduced. A separate woman inspectorate will help to bring in more girls to school.

- **Lodging:** It is only by providing women teachers with quarters near the schools that many educated women can be attracted to the teaching profession.

- **Hostels:** The construction of hostels should be included as one of the priority objectives in the Plans of the states, and necessary financial assistance for the construction of hostels and maintenance stipends be made available more liberally to local authorities and voluntary organizations working in the field of education of girls and women.

(x) **Building and equipment**: Local bodies should be made responsible for the provision of school buildings, equipment, playing fields and the like and observance of the educational code in the state.

(xi) **Social education**: In the field of social education, a determined effort should be made to increase the number of literacy classes for women in rural areas and to carry out intensive campaigns for the spread of literacy among women. Activities in this field should be administered by the education departments of the state governments.

(xii) **Central assistance**: Such central assistance should be:

- **At the elementary stage for**: (1) preparation and employment of women teachers; (2) grant of free books, writing material and clothing to girls; and (3) twin quarters for women teachers.

- **At the secondary stage for**: (1) provision of separate schools for girls; (2) hostels; (3) grant of free books, writing materials and clothing to girls; and (4) preparation and appointment of women teachers in increasing numbers.

(xiii) **Compulsory education:** Compulsory Education Act should be introduced in states where it does not exist. In addition, state governments should provide sufficient incentives and carry on propaganda to attract all children to school.

(xiv) **Curriculum**: While the curriculum can be the same for both boys and girls at the primary and middle stages, provision should be made for offering of electives comprising subjects which would be of special interest to girls and which would help them later in their fields of activity.

(xv) **Shift system**: In schools that lack accommodation, but have a rush of admission, the double shift system may be tried as a temporary measure.

(xvi) **Seasonal adjustment**: Changing of school hours and school holidays to seasonal requirements has been found in some places to be a helpful concession to parents who would otherwise not be in a position to spare the children for attending classes.

3. Committee on the Status of Women (1971–74)

Various new problems relating to the advancement of women which had not been visualized by the Constitution makers and the government in earlier days had emerged. Therefore, with the changing social and economic conditions in the country, the Government of India felt that a comprehensive examination of all questions relating to the rights and status of women would provide useful guidelines for the formulation of social policies including education. For this purpose, the Government of India, Ministry of Education and Social Welfare, constituted Committee on the Status of Women on 22 September 1971. The Committee submitted its report entitled 'Towards Equality' in December 1974.

The terms of reference of the Committee on the status of women were to:

- Examine the constitutional, legal and administrative provision that have a bearing on the social status of women, their education and employment.

- Assess the impact of these provisions during the last two decades on the status of women in the country, particularly in the rural sector, and to suggest more effective programme.

- Consider the development of education among women, and determine the factors responsible for the slow progress in some areas.

- Survey the problems of the working women including discrimination in employment and remuneration.

- Examine the status of women as housewives and mothers in the changing social status and their problems in the sphere of further education and employment.

- Undertake surveys on case studies on the implications of the population policies and family planning programmes on the status of women.

- Suggest any other measure which would enable women to play their full and proper role in building up the nation.

The recommendations of Committee on the Status of Women have been discussed below.

A. Co-education

(i) Co-education would be adopted as the general policy at the primary level.

(ii) At the middle and secondary stages, separate schools may be provided in areas where there is a great demand for them.

(iii) At the university level, co-education should be the general policy and opening of new colleges exclusively for girls should be discouraged.

(iv) There should be no ban on admission of girls to boys' institutions.

(v) Wherever separate schools/colleges for girls are provided, it has to be ensured that they maintain required standards in regard to the quality of staff, provision of facilities, relevant courses and co-curricular activities.

(vi) Acceptance of the principle of mixed staff should be made a condition of recognition for mixed schools. This measure may be reviewed a few years after it is implemented.

(vii) Wherever there are co-educational schools, separate toilet facilities and retiring rooms for girls should be provided.

B. Curricula

(i) There should be a common course of general education for both sexes till matriculation.

(ii) At the primary stage, simple needle craft, music and dancing should be taught to both sexes.

(iii) From the middle stage, differences may be permitted under work experience.

(iv) In Classes XI-XII, girls should have full opportunity to choose vocational and technical courses according to local conditions, needs and aptitudes.

(v) At the university stage, there is a need to introduce more relevant and useful courses for all students.

C. Pre-school education

(i) The provision of three-year pre-school education for children by making special effort to increase the number of 'balwadis' in the rural areas and in urban slums.

(ii) In order to enable them to fulfil the social functions discussed above, an effort should be made to locate them as near as possible to the primary and middle schools of the locality.

D. Universalization of education (age group 6–14)

(i) Provision of primary schools within walking distance from the home of every child in the next five years.

(ii) Establishment of ashram or residential schools to serve clusters of villages scattered in difficult terrains. Where this is not immediately possible, preparatory schools may be provided for the time being.

(iii) Provision of mobile schools for children of nomadic tribes, migrant labour and counteraction workers.

(iv) Sustained propaganda by all types of persons, preferably women officials, and non-officials, social and political workers, to bring every girl into school in class I, preferably at the age of 6.

(v) Provision of incentives to prevent drop-outs, where the most effective incentive is the provision of mid-day meals. The other important incentives are free school uniforms, scholarships or stipends, and free supply of books and other study material. For schools which do not prescribe any uniform, some provision of clothing is necessary.

(vi) Special incentives for areas where enrolment of girls is low.

(vii) At least 50 per cent of teachers at this stage should be women.

(viii) Provision of at least two teachers in all schools as early as possible.

(ix) Developing a system of part-time education for girls who cannot attend school on a full-time basis.

(x) Adoption of the multiple entry system for girls who could not attend school earlier or had to leave before becoming functionally literate.

(xi) Provision of additional space in schools so that girls can bring their younger brothers and sisters to be looked after, either by the girls themselves in turn, or by some local women.

(xii) Opening of schools and greater flexibility in admission procedure in middle schools to help girls in completing their schooling.

E. Sex education

  (i) Introduction of sex education from middle school.

  (ii) Appointment of an expert group by the Ministry of Education to prepare graded teaching material on the subject.

  (iii) This material may be used for both formal and non-formal education.

F. Secondary education

  (i) Free education for all girls up to the end of the secondary stage.

  (ii) Improving the quality of teaching and provision of facilities for important subjects like science, mathematics and commerce.

  (iii) Introduction of job-oriented work experience, keeping in view the needs, the resources and the employment potential of region e.g., courses leading to training as ANM, typing and commercial practice, programmes oriented to industry and simple technology, agriculture and animal husbandry.

G. Higher education

  (i) Development of more employment opportunities, particularly of a part-time nature, to enable women to participate more in productive activities.

  (ii) Development of employment information and guidance service for women entering higher education.

H. Non-formal education

The greatest problem in women's education today is to provide some basic education to the overwhelming majority who have remained outside the reach of the formal system because of their age and social responsibilities as well as the literacy gap. For the sake of national plans for development, it is imperative to increase the social effectiveness of women in the age group of 15-25. Ad hoc approaches through the adult literacy, functional literacy and other programmes of the government have proved inadequate. As for vocational and occupational skills, the needs of women are greater than those of men. The skill differ according to the industrial and market potential of regions, and it is imperative to relate the training to local needs, resources and employment possibilities instead of adopting an artificial sex-selective approach.

4. National Policy on Education (1986) on Women's Education

Concerned about the status and education of women in the country, the major recommendations were made by National Policy on Education (1986) as under:

> 'Education will be used as an agent of basic change in the status of women. In order to neutralize the accumulated distortions of the past, there will be a well-positive, interventionist role in the empowerment of women. It will foster the development of new values through redesigning curricula, textbooks, the training and orientation of teachers, decision-makers and administrators and the active involvement of educational institution. This will be an act of faith and social engineering. Women's studies will be promoted as a part of various courses and educational institutions encouraged to take up active programmes to further women's development.

The removal of women's illiteracy and obstacles inhibiting their access to, and retention, elementary education will receive overriding priority, through provision of special support services, setting of time targets, and effective monitoring. Major emphasis will be laid on women's participation in vocational, technical and professional education at different levels. The policy of non-discrimination will be pursued vigorously to eliminate sex-stereotyping in vocational and professional courses and to promote women's participation in non-traditional occupations, as well as in existing and emergent technologies.'

5. National Policy on Education Review Committee (1990)

Considering women's education to be a vital component of the overall strategy of securing equity and social justice in education; National Policy on Education Review Committee (NPERC) states that:

> In order to promote participation of the girls and women in education at all levels, there is need for an integrated approach in designing and implementing the schemes that would address all the factors that inhibit their education. More implementation of disaggregated schemes such as opening of Non-formal Education Centres for girls, Adult Education Centres for women etc., by themselves are not adequate. In this context, special mention may be made of interaction of Early Childhood Case and Education (ECCE) with primary education. Education of women is not to be construed of a question of mere access, but of empowering them through education of all on equality of sexes.

The Committee reviewed National Policy on Education (NPE) and Programme of Action (POA) in the context of women's education and made recommendations with regard to the following dimensions:

  (i) Access to education and equality of learning

 (ii) Content of education and gender bias

 (iii) Vocational education

 (iv) Training of teachers and other educational personnel

 (v) Research and development of women's studies

 (vi) Representation of women in the educational hierarchy

 (vii) Employment of women

(viii) Adult education

 (ix) Resources

 (x) Management

NPERC strongly advocated intervention on behalf of women by the state governments and the local bodies in tune with what NPE envisaged in regard to women's education. The detailed recommendations with regard to the different dimensions are as follows:

 (i) There is a crucial link between easy access to water, fuel and fodder, and schooling of girls. This understanding needs to be explicitly reflected in the policy of government and be concertized in operational designs.

 (ii) Priority needs to be given to the habitations/villages having enrolment and retention rates for girls in schools below the average rates of the states.

(iii) Planning for educational development of any given region would have to be necessarily conducted at the block or sub-block level. This task would be facilitated if it is undertaken through the proposed educational complexes.

(iv) Teachers, anganwadi workers, village-level functionaries of other departments and representatives of women's groups and community level organizations should play an important role in making micro-level information available to the educational complex for prioritization of action in this regard.

(v) The policy framework on women's education must bring out the criticality of the link between ECCE and girls' accessibility to elementary education.

(vi) The timings of ECCE centres should include the school hours so that the girls in the 6–14 age group are relieved from the responsibility of sibling care.

(vii) Priority should be given to habitations where enrolment and retention rates for girls are below the state average.

(viii) There should be shortening and staggering of school hours, particularly for girls.

(ix) There should be provision for uniforms, textbooks etc., to all girls and scholarships to deserving girls from underprivileged groups.

(x) Number of women teachers in co-educational schools should be increased.

(xi) Hostel facilities must be made available for girls at all levels.

(xii) The issue of regional disparities needs to be incorporated into the operational design for universalizing girl's access to elementary education.

(xiii) The curriculum in schools should include:

- Increase in the visibility of women and projection of a positive image of the role of women in history, their contribution to society in general and the Indian context in particular.

- Special efforts should be made to strengthen Mathematics and Science education among girls.

- Undifferentiated curriculum for boys and girls.

- Elimination of negative stereotypes, and biological and social concepts which have a sexist bias.

- Basic legal information including protective laws regarding women and children, and extracts from the Constitution to make the children aware of the fundamental rights and other basic concepts therein.

- Specific measures to improve the participation of girls in physical training and sports should be undertaken.

(xiv) It is recommended that all school textbooks, both by NCERTs and SCERTs, and other publishers, be reviewed to eliminate the invisibility of women and gender stereotypes, and also for the proper incorporation of a women's perspective in the teaching of all subjects.

(xv) All media channels, in public and private sectors, should take serious note of the crucial role that the media can play in promoting gender equality and empowerment of women as enunciated in NPE.

(xvi) Media should project positive image of women.

(xvii) An awareness of the need for women's education, especially elementary and vocational education, should also be spread.

(xviii) Vocational training for women should be encouraged in non-traditional occupations, following an undifferentiated curriculum.

(xix) Vocational training programmes, in general, require a critical evaluation and re-orientation within which the incorporation of the women's perspective should be a key dimension. This would include sensitivity to women's issues and awareness of the problems in the education of girls.

(xx) Women's study centres should be organized in all the universities and recognized social science research institutions within the Eighth Plan.

(xxi) Develop 'Manila Samakhya' in a decentralized and participative mode of management, with the decision-making powers developed to the district or block-level, and ultimately to the poor women's groups themselves.

(xxii) For imparting adult education to women, and thereby empower them, the Mahila Samakhya model should be tried out.

(xxiii) At the institutional level, the head of the institution should be made fully responsible for micro-level planning and ensuring universalization of girls' education and their access to high school or vocational education, according to disaggregated strategies and time-frames.

6. Programme of Action (1992) and Women's Education

Programme of Action (1992) stated: 'Education for women's equality is a vital component of the overall strategy of securing equity and social justice in education. What comes out clearly from the implementation of NPE (1986) and its POA, is the need for institutional mechanisms to ensure that gender sensitivity is effected in the implementation of all educational programmes across the board. It is being increasingly recognized that the problem of UEE is, in essence, the problem of the girl child. It is imperative that participation of girls is enhanced at all stages of education, particularly in streams like science, vocational, technical and commerce education where girls are grossly under-represented. The education system as a whole should be re-oriented to promote women's equality and education.'

The Committee recommended the following measures to make the education an effective tool for women's empowerment:

(i) Enhancing self-esteem and self-confidence of women.

(ii) Building of positive image of women by recognizing their contribution to the society, policy and the economy.

(iii) Developing ability to think critically.

(iv) Fostering decision-making and action through collective processes.

(v) Enabling women to make informed choice in areas like education, employment and health.

(vi) Ensuring equal participation in developmental processes.

(vii) Providing information, knowledge and skill for economic independence.

(viii) Enhancing access to legal literacy and information relating their rights and entitlements in society with a view to enhance their participation on an equal footing in all areas.

The following measures will be taken for achievement of the above parameters:

(i) Every educational institution will take up active programmes of women's development.

(ii) All teachers and instructors will be trained as agents of women's empowerment. Training programmes will be developed by NCERT, NIEPA, DAE, SRCs, DIETs, SCERTs and the university system.

(iii) Gender and poverty sensitization programmes will be developed for teacher educators and administrators.

(iv) In order to create a greater confidence and to motivate parents to send girls to school, preference will be given to recruitment of women teachers.

(v) The common core curriculum is a potentially powerful instrument to promote a positive image of women.

(vi) Funds would require to be earmarked in all education budgets for such awareness and advocacy-related activities.

(vii) Foundation course should be designed and introduced for undergraduates with a view to promote the objectives of empowerment of women. This will be done within the Eighth Plan period.

(viii) Efforts will be made to design special Non-formal Education (NFE) programmes for out of school and adolescent girls with a view to get them back into the formal stream or qualify for technical or vocational education in order to achieve Universal Elementary Education (UEE).

(ix) Special efforts would be made to recruit women teachers and to augment teacher-training facilities for women so that adequate number of qualified women teachers are available in different subjects, including Mathematics and Science.

(x) Programmes for continuing education should be designed to ensure that neo-literates and school-going girls have access to reading materials.

(xi) The electronic, print and traditional media will be used to create a climate for equal opportunities for women and girls.

(xii) Women's cells should be set up within all central and state agencies concerned with curriculum development, training and research.

(xiii) A monitoring cell will be set up within the Planning Bureau of the Department of Education, Ministry of Human Resources Development.

(xiv) All the Bureaus of the Department of Education will prepare a concrete action plan addressing gender related concerns in their specific area of work by August 1993. Relevant nodal institutions like UGC, AICTE, ICSSR, ICHR, CBSE, ICAR, ICMR, IAMR, State Boards, Vocational Education Bureaus, etc., will also prepare similar action plans.

(xv) Special efforts should be made by the Centre and State planners, curriculum developers and administrators to consciously encourage participation of girls in non-traditional and emergent technologies at all levels. Guidance and counselling for girls should be undertaken as a necessary pre-condition to encourage participation for the improvement of girls' access to technical, vocational and professional education.

The greatest beneficiaries of New Education Policy should be the youth and the women. The New Policy will be used as an agent of basic change in the status of women. It has been stated in New Education Policy that every effort will be made through the instrument of education, to evolve a society which values the equality of sexes, removal of sex bias against women in the textbooks and universalization of elementary education for girls. New incentives for girls' education such as free textbooks and attendance scholarships will have to be launched.

CHECK YOUR PROGRESS

5. Give any two major recommendations of the National Committee on Women's Education.

6. When was the report by the Committee for Girls' Education and Public Cooperation (1963-65) published?

7. State any two measures of the Programme of Action (1992) Committee.

1.4 EDUCATION FOR GIFTED CHILDREN

An exceptional child may be defined as the one who differs so much from his peer average in respect of physical, mental or social characteristics that he is unable to develop his fullest potential under normal conditions in an ordinary class and for whom some special environment or organization has to be created either within or without the normal school. Exceptional children deviate significantly from the normal ones. The deviation may fall on either end far above the average or far below the average in one or more aspects of achievement.

In the words of Crow and Crow, 'The term *typical* or *exceptional* is applied to a trait or a person possessing the trait, if the extent of deviation from normal possession of that trait is so great that because of it the individual warrants and receives special attention from his fellows and his behaviour responses and activities are thereby affected.'

Samuel A. Kirk, in his book, *Educating Exceptional Children,* gave the following definition, 'An exceptional child is he who deviates from the normal or average child in mental, physical and social characteristics to such an extent that he requires a modification of school practices or special educational services or supplementary instruction in order to develop to his maximum capacity.'

According to W. M. Cruickshank, an expert on special education and mental disabilities, 'An exceptional child is he who deviates physically, intellectually, emotionally and socially so marked from normal growth and development that he cannot be benefited from a regular classroom programme and needs special treatment in school.'

Characteristics of Exceptional Children

Some of the characteristics of exceptional children are as follows:

- Exceptional children deviate markedly from normal children.
- Deviation may be physical, intellectual, emotional or social.
- Exceptional children need a special environment.
- Special environment may be provided in the normal school or in a special school.

Classification of Exceptional Children

Exceptional children can be classified as follows:Classification of Exceptional Children

1. Mentally Exceptional
   - Gifted
   - Backward or mentally retarded
2. Emotionally Exceptional
   - Delinquents
3. Physically Handicapped
   - Blind and near blind
   - Crippled
   - Deaf and dumb
   - With defective speech
4. Socially Handicapped
5. Neurotic
6. Multi-handicapped

Importance and Need to Educate Exceptional Children (Special Education)

Constitutional Directive on compulsory education includes education for all children till the age of 14 years. Therefore, exceptional children must also receive education. The Declaration of the Rights of the Child, adopted by the United Nations in 1959, stated, 'The child who is physically, mentally or socially handicapped shall be given the special treatment, education and care required for his particular condition.'

India's National Policy for Children (1974) specifically observed, 'Children who are socially handicapped, who have become delinquent or have been forced to take to begging or are otherwise in distress, shall be provided facilities for education,

training and rehabilitation and will be helped to become useful citizens.' It further stated, 'Special programmes shall be formulated to spot, encourage and assist gifted children, particularly those belonging to the weaker sections of society.'

The National Policy on Education, 1986 and as amended in 1992 also envisages special provision for the handicapped.

Apart from constitutional obligations, education of the exceptional children should receive special attention on account of the following reasons:

- Exceptional children do not get proper motivation in regular classroom work as they need different treatment.

- Exceptional children may develop behavioural problems if their specific needs are not properly attended to.

- Principle of equality demands that all children must be provided with equal opportunities to develop their potentialities to the maximum level.

- Education of the exceptional children will enable them to be self-supporting economically.

- Special education will guide these children to become useful members of the society.

- Several categories of children i.e., the deaf, the dumb and the blind need special curriculum, methods of teaching and instructional materials which can be provided only in special schools.

Gifted Children

Kirk, in his book *Educating Exceptional Children,* stated that in ancient Greece, over 2000 years ago, Plato stressed the need for proper and special education of the intellectually superior children.

On account of the significant contribution of the gifted in various fields, interest in their special education and training has grown considerably all over the world during the last one hundred years. Gifted children are the wealth of any civilization or society.

A gifted child is both an asset and a responsibility. He is an asset of incalculable value to society. His potentialities for good are difficult to overestimate. Our socio-economic structure, both at the national and international level, demands that leadership should be of the highest quality with keen intelligence. Following are the important reasons for growing interest in the gifted children:

- Values of democracy can only be realized in the fullest sense when we recognize the full range of ability within our total population.

- There is a limited pool of ability and special talent in every country. This must be identified and developed to save it from loss.

- The gifted individuals have played an important role in the preservation and advancement of civilization.

- Many gifted children languish in educational institutions simply because they are not aware of their 'gifts' and the school programmes do not provide them enough motivation and challenge.
- We need leaders for our business, education, research and government. These leaders are provided by this class of gifted children.

Meaning and Definition of the Term Gifted

Some of the important definitions are mentioned to explain the meaning of the word 'gifted child'.

According to Robert J. Havighurst, a professor, physicist, educator, and aging expert, 'The talented or gifted is one who shows consistently remarkable performance in any worthwhile line of endeavour.'

In the words of Leta S. Hollingworth, 'By a gifted child we mean one who is far more educable than the general children. The greater educability may lie along the lines of one of the arts, as in music or drawing, it may lie in the sphere of mechanical aptitude, or it may consist in surpassing power to achieve literacy and abstract knowledge.'

Prem Pasricha observed, 'The gifted child is the one who exhibits superiority in general intelligence or the one who is in possession of special abilities of high order in the fields which are not necessarily associated with high intelligence quotient.'

Intelligence Quotient (IQ) and the Gifted

Lewis Terman, in 1916, set the lower limit for the gifted person at 110 on the Revised Stanford Binet Simon Intelligence Scale. In 1937, only children having IQ of at least 120 (1.25 sigmas above mean) were judged to be very superior. Some years later, children with IQ 125 or above in the major classes of Cleveland, Ohio, were classed as superior. Goddard used 120 as the lower limit in forming classes for gifted children including both those with special artistic and mechanical talents and those who excelled in creative thinking and abstract reasoning.

Gifted children may be classified into three categories:

- Superior, having IQ between 100 and 120
- Very superior, having IQ between 120 and 140
- Near-genius, having IQ 140 or more.

Scope of Giftedness: Not Confined to IQ

Giftedness is not only confined to intellectual domain but it also pervades different areas. Thus, Guilford envisaged as many as 120 different abilities as an individual may be gifted in one or more abilities in different areas.

The 57th Yearbook of the National Society for the Study of Education in the US explained the nature of giftedness as, 'A talented or gifted child is one who shows consistently remarkable performance in any worthwhile line endeavour. Thus, we shall include not only the intellectually gifted but also those who show promise in music, the graphic arts, creative writing, dramatic, mechanical skills and social leadership.'

Ralph W. Tyler, discarded the IQ standard and defined the gifted child as one who is exceptional in the amount of production, the rate of his production, the quality of his production or a combination of these; a child who may do much more school work than the average student does, he works faster and performs with much higher quality.

Kirk referred giftedness as any of the following special aptitudes and talents:

- Academically talented
- Artistically talented
- Linguistically talented
- Mechanically talented
- Musically talented
- Physically talented
- Socially talented

Sumption and Lucking envisaged the gifted as, 'Those who possess a superior central nervous system characterized by the potential to perform tasks requiring a comparatively high degree of intellectual abstraction or creative imagination or both.'

Louis A. Fleigher and Charles E. Bish observed, 'The term gifted encompasses those children who possess a superior intellectual potentiality and functional ability to achieve academically in the top 15 to 20 per cent of the school population; and/or talent of a high order in such special areas as mathematics, science, expressive arts, creative writing, music and social leadership, and a unique creative ability to deal with their environment.'

W. J. Getzels explained giftedness as, 'Although the question may be largely a semantic one, there is no doubt that many desirable qualities exist beyond those with an exclusively intellectual form. Are there not some social qualities, say moral character or psychological adjustment which also might lead us to call an individual gifted, and may perhaps be reflected in superior school performance, to say nothing excellence in other areas such as public service? Surely the study of such qualities might be an adjunct to any general and systematic examination of giftedness.'

Luois Leon Thurstone, a US pioneer in the fields of psychometrics and psychophysics, observed that a person of high intelligence may not be creative. According to him, 'To be extremely intelligent is not the same as to be gifted in creative work. This may be taken as a hypothesis. It is a common observation in the universities that those students who have high intelligence, judged by available criteria, are not necessarily the only ones who produce the most original ideas. All of us probably know a few men who are creative and highly intelligent, but this combination is not the rule.'

L. X. Magnifico divided the gifted into two groups as follows:

- A child whose ability, as indicated by an intelligence test, is within the range of the upper 2 or 3 per cent of the population
- A child having outstanding ability in a given field, for example, music or art

Eight-fold Criterion for Defining Gifted Children

In emphasizing special talents, Paul Witty enumerated the following criteria for defining very young gifted children:

- A large vocabulary, accurately used
- The use of phrases and sentences at an early age, as also the ability to tell or reproduce a story
- Interest in books and later enjoyment of atlases, dictionaries and encyclopaedias
- Interest in calendars and clocks
- Ability to concentrate longer than most children
- Early discovery of cause and effect relationship
- Early development of mental faculties; gifted children often learn to read before they enter school
- Proficiency in drawing, music or other art forms

Behaviour Pattern of Gifted Children

The behaviour patterns of gifted children are as follows:

- **Physical characteristics:** They are physically sound and better than normal children. Their faces are usually bright. They possess vigour and vitality.
- **Intelligence:** Their intelligence is high. Their 'g' factor of intelligence is very strong. Some have a very strong group factor or 's' factor.
- **Varied interests:** Their interests are more varied than those of normal children. A gifted child of eight may read novels, write long essays, take interest in subjects such as history, geography, astronomy, grammar, physics and music.
- **Inquisitive nature:** They are extremely inquisitive and quick in understanding.
- **Superiority in academic work:** They are characterized by general superiority in academic work. Even in the elementary school, they do their best work on tests of reading and language. 45 per cent of Terman's group of gifted children, whom he studied, learned to read before entering school. Regarding one child, Terman said 'As early as 21 months, she read and apprehended simple sentences, by 26 months her reading vocabulary was more than 700 words.'
- **Well adjusted:** As regards character and personality traits, they are well-adjusted. Terman stated, 'Even in leadership and social adaptability, traits in which gifted children are thought to be especially deficient, most studies show gifted children to be somewhat superior to children of the general school population.'

Positive and Negative Characteristics of the Gifted Adolescents

James M. Dunlop has categorized positive and negative characteristics of gifted children:

Positive Characteristics

The positive characteristics are as under:

- Learn easily and rapidly
- Retain what they learn without much drill
- Have a rich vocabulary marked by originality
- Show interest in ideas and words
- Show much curiosity in questioning
- Enjoy reading
- Reason things out
- Possess greater ability to generalize
- Know and appreciate things of which normal children are unaware
- Take interest in the nature of man and universe at an early stage
- Seek older companions
- Possess a good sense of humour
- Have a desire to excel

Negative Characteristics

The negative characteristics are as under:

- Restless, disturbing and inattentive
- Careless in handwriting
- Indifferent to class work
- Critically outspoken

Extent or Incidence of the Gifted Population

Hollingworth, on the basis of a study, concluded that there is one gifted child in a population of one million. However, studies conducted by J. J. Gullagher did not tally with the estimates of Hollingworth. Usually, it is said that about 2 to 3 per cent of the population may be placed in the category of the gifted.

On account of several factors, it is not easy to estimate the number of gifted children in a particular school population. The difficulty is on account of the fact that there is no single criterion which can be used as the yardstick for assessing giftedness.

Identification of the Giftedness

Usually four types of techniques are used to identify giftedness. Gallagher pointed out the following limitations of various techniques in this regard:

Table 1.1 *Limitations of Various Techniques to Identify Giftedness*

	Method	Limitations
1.	Intelligence tests (Individual)	Best but expensive and time consuming.
2.	Group intelligence tests	Generally good for screening. May not identify those with reading difficulties and emotional problem.
3.	Achievement test batteries	Will not identify under achieving gifted children.
4.	Observation by teachers	Not suitable for children with emotional problems, and children and others with hostile attitudes towards school.

Gallagher concluded that what gifted children have in common is the ability to absorb concepts, to organize them more effectively and to apply them more appropriately.

Adjustment Problems of Gifted Children

A gifted child may become a problem for the parents and the teacher if he is not handled properly. The following problems arise:

- He revolts against the parents and teachers when they do not recognize him, and sometimes creates mischief in order to catch their attention or to show his superiority.

- There is lack of stimulation for him in the subjects of his interests when he does not get opportunities to progress according to his own pace.

- Because of lack of opportunities and lack of recognition, he sometimes develops inferiority complex.

- Too much of recognition or applauses by the parents or teachers, leads to the development of a feeling of pride and arrogance in the child.

- When the gifted child is not properly guided, he utilizes his superior intelligence in mischief, indiscipline, gang-formation and revolts against his elders. He, in turn, becomes a nuisance.

Education of the Gifted

Efforts to identify gifted children were started in the US by WT Harris in St. Louis Public School in 1867. By 1920, three public schools in Cleveland, Rochester and Los Angeles in the US were offering enriched programmes to gifted children. Later, all educators, parents and administrators recognized the importance of providing special education to gifted children.

Methods of Educating the Gifted

The methods of educating the gifted children are as follows:

1. **Acceleration:** Acceleration offers opportunity for a gifted pupil to move at a pace appropriate to his ability and maturity and to complete an educational programme in less than the ordinary amount of time. It involves advancing the gifted child rapidly from one grade to another in school so that he enters college earlier than others.

2. **Ability grouping or homogeneous grouping or segregation:** The gifted pupils may be placed in special groups for all or part of the school day. The

purpose of ability grouping is usually to provide for enrichment of children's experiences in both depth and breadth, and to permit the children to stimulate one another.

According to this scheme, students with more or less similar background are grouped together in the same section. It is a common practice in some of the schools to group students into various sections, that is, A, B, C and others according to intellectual, physical and social interests of the students. This creates healthy competition and is very useful in a large school where classes can be divided into different sections.

3. **Enrichment Programmes:** Enrichment consists in giving the gifted child the opportunity to go deeper or to range more widely than the average child in his intellectual, social and artistic experience.

   Such a programme may be characterized by (i) emphasis upon the creative or the experimental work (ii) emphasis on the skill of investigation and learning (iii) independent work, stressing initiative and originality (iv) high standard of accomplishment (v) cooperative planning and activity that provide opportunity for leadership training and experiences in social adjustment (vi) individual attention given by teacher to student (vii) First-hand experiences (viii) flexibility of organization and procedure (ix) extensive reading and (x) concern with community responsibility.

   The gifted students should be encouraged to study a variety of books and reference material. On the co-curricular side, provisions for a sufficient variety of activities should exist in a school so that the students may develop various social and moral qualities of a high order.

4. **Triple Track Plan:** Track Plan which introduces elasticity in the classification of the students is very popular in American schools. According to this scheme, the authorities prescribe a uniform syllabus for all. Average children cover it within the normal period, the dull in a large period and the gifted in a shorter period in comparison to average children.

5. **Rapid Promotion or Double Promotion:** By this we mean more than one promotion during the course of the year. If a child shows an extraordinary achievement in one class, he may be given a double promotion. The aim of this promotion is to place the gifted student in a setting suiting him the most. However, at occasions such promotions prove to be very detrimental to the child. The child may be a gifted one in comparison with the students of his previous class but may not show the same progress in the next class with the students of different mental and physical make-up and this would result in his mental slowdown in the new setting. Age, social maturity and health—all these factors should be given due weightage.

6. **Special Schools:** In some of the developed countries, separate schools are provided for such students. This system has been criticized on the ground that quite a large number of such students are deprived of the practice in leadership which they would get in association with average children.

Brown was of the opinion that keeping these children as an integral part of the school was the most important factor in affecting their future performance.

7. **Summer Schools:** These schools are planned during summer vacations. These schools have been successfully tried in the US. Academically talented students are selected from different parts of the country on the basis of psychological tests, interview and previous school records and are brought together for a special educational programme. The programme is intended to be very challenging and is planned under the expert guidance of a band of talented teachers. The students are provided with the best available books which they may consult for writing their project reports and for holding discussions in the class. Usually, three areas—science including mathematics, social studies and literature are covered.

After the programme is over, the students return to their regular schools. Students can attend summer schools as long as they do not complete their final school leaving examination.

Advantages of the Scheme of Summer Schools

The benefits of summer schools are as follows:

- The scheme provides students with challenging situations.
- The students realize, perhaps for the first time, that there are other children equally intelligent, or even more intelligent than them.
- The scheme sets the pattern for an enriched programme for the talented.
- The scheme is psychologically and scientifically sound, as it provides a suitable basis for developing a curriculum for the talented children.
- The scheme provides first-hand experiences to students of living together for a number of weeks with a wide variety of talented children.
- The scheme provides first-hand experiences to teachers for handling the problems of the academically talented children.
- It is easy to have an all-India scheme for the purpose without much difficulty either of an administrative or of a technical nature.
- The scheme fits in the context of our democratic educational set-up.
- The scheme will help in creating the necessary climate in the country for making adequate provisions for the education of the academically talented.
- It would be possible to make the best use of the potential human resources.
- The scheme will help in providing the necessary basis for organizing systematic and scientific research on the academically talented.
- The scheme will also help in spotting out a large number of talented teachers.

8. **Scholarship Programmes:** The large programme of scholarships at all stages will ensure that all gifted students, or at least the top five to fifteen per cent of the relevant age group, will receive the highest education possible.

9. **Special Visits:** Well-planned visits may be arranged to laboratories, museums, and other places.

10. **Contact with Talented People:** Talented students may be brought into contact with persons engaged in the types of work for which the students show special ability or interest. These persons may be able to provide occasional opportunities for the students to work in their special fields.

11. **Hostels:** Hostels or 'day centres' should be made available for those students whose home environment is not conducive to proper study.

Roles of those Involved with Educating the Gifted

(i) **Role of the counsellor:** The role of the counsellor in the promotion of a talent can be very important. The counsellor with his detailed knowledge of each talented student is in a unique position to formulate a programme for his enrichment and suggest the necessary modifications required in the existing curricular and extracurricular programme. Where special counsellors are not available, this task falls on the teachers.

It is, therefore, necessary to train teachers for this responsibility through in-service seminars and special courses. It should be impressed on them that the classroom atmosphere and the attitudes of teachers are of considerable importance. In a social and educational set-up like that of India, where the relationship between the teacher and the taught is still largely authoritarian, the general tendency is to suppress any urges and interests that deviate from the class norm. The first requirement for the promotion of talent, therefore, is for the teachers create an atmosphere of free expression in the classroom and to provide opportunities for creative work.

In planning for the development of the talented student, it should be remembered that it is not only his intellectual competence of special ability that needs to be developed. The development of the emotional and social aspects of his personality, and of socially desirable attitudes, is equally important.

(ii) **Role of every educational institution:** The Education Commission 1964–66 observed, 'Every educational institution should be assisted to develop a programme for identifying the brighter children attending it and for providing them with special enrichment programmes to suit their needs and to help in their growth. These programmes, the nature of which would vary from stage to stage and from one type of institution to another, would have to be carefully designed and teachers would have to be trained, in putting them across. In all these programmes, 'talent' should not be understood in the traditional sense only, but should cover a wide range of mathematical, verbal, artistic and experimental skills. Scholarships and encouragement should be available, on a basis of equality, to all talent at all stages of education.'

(iii) **Role of the education departments:** The responsibility for the development of this comprehensive programme should be squarely placed on the education departments which should work in collaboration with the universities. The

secondary stage is the most crucial for discovery and development of talent, and unfortunately, it is precisely at this stage that the scholarship programme is now weak. Its development will, therefore, have to be accorded high priority.

We may sum up the discussion with the observations of the Education Commission. 'A dearth of competent and trained manpower is now felt in nearly every branch of national life, and is probably one of the biggest bottlenecks in progress. Poor as we are financially, the poverty of trained intellect is still greater. We might do well to remember Whitehead's warning: 'In the modern world the rule is absolute—any race which does not value trained intelligence is doomed.''

1.4.1 Equalizing Educational Opportunities

It is generally believed that neither a policy of complete 'Laissez faire' nor of complete state control of education is suited to a welfare state. The state must take positive as well as negative action to maintain a proper balance of social welfare for its citizens. The state must step forward and ensure not only an adequate amount of education but also education of an adequately high standard to all those who are desirous of it. Private enterprise in education must be encouraged but should not be allowed to be exploitative. Provision of equality of opportunity is one of the fundamental rights of a democratic state.

Equalization of Educational Opportunity

One of the important social objectives of education is to equalize opportunity, enabling the backward or underprivileged classes and individuals to use education as a lever for the improvement of their condition. Every society that values social justice and is anxious to improve the lot of the common man and cultivate all available talent, must ensure progressive equality of opportunity to all sections of the population. This is the only guarantee for the building up of an egalitarian and human society in which the exploitation of the weak will be minimized.

Inequalities of educational opportunities arise in various ways. In places where no primary, secondary, or collegiate institutions exist, children do not have the same opportunity as those who have these facilities in the neighbourhood. This handicap should be overcome by the widest dispersal of educational institutions, consistent with economy and efficiency, by instituting, an adequate scholarship programme, by providing the needed hostel facilities or by making suitable transport arrangements. It is sometimes not fully appreciated that there are at present glaring imbalances of educational development in different parts of the country: the educational developments in the States show wide differences, and even wider differences are found between the districts. To remove such inequalities, deliberate policies of equalization of educational opportunities and educational development in the different districts will have to be adopted.

Another cause of inequality of educational opportunity is the poverty of a large section of the population and the relative affluence of a small minority. Even in the neighbourhood of an educational institution, children from poor families do not have the same chance as those who come from richer ones. To overcome these

handicaps, it is desirable to abolish fees progressively, to provide free books, stationery and even school meals and uniforms. In addition, it is necessary to develop a large programme of scholarships.

Again, differences in the standards of schools and colleges create an extremely intractable form of educational inequality. When admission to an institution such as a university or professional college, is made on the basis of marks obtained at the public examination at the end of the secondary stage, as often happens, the marks do not at all provide a common yardstick for a student from a rural area who attends an ill-equipped school in his village, and a student from an urban area who attends a good city school. To overcome this to some extent at least, it is necessary to evolve more reliable and egalitarian methods of selection, whether for admission to institutions or for award of scholarships.

1.4.2 Significance of Equalization of Educational Opportunities

Equalization is important in every section of the society. It binds together the people of vivid nature and culture and helps in building social, cultural and national integration. Just like other sectors of the society, the concept of equalization should also lie in the educational system of the country. It is good to have equalization of educational opportunities for the progress of the country. While discussing the aspect of equalization of education opportunities, the Kothari Commission has stated that 'One of the most important objectives of education is to equalize opportunity, enabling the backward or un-privileged classes and individuals to use education as a lever for the improvement of their condition. Every society that values social justice and is anxious to improve the lot of the common man and cultivate all available talent must ensure progressive equality of opportunity to all sections of the population. This is the only guarantee for the building up of an egalitarian and human society in which the exploitation of the weak will be minimized.'

For all of us, it is important that we know the clear difference between the concept of equality and equity and not confuse between the two. Equity refers to fairness that may require different treatment or special measures, for some persons or groups whereas equality refers to the same treatment in dealings, quantities or values.

Equity involves fairness and moral values, which has made it a reason for tension and battle amongst all mankind since times immemorial. It even poses to be a great hurdle in the imparting of education. This equity barrier has its effects on three main education groups, which are race, gender and special needs. So, in order to overcome all the equity and equality issues regarding education, the Constitution provides certain provisions and the Indian Government has also started many programmes in this regard.

There are various factors that lead to inequality in education. Some common factors could be gender, high drop-out rate and lesser enrolment. Inequality in schooling is also a major hindrance in equity and equality of education.

Gender

Like in the case of race and special needs, it is just as important in the case of gender, too, to take note that it is not on all occasions fair to treat everyone the same. The learning approaches of boys and girls differ and both genders learn differently. Both genders even approach, analyse and solve problems differently. Sexual harassment is a problem faced more by females than by males and sexual harassment lowers self-esteem leading to inter-gender equity troubles.

Today, the treatment meted out to the genders comes from gender perceptions built over the years and those that existed years back. Equality among gender stems from their already existing equality among races. In existence are various misconceptions regarding women, for example they cannot learn as well as men do, they are incapable of voting like men, or they just cannot take decisions of importance like men can. Even though the society in the present times does not see women in the same manner, yet there remain a few negative undertones and unintentional biases regarding women and education embedded within societal messages.

Special Needs

It is probably quite difficult to accommodate children with special needs with equity and equality. The reason for this could be that despite the fact that they all are kept in a single category, individually their needs do differ. Besides the monetary cost of accommodating students with special needs, the cost of time also exists. To obtain equity and inclusion of children with special needs, you need to do the following:

- Ensure equal access by putting in place both input and output features

- Train educators and make them aware

- Get students ready for real world

Not that each bit of technology set up in the schools can be made ready for children with special needs but it should be accessible. Educators should have awareness about that which can be made available for children with special needs and they must also be equipped with knowledge of how to apply accommodations to children with special needs. Both schools and districts need to participate actively in developing the curricula. Let us look at the meaning of some terms associated with equity in education:

- **Equal access:** This implies impartiality in providing opportunity. The hindrance to this could be caused by the legal or physical barriers imposed on access to education.

- **Equal educational opportunities:** This implies providing each student with the same treatment, opportunities, and resources.

- **Equity:** This implies making available educational opportunities with impartiality, justice, and fairness.

- **Educational equity:** Educational equity has its basis in the principles of justice and fairness for every student when it comes to success, treatment, providing of opportunities and allocation of resources. With these principles,

there is a high probability of there being equality for each student in terms of educational results even in diverse groups. Each of the strategies applied are systematic, carefully planned and with a clear focus and have as their basis the core learning – teaching core concepts.

There are seven key components identified in the process of attaining excellence in education through the combination of effective and equitable practices in school. Let us look at these components.

- **Access:** This refers to opportunities being made available to every student to take part in each one of the various aspects associated with the process of education, as well as in including resources and facilities of learning pertaining to co-curricular and extracurricular programs.

- **Instruction**: It refers to those instructions that will promote an image of positivity for diverse groups as well as create a strong commitment to an equitable teaching-learning environment.

- **Materials**: It is of prime importance to keep the use of learning material and learning aids to a minimum if it cannot be avoided all together, so that any bias in language, pictures, graphics and content can be minimized.

- **Assessment:** There should be a checking of and accounting for differences in the cultural background and style of learning of the various students and this should form a firm basis for aligning the assessment with curricula and instruction of the school and its various goals of improvement.

- **Interactions:** It is possible that attitudes are biased and are relating with students in varied manners, based on factors like ethnicity, ability, sex and race.

- **Attitudes:** Attitudes should be monitored for prejudice and bias, which whether or not intentional, are capable of creating discriminatory behaviour and may affect the performance of the student.

- **Language:** There is a need to regularly monitor for overt or subtle biases that have the power to reinforce, create, or influence prejudice to languages.

Causes for Inequality of Educational Opportunities

The various causes for inequality of educational opportunities are:

- **Lack of educational facilities:** There are many places and areas in the country where educational institutions do not exist. Children residing in those areas do not acquire similar kind of chance as children who have the amenities in other countries or other states.

- **Poverty:** Children coming from the poor sections of the community do not have the same chances to study in the neighbourhood of an educational institution as the ones who come from affluent family.

- **Difference in the standard of educational institutions:** Difference in the values of colleges and schools lead to educational inequality. Students coming

from rural educational institutions do not match up well when admissions to professional courses are made on behalf of selection tests.

- **Difference in home environments:** An adolescent from the rural house or from the urban slum area whose parents are illiterate cannot get the same kind of environment and prospect which an adolescent from a higher class house with extremely knowledgeable parents receives.

- **Disparity in education of boys and girls:** Due to the conservative nature of some societies, there is a broad difference between the education of girls and boys.

- **Disparity due to advanced classes and backward classes:** Another factor that has led to inequality of opportunity in education is the existence of different types of classes.

- **High private costs of education:** The private cost of education required for the text books, supplies, etc. have improved very significantly in current years in public schools. The parents are required to incur very heavy expenditure for this purpose.

Steps for the Equalization of Educational Opportunities

- **Eradication of tuition fees:** All nations should work together for the development of education so that a stage will come when education will become tuition free.

- **Free textbooks at various stages:** It is very essential that a programme of providing free text-books should be given very high priority and introduced immediately at all stages of education.

- **Book-banks:** In secondary schools and in institutions of higher education, a programme of book-banks should be encouraged and developed.

- **Grants for purchase of books:** The best of the students in educational institution belonging to backward classes should be given grants annually to obtain books which may not necessarily be text-books.

- **Scholarships:** There should be an adequate programme of scholarships so that the best use is made of the available talent.

- **Transport facilities:** Adequate transport facilities may be provided in the rural areas and for the students of backward classes so that students are encouraged to attend an educational institution.

- **Day study centres and lodging houses:** A large number of day study centres and lodging houses at the minor and university stage should be provided to students who do not have adequate facility to study at home.

- **Earn and learn facilities:** As a supplement to the programme of scholarships, facilities for students to earn and play must be provided.

- **Special facilities for girls:** Special incentives may be provided to the girls.

- **Admission policy:** There is a great need to introduce an egalitarian element in admissions to institutions so that students coming from rural areas are not handicapped due to language or some other factors.

- **Special assistance to backward areas or states:** At the national level, it should be regarded as the responsibility of the Government of India to secure equalization of educational development in the developing states. The necessary programmes for this including special assistance to the less advanced states should be developed.

- **Compensatory and remedial education:** Compensatory education means provision of such special training and incentives as would compensate for the initial disadvantages experienced by the children of the culturally, economically and socially deprived groups. The compensatory measures include free school uniform, textbooks and meals. It also includes remedial classes. Such a treatment is likely to be very useful for their educational, emotional and social development.

- **Common school system:** A system of common school for education should be developed. It should be preserved and maintained at a stage of excellence and competence. This is a very helpful step towards eradicating the separation that exists in our society between the educational institutions for the poor and those for the rich ones. The exiting 'caste' system in the educational system should be gradually abolished.

Right to Education (RTE)

As quoted from the report of Committee of CABE on 'Universalization of Secondary Education' (set up by the Ministry of Human Resource Development, Government of India):

> The Constitution of India, under the original Article 45, directed the State to endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years.

This provision implicitly covered early childhood care and education (including pre-primary education) for children below six years of age and eight years of elementary education (Class I to VIII) for the 6-14 year age group. The priority given by the Constitution to this provision was clearly evident from the time-frame specified therein; no other clause in the Constitution carries this sense of urgency.

Yet, the State managed to ignore the agenda of Universal Elementary Education (UEE) for four long decades just because Article 45 was placed in Part IV of the Constitution i.e. Directive Principles of State Policy and, therefore, was seen as not being justiciable. It was only in 1993 that the situation changed dramatically when the Supreme Court, in the case of Unnikrishnan J.P. vs. State of Andhra Pradesh and others, gave all children a Fundamental Right to 'free and compulsory education' until they 'complete the age of fourteen years' and stated that this right 'flows from Article 21' i.e. Right to Life. In the context of this Committee's Terms of Reference, it may further be noted that the Supreme Court in

the same judgment ruled that, after the age of fourteen years, the Fundamental Right to education continues to exist but is 'subject to limits of economic capacity and development of the State'.

It is this historic interpretation of the Constitution and similar judgments coming from the highest judiciary of the land that eventually persuaded the Government of India to constitute the Saikia Committee of State Education Ministers (1996) whose report in January 1997 recommended that the 'Constitution of India should be amended to make the right to free elementary education up to the 14 years of age, a fundamental right.' This was followed by the introduction of the Constitutional 83 Amendment Bill in the Parliament (1997) and eventually the passing of 'The Constitution (Eighty-Sixth Amendment) Act, 2002' – more than half a century after India's independence. In the process, however, the intent of the 1993 Supreme Court judgment as well as the Saikia Committee recommendation (1997), was diluted by exclusion of almost 17 crore children from their right to early childhood care and pre-primary education, the significance attached to this agenda in the National Policy on Education – 1986 notwithstanding.

CHECK YOUR PROGRESS

8. State any two characteristics of exceptional children.

9. Write down any two advantages of the summer schools.

10. Why is equalization important?

1.5 SUMMARY

- A Dictionary of Education (1981) by Derek Rowntree considers child-centred approach/education/teachings, 'Rather woolly slogan, but its main point is made by teacher who claims 'I teach children, not subjects'. This implies care for the child his personality, needs and learning style and not just for his or her academic process.'

- Children learn best when they are active. When we consider the child an agent in his own learning, we must provide for him to be active. The medium of learning is the activities undertaken by the child. Learning takes place through a continuous process of interaction between the learner and his environment.

- Child-centred education has a few limitations which must be taken care of by the teachers. Too much freedom is likely to engender ego-centrism in children. Children may grow to be unwilling to accept reasonable authority.

- Some of the duties of a teacher in a child-centred education include: (a) Motivating children (b) Developing trust and confidence in children's capacity to learn (c) Becoming as a resource for creating meaningful learning experiences (d) Accepting the individual and the group

- Play way approach to teaching is based on the philosophical thought of Caldwell Cook. According to him, good work is more often the result of spontaneous effort and free interest than of compulsion and forced application.

- Some of the Play-Way materials include: (a) Gifts of Froebel (b) Sand play (c) Water-play (d) Wooden toys (e) Rubber toys (f) Glass toys (g) Plastic toys (h) Pictures (i) Picture book puzzles

- Dramatic play, a Play-Way activity, is basically an exercise of the imagination, at the same time, it can also be a valuable learning experience. To a young child, a doll is not just a doll. It is like a real person. A toy telephone can be used to call and talk with someone.

- Friedrich Wilhelm August Froebel (1782-1852) popularly known as Froebel who was a German educator founded the Kindergarten Method. Kindergarten is a German word which means the 'children's garden' i.e. a place where young human plants are cultivated. Froebel regarded school as a garden, the teacher as a gardener and the children as plants.

- Froebel's gifts and songs can be adopted/ adapted to local conditions. Likewise locally available material can be provided so that it could be made as inexpensive as possible. There is no doubt that kindergarten method as founded by Froebel is, by far the 'most original, attractive and inspirational' method for infant development. On account of this, this method is now used in all the progressive schools of the world.

- The Montessori Method derives its name from Maria Montessori (1870-1952), the originator of this method. Maria Montessori was an Italian doctor who later on became one of the greatest educationists of the world.

- According to Montessori, 'Child is a body which grows and a soul which develops—these two forms— physical and psychic, have one eternal front, life itself'. It follows then that 'We must neither mar nor stifle the mysterious powers which lie within these two forms of growth, but we must await from mem the manifestation which we know will succeed one another'.

- The Montessori Method of teaching may be divided into four parts: (a) Sensory training (b) Training in practical life activities (c) Motor training (d) Language and arithmetic teaching

- 'Children's House' is the name given to a school by Dr. Montessori. This House provides all the requirements of a good 'family house'. As a matter of fact, it has all the qualities of a school, a workshop and a home. There are many rooms in the Children's House. The main room of the building is a study room. Smaller rooms—common room, lunch room, rest rooms, room for mutual work, a gymnasium, a lavatory or a children's bath room—are attached to this main room. The rooms are well equipped according to the needs of the children and spirit of the Montessori Method.

- Constitutionally, Indian women and men have been granted equal status and rights, but on practical grounds, women still lag behind men in various life

activities due to gender discrimination. Hence, to give better growth opportunities to Indian women, according to their special interests and legitimate demands, courses of study and employment facilities should be provided.

- Some of the major problems of women's education in India include: (a) Traditional prejudices (b) Absence of separate schools (c) Lack of women teachers (d) Household work (e) Poverty (f) Child marriages (g) Lack of provisions on certain subjects.

- Education can be used as a catalyst in bringing around change in the status of women. In order to neutralize the accumulated distortions of the past, there is now well-conceived edge in favour of women. The national education system now plays a positive and interventionist role in the empowerment of women.

- At its meeting held in April 1963, the National Council for Women's Education endorsed the suggestion made by the Union Education Ministry that a small committee be appointed to look into the causes for lack of public support, particularly in rural areas, for girls' education and to enlist public cooperation.

- The greatest problem in women's education today is to provide some basic education to the overwhelming majority who have remained outside the reach of the formal system because of their age and social responsibilities as well as the literacy gap. For the sake of national plans for development, it is imperative to increase the social effectiveness of women in the age group of 15-25.

- An exceptional child may be defined as the one who differs so much from his peer average in respect of physical, mental or social characteristics that he is unable to develop his fullest potential under normal conditions in an ordinary class and for whom some special environment or organization has to be created either within or without the normal school.

- Samuel A. Kirk, in his book, Educating Exceptional Children, gave the following definition, 'An exceptional child is he who deviates from the normal or average child in mental, physical and social characteristics to such an extent that he requires a modification of school practices or special educational services or supplementary instruction in order to develop to his maximum capacity.'

- Constitutional Directive on compulsory education includes education for all children till the age of 14 years. Therefore, exceptional children must also receive education. The Declaration of the Rights of the Child, adopted by the United Nations in 1959, stated, 'The child who is physically, mentally or socially handicapped shall be given the special treatment, education and care required for his particular condition.'

- Efforts to identify gifted children were started in the US by WT Harris in St. Louis Public School in 1867. By 1920, three public schools in Cleveland, Rochester and Los Angeles in the US were offering enriched programmes to gifted children. Later, all educators, parents and administrators recognized the importance of providing special education to gifted children.

- The state must take positive as well as negative action to maintain a proper balance of social welfare for its citizens. The state must step forward and ensure not only an adequate amount of education but also education of an adequately high standard to all those who are desirous of it.

- Equalization is important in every section of the society. It binds together the people of vivid nature and culture and helps in building social, cultural and national integration. Just like other sectors of the society, the concept of equalization should also lie in the educational system of the country. It is good to have equalization of educational opportunities for the progress of the country.

- Like in the case of race and special needs, it is just as important in the case of gender, too, to take note that it is not on all occasions fair to treat everyone the same. The learning approaches of boys and girls differ and both genders learn differently. Both genders even approach, analyse and solve problems differently.

1.6 KEY TERMS

- **Early childhood:** It is defined as the period from conception through eight years of age.

- **Child-centred education:** An educational theory or system that emphasises the pupil and his or her individual characteristics as central in conducting instruction instead of focussing on subject matter, external authority, and educational requirements.

- **Kindergarten:** It is a preschool educational approach traditionally based on playing, singing, practical activities such as drawing, and social interaction as part of the transition from home to school.

- **Montessori:** It is a system of education for young children that seeks to develop natural interests and activities rather than use formal teaching methods.

1.7 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Two key concepts of child-centred education are: (a) Aim: The aim is development of the total personality of the child. (b) Programme: Programme is to be activity-based with different teaching strategies.

2. The role of a teacher in child-centred education includes motivating children, developing trust and confidence, becoming a resource for creating meaningful learning experiences and so on.

3. Play-way is based on the principle that learning takes place through doing.

4. The Montessori Method aims at educating the children through the sense training. It is based upon the maxims 'proceed from concrete to abstract', from 'general to abstract.'

5. Two major recommendations include: (a) Steps should be taken to constitute as early as possible a National Council for the education of girls and women. (b) Concessions in kind (not in cash) should be given to all girls, whether from rural or urban areas, of parents below a certain income level.

6. The Committee submitted its report in 1964 and it was published in 1965.

7. The two measures include: (a) Enhancing self-esteem and self-confidence of women. (b) Developing the ability to think critically.

8. Two characteristics of exceptional children are:

   (a) Exceptional children deviate markedly from normal children.

   (b) Deviation may be physical, intellectual, emotional or social.

9. Two advantages of summer schools are:

   (a) The scheme provides students with challenging situations.

   (b) The students realize, perhaps for the first time, that there are other children equally intelligent, or even more intelligent than them.

10. Equalization is important in every section of the society. It binds together the people of vivid nature and culture and helps in building social, cultural and national integration.

1.8 QUESTIONS AND EXERCISES

Short-Answer Questions

1. List the similarities between the Kindergarten Method and the Montessori Method of education.

2. Write down the positive characteristics of gifted children.

3. What is the need for child-centred approach?

4. State the application of Play-Way attitudes.

5. Who was the founder of the Kindergarten Method? What was the philosophy of this method?

6. What is the role of the teacher under the Montessori Method?

7. What is the importance and the need to educate exceptional children?

8. Why is it important to equalize educational opportunities?

Long-Answer Questions

1. Discuss the child-centred approach to teaching.

2. Describe the meaning and principles of Play-Way.

3. Explain the main features of Kindergarten Method of education.

4. Describe the Montessori Method in detail.

5. Discuss some of the measures for promoting women's education in India.

6. Describe the causes of inequality of educational opportunities.

1.9 FURTHER READING

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UNIT 2 EDUCATION IN
         A GLOBAL WORLD

Structure

2.0 INTRODUCTION

Today, access to education is widely recognized as a basic human right. The role of the State in delivering that right is legally codified in commitments to the international rights treaties. However, governments are constrained in the equitable financing and provision of services of sufficient quality. As a result, there has been an increasing call for a range of non-state providers to play an expanded role in the delivery of education. The growth of non-state providers has been fuelled, on one hand, by conscious policy design and, on the other, by voluntary, demand-driven needs for increased access to better quality education. In particular, non-state providers have come to play a significant role in delivering education to the poor. Non-state education has a long history, in some cases predating state provision. Although the growth of non-state provision brings new opportunities for governments, it also brings challenges. In particular, governments face questions about the implications of increased non-state provision for the universality, affordability and quality of education. Available evidence suggests there is great potential for the non-state sector to contribute to overall progress in education, which will result in broader coverage and greater efficiency in education delivery, particularly in reaching those groups underserved by public systems. At the same time, however, governments need to ensure that non-state sector engagement promotes provision that is pro-poor and equitable.

In this unit, you will study about internationalization privatization and liberalization of education. Towards the end of this unit, you will learn about people-public-private partnership in education.

2.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss internationalization of education and its importance
- Explain privatization of education and the factors affecting privatization in education
- Describe the impact of liberalization on education system in India
- Assess people-public-private partnership in education and various dimensions of public private partnership in schools

2.2 INTERNATIONALIZATION OF EDUCATION

Internationalization is different and distinct from globalization. Globalization can be explained as the growing interdependence and interconnectedness of the modern world through increased flows of goods, services, capital and information. Globalization has resulted in higher education or as a commercial product, with dealings in it being governed essentially by market forces and the principles of marketplace.

Internationalization should not be confused with globalization. Globalization of Indian higher education involves a super nationalism that straddles national boundaries, ignoring cultural identity. Technology often goes in hand with globalization, magnifying the threat. In contrast with globalization, internationalization of higher education recognizes nation, it is described as a process of interchange of higher education between nations. It involves partnership between nations, between national systems and between institutions. Without partnership there is no international education. Strategies for internationalization activities of higher education institutions involve the following activities:

Making special provision for the admission in the universities for the students of other countries

For decades, students have gone to other countries for their higher education and high-income countries have awarded grants and travel assistance to their teachers and researchers to enable them to collaborate with scholars and institutions in other countries. Now, this idea is being elaborated to bring numbers of people from diverse cultures into exchange with each other in a neutral environment focused on learning and intellectual exchange. Earlier, students who crossed international borders for higher education purposes used to originate mainly in countries in the South and flowed to countries in North America or Western Europe to continue their advanced studies. Today, in contrast, significant south-to-south and north-to-south flows are occurring as well and flows in all directions are growing rapidly.

Student exchange programmes

Universities of different countries with different cultural background provide scholarships to their students to go to the other university in a different country for a

particular semester to study a particular paper and the final degree is awarded by the host university.

Corporate training

Corporate training programmes are developed to obtain skilled workers. Even in advanced countries with large pools of highly trained workers, corporations regularly train new hires for a few months. Corporations may provide training in collaboration with universities

Offshore and distance education

Offshore Campuses are formal cross-border higher education initiatives structured from the outset with the intent of awarding participating students with a joint degree in the name of the participating partners or under the brand name of the foreign participating university even though none of the education may have taken place in the university's origin country. It is becoming common under Branch Campus arrangements for students to receive a degree from the foreign university that set up that campus even though it is not located in the country where the higher education took place.

Exchange of research

In the past, international research collaboration mainly involved individual faculty members from developed countries travelling to another developed country or to a developing one for research collaboration. On those trips, the visiting foreign faculty member may have delivered lectures or participated in seminars at the host institution but the main purpose of the visit was to collaborate with research colleagues in another country. Graduate students often accompanied their professors abroad and visiting faculty took advantage of their travel to recruit prospective graduate students for study at their universities. Individual research collaborations between academic professionals from different countries remain important today. However, formal collaborations between universities that involve curriculum and program development are growing and likely to expand in the years ahead.

Programme partnerships

Programme partnerships are defined as international institutional collaborations under which each of the anticipating partners awards course credit. While some Program Partnerships may require Study Abroad participation as part of the degree, as long as the degree is awarded by a single institution to students enrolled in the study program in the university's home country, it can remain outside of a country's regulatory framework. Thus, according to this definition, Program Partnerships are 'informal' and mainly involve collaboration on program 'content' rather than formal accreditation.

The strategy of internationalization of education includes the international context, culture and policy for the institution, its mission statements and corporate plans, its management and business plans, its organization structure for internationalization, its staff policies and its institution wide links. Internationalization

brings global environment on more equal terms, higher education and society can move away from dependency syndrome of nations who took initial advantage of internationalization process.

Through the process of internationalization of education many nationals have become more attached to their own national identity than before. International education is not only a confrontation with the other but also, and maybe more, with the own culture.

CHECK YOUR PROGRESS

1. What is corporate training?
2. What are programme partnerships?

2.3 PRIVATIZATION OF EDUCATION

There is a lot of debate over privatization of the education sector in India. There is an immense pressure on the government to meet the ever increasing demands for the development of educational system in India. The cost to develop the infrastructure is too high to meet this challenge. Many developing and developed economies are now opening the doors for the foreign players in education sector so that they are relieved from the excessive costs. In developed countries, the main issues at hand are provision and accountability. In these countries privatization can be advantageous to parents, who are given more freedom and choice when deciding on schools for their children, and greater control over the way their children are educated. However, in a developing country like India where the population has increased manifold and majority of the population is uneducated, demand for education has also increased. Hence, there is a dire need to privatize education in India.

The motive of privatization is different in developing and developed countries because of different needs. As a result, the form of privatization adopted is also specific to the country and its economic and demographic situation.

The term **'**privatization' is a wide term referring to many different educational programmes and policies. As an overall definition, 'privatization is the transfer of activities, assets and responsibilities from government/public institutions and organizations to private individuals and agencies' (Levin, 2001). Privatization is the act of reducing the role of the government or increasing the role of the private institutions of society in satisfying people's needs; it means relying more on the private sector and less on the government (Savas, 2006).

In its narrowest meaning, privatization suggests a movement away from public financing and toward private financing.

Factors Affecting Privatization in Education

Education is one of the main driving forces of economic and social development in any country. The governments are now prioritizing education development and are committed to find new ways to provide education of good quality, affordable and accessible to all, with the help of latest technology available.

In the recent past we have seen that privatization of education has emerged in several forms and types in India:

- We have seen privatization within government higher education institutions taking place in the form of introducing self-financing courses within government institutions;

- Many government-aided private institutions have been converted into private self financing institutions;

- Self-financing private institutions have been allowed to expand with recognition and also without recognition, which may be termed as commercial private higher education institutions.

There are a number of factors that drive privatization in education. The factors may differ in intensity between countries and across the three sectors of primary, secondary and tertiary education. When we combine these factors they represent a powerful force that may increase privatization, even when government officials are resistant to change. The two main factors that determine privatization in education are discussed here. They are demand and supply factors.

Demand factors

This is a very simple factor, which discussed here to explain privatization in education. Everyone wants it. In many countries, we see that education is also seen as major medium to gain social status and economic advancement. As a result the demand for education in such countries is pretty high. If the government fails to meet people's expectations and is unable to afford to provide and fund all the quality education that parents expect for their children, then the parents would seek private suppliers. This type of demand is 'excess demand', over and above what is provided by the government. The excess demand will pave the way for privatization secondary and tertiary levels, as parents seek to give their children more years of education than may be available in government schools. Many parents feel that the education that the public schools are providing is not up to the mark and would want an education in different form. Such parents will not be satisfied and will seek an alternative type of education. This is 'differentiated demand'. It may encourage privatization across all three sectors.

Excess demand is ever increasing in today's scenario because literacy rate is increasing and the people have understood that education is important for economic and social betterment. Earnings are related to education today. For example a worker knows that to get a high-paying job he must have a high level of skills. Hence he will look for a supplementary vocational education because he is aware that it is required. There are many documented evidences that say that the monetary returns to education

have risen over the period since 1980. As the returns are high the enrolments are also increasing.

One reason why the differentiated demand has grown is that many public schools offering education that is standardized or uniform (often because the rules are set at higher levels). When the uniformity in the public schools is high, more number of parents would seek differentiated demand. The second reason for the high differentiated demand is that economies and societies now have become much more specialized. Job opportunities have increased. Many new sectors have come up as a result many occupations have developed. The education system need to match this pace and must cater to these needs. Hence now we can see many schools offering a strong science curriculum or a strong arts curriculum. There are various university courses various streams like bioengineering, MLT, Mass Communication, Event Management, information technology, Journalism, cybernetics, and as well as traditional disciplines.

In the last decade we have seen a huge jump in both excess and differentiated demands. The reason we discussed why Excess demand has grown is that the awareness among the masses have increased and they understand that education is very important for social and economic betterment.

Supply factors

Another important factor that determines the privatization is the decline in the quality of education offered by the public sector. This may be attributed to some extent due to fewer funds available in the public sector. As the economy is increasing the educated class is also on the rise. People now believe that local public school run by the governments are not equipped with the facilities to provide education of the type that is required in today's context. These parents as a result are looking for other alternatives, often in the private sector. The reasons why the public schools are perceived to be not efficient may be that the government run public school system in India has reached a capacity constraint. With the population explosion, these government schools may be overcrowded. Therefore the alternative may be the private school providers.

Need for Privatization

The need for privatization may be discussed under the following heads:

1. **Need for competitive efficiency**: The main justification why there should be privatization in the education sector lies heavily on the grounds of effectiveness to promote a more competitive economic environment. People have the perception that the public sector enterprises are inefficient in providing services as per the people's expectations. People believe that private sector is much more competent in terms of resource allocation and work.

2. **Growth in population:** The population of our country has risen to 1.22 Billion in 2012. The demand of education is also increasing. To provide education to a huge number of people in India education system need to be developed and more private institutions are needed. The demand for education is so high that privatization of higher education is needed.

3. **Financial burden on government:** Lot of finances is required to cope up with the demand of higher education in India. Many government run schools and colleges are incurring losses. Therefore state/central governments are unable to bear the financial burden of these public enterprises. Current spending on education in India is about 4% of GDP. The Indian government though has a opinion that the minimum spend on education should be 6%. Spending on higher education is very less. The spending on education is not even matching the international standards. The countries such as Malaysia, Denmark, Namibia, South Africa, and Norway invest around eight per cent of GNP on education. Therefore the government must come up with the policies through which private resources are mobilized.

4. **Education as an economic good:** There was a time when education was considered as a social service but now the perceptions have changed with the arrival of private players. It has become a necessary economic input. Corporate and private layers are venturing into the education sector and the investment in education is now treated as a factor contributing to the development of human resources. Encouraging private sector initiative can help meet the huge demand of education in India. They will take more initiatives since the private sector is the beneficiary of the knowledge industry.

5. **Quest for quality:** The reason why private institutions can provide a better quality of education is that they will hire qualified and competent staff and will be more organized. They will not have to go through the long procedures for procurement of human as well as material resources as we see in the government sector. The competition will force them to offer best quality and standard and they will strive for good qualitative infrastructure and equipment like buildings, furniture, different types of laboratories. Hence there is a dire need for privatization in our country.

6. **Rapid growth of school education:** Due to increase in number of schools we also saw growth in Primary and secondary education. Subsequently this has raised the demand higher education. The government is finding it difficult to match with the pace and is unable to provide the infrastructure for higher education. Hence the need of the hour is privatization of higher education.

7. **Fulfilling the need for skilled manpower:** The public sector has its own limitations to take initiatives to improve the education according to the modern requirements. However Private players are coming up with innovative ideas and are initiating modern and advanced courses to meet the demand for subjects which facilitate economic development of the nation. The demands of the market and the times can be fulfilled. For this privatization is needed.

8. **Curtailment of corruption**: Another important factor why Private sector is required in our country is to curtail corruption in the government sector. Privatization helps in controlling the corruption to some extent and also brings about some discipline. Therefore we can see some capacity utilization with the arrival of private sector.

9. **Desire for more autonomy:** Privatization of higher education will help in providing autonomy to institutions and they would be less dependent on the government. This will help in removing the political interference in areas of management, administration, and finance.

10. **Synergy for information based economy:** In order to help the education system there is a need for interaction between UGC, industry, academic institutions of higher learning, R&D institutions and funding agencies. This can only be accomplished by a synergy process wherein they will be partners in various activities, complementing each other in reaching their visions, objectives and goals. This can be achieved through private participation.

11. **Technological developments:** In today's day and age there is a huge demand for the experts in various fields like Telecom, communication, and Information Technology. In the last decade we have seen developments such as robots, microchips, communications, genetics, lasers, growth of satellite TV and computer technologies. There are limited resources in public sector and it is unable to fulfill the large demands of the industry and other sectors of economy. Therefore private sector is required to undertake to train manpower in technology and respond to market demands.

12. **Greater responsibility with the recipients of education:** Few decades ago education was considered as a free public good thereby devaluing education. Privatization of education has brought a change in this perception. Now the recipients bear the full cost of the education that helps in bringing greater responsibility in them. Thus, the parents and students are likely to demand greater efficiency and quality in teaching.

Advantages and Limitations of Privatization

Privatization enhances quality and accessibility of education in the following manner:

Advantages

- It helps in decentralization and de-bureaucratization of educational institutions.
- It brings innovativeness and novelty in teaching and evaluation.
- It encourages new initiatives in educational reforms.
- It promotes competition.
- It offers customized services and provision of wide choice of courses and subjects to students.
- It helps in framing of the curriculum according to global, national and local needs.
- It ensures quality education and training.
- It brings transparency in all procedures.
- It facilitates the availability and better maintenance of resources.
- It ensures optimum utilization of human and physical resources.
- It fulfils the need of the country in liberalization and globalization.

Limitations

Privatizing education may have certain ill-effects such as:

- It undermines equity, diversity and openness.
- It deprives many of availing education and badly affects the poor (due to excessive fees).
- It does not address issues of equality, fairness and responsibility.
- Courses in humanities and social sciences will be side-lined due to no economic gain.
- It leads to accountability problems.
- It creates apprehensions about job security and retrenchment of staff.
- Civic and democratic values may not get passed down.
- It results in favouritism towards family members and friends.
- Cost saving will lead to cost cutting.
- Collected funds may be misused by the owners.

Privatization Policies and Programmes in Education

UNESCO International Institute for Educational Planning in 2002 recommended certain privatization policies and programmes in education across all the sectors of education including primary, secondary and tertiary education. The major policies and programmes of the institute are reviewed as follows (Levin, 1992).

1. Educational vouchers

A student having an Educational Voucher (a form of educational coupon) is entitled to a prescribed amount of schooling. In the past, the schools were funded through taxes paid by local communities, by regions, or by the national government. The total funds collected from these taxes were divided between the students who lived in that society or community. Educational voucher system in the present scenario would be very different. An annual amount of funding would be allocated to each student that he can use to enrol in a school of his/her choice. The revenues of the schools would depend on number of enrolment. If the number of students enrolled in a particular school is less then it needs to cut its costs or close down. The government funding would still be required even in the voucher system of education. By giving parents the power of being able to freely use the voucher, private choices – and therefore private accountability – would be significantly expanded. Educational Vouchers need not cover the entire costs of schooling, but may simply serve as an incremental inducement to enrolment. In certain countries, where the female enrolment is less, the scholarships are given to female students to encourage enrolments.

2. Public school choice

In order to maintain control over the provision and funding of education, government agencies may allow parents to make choices between public schools. In the past, residential location used to determine the enrolment in a school. Families used to get their children enrolled a to the nearest school from their residence. Even today

preference is given to the students located near the school so in many situations, this is still the case. In a developed society, when there is sufficient means of transportation and ample number of schools is there in a particular region, it may be feasible to allow enrolment in any public school. These policies are often called 'school choice' or 'open enrolment' programmes. Because of such programmes there is a greater choice for parents, although these choices remain limited to include public schools only.

3. Public school liberalization

Public schools are governed by government norms and rules. The disadvantage of government managing these schools is that they may become excessively bound by rules, traditions, regulations, and bureaucratic practices. It can result in inefficiencies and rigidities. Liberalization of public schools mean excluding the 'red tape' and bureaucracy from the management of the public schools. It would make them more competent, efficient and more flexible. With the flexibility in the norms and fewer regulations, the government run public schools would prepare themselves to respond to changes in students' needs, and in the prices of key inputs, such as teachers. One of the better ways to reduce the number of rules is to create new schools that are clearly exempt from them.

4. Private contracting of specific services

Today schools are offering number of services under the title 'education'. The services include not only instruction, but also include latest sports facilities, meals (generally mid day meals), and welfare counselling. These are the ancillary services from the schools that they can outsource to private firms under contract. The parents and the students are mainly concerned about the quality of the education and services they are receiving. They are least concerned about who has supplied that service. For the efficient functioning the government must encourage private contractors for educational services. This may be the most common approach to privatization, and politically the least contentious when reduced to specific services. Government alone is not able to handle the vast services (not directly educational) that schools are providing. Therefore we have seen that numerous companies have come up as contractors to the schools for food, textbooks, cleaning services, and transport etc. In India, for instance, a scheme for setting up 2,500 schools through Public Private Partnership (PPP) had been formulated in 2010. The proposed scheme is part of the initiative to set up 6,000 model schools in rural blocks. Some on-going models of government assistance for schools by private partners are Residential schools in Andhra Pradesh, Adarsh schools in Punjab, PPP schools in Rajasthan and government aided schools throughout India.

5. Tuition tax credits and deductions for parents

If the government wants to encourage private expenditures on education it should make educational expenditures exempt from taxes. For example if parents are spending Rs 1 lakh on the education of their 2 children per year, then this income should be exempt from taxes. The tax advantage will encourage the families to purchase more education-related services. When the demand for the services would increase, privatization would be encouraged.

6. Subsidies and assistance grants to private schools

Government need to encourage more private players to invest in schools and educational institutes. For this it can give assistance grants and subsidies directly to private schools. The trend of giving grants to private schools is common in many countries like England, Australia, France, Holland, Germany, Hungary, Poland Japan and Sweden etc. The grants help the private schools to run efficiently without charging high fees. This way large number of families will be attracted to the private sector. These grants also reduce the financial burden on the government (otherwise they would have to invest billions to build infrastructure for education).

The World Bank Report 2009 on Secondary Education in India suggests for Reform of the Grant-in-Aid System, through which the state provides financing to private secondary schools. It recommends that at a minimum, school grants could be made conditional on achieving certain performance standards (e.g. independently verified student and teacher attendance, retention/pass rates, examination results, etc.). More substantive reform would shift from financing of teacher salaries to financing per student capitation grants based on average public school unit costs, conditional upon previous year's fulfilment of minimum quality criteria.

7. Home-schooling

Home Schooling not very common in our country but in countries like America there are people and parents who feel that the education provided by private and public schools is not appropriate, helpful or desirable education for their children. Such families have the option to opt out of the country's education system completely. The children are not sent to the schools and instead are taught at home (Home-Schooling). The trend of home schooling is very common in the United States of America and is a legitimate way of meeting the compulsory schooling laws. Over 800,000 children in US (1.7 per cent of all school-age children) are estimated to spend at least two years as home-schoolers. This is yet another form of privatization of education that is privately provided, privately funded. The government agencies have less monitoring in this type of system.

8. Competition

The education market can be expanded by encouraging, educational institutions, schools or agencies at other levels to compete with each other. It is most likely that school will not respond to students' needs when there is monopoly. In sharp contrast, when a family has a choice of schools for their children, they will select the school that best meets their needs. Therefore, it is imperative that privatization reform must involve creating systems wherein schools compete with each other to offer the highest quality education.

We can promote competition by the following means:

- Allow new players and schools to enter the education market
- To break up the large regional education directorates into smaller units
- Decentralize the power from high-level ministries of education to school sites

Private Initiatives in Education in India

In India there are different kinds of schools. The Schools run by the state governments or by Central government are government sector schools. However, in the private sector, there are three types of schools:

- Schools which are privately run but receive grant-in-aid from the government
- Schools which are recognized by the governments based on certain criterion outlined and must follow certain regulations. They receive little government funding
- Schools which are still not been recognized by the government and might not meet the criteria – such as infrastructure or teacher salaries – needed for recognition.

In India, the privatization of education has been taking place at the school level without much resistance. A dual system has come to be established at various levels of school education. The overall enrolment in private schools in the country has gone up from 18.84 per cent in 2006 to 26.09 per cent in 2011, according to the Annual Status of Education Report (ASER) 2011, released by Pratham Foundation, an NGO.

Establishment of Private Universities has been a major milestone in field of higher education in India. Private Universities is a new concept where self financed private universities can be established by private players without financial assistance from the State. A number of private universities have been established in various States as also Central Government of India has granted Deemed University status to a number of educational institutions.

Today India boasts of more than 45,000 colleges in the entire country and more than 20 million students. As per UGC as on March 2012, there are 44 Central Universities, 285 State Universities,130 Deemed Universities and 109 Private Universities established by the Acts of the Legislatures of Centre and different States.

In this era of liberalization and global education, it is germane to attract, encourage and promote the private sector investment in the realm of Higher Education and lay the legislative pathway to establish and incorporate private self-financing Universities in India. It is the right time to promote, develop and implement a progressive framework that provides for opportunities to deserving private institutions and educational promoters, with relevant and sufficient experience and exposure in the field of higher education, so as to contribute towards the expansion of higher education and research.

CHECK YOUR PROGRESS

3. Define privatization.
4. What are the two main factors that determine privatization in education?

2.4 LIBERALIZATION OF EDUCATION

In the context of globalization, liberalization generally means removing the regulations and controls at various levels of the economy that facilitate market forces to determine its course and direction. Liberalization favours a competitive market solution to economic issues and helps in reducing the role for the state in economic management. In its primary and stricter meaning liberalization proclaims freedom of trade and investment; elimination of government controls on allocation of resources in the domestic economy; creation of free trade areas; progressive removal of restrictions on external trade and payments; expansion of foreign investment, loans and aid and rapid technological progress.

Liberalization also promotes a balanced budget; helps reduction in progressive taxation, advocates social security and welfare and a diminished role for the state in economic management. Liberalization is not in favour of subsidies and state protection and resource allocations through administrative means. It suggests that corruption, inefficiency and mismanagement are built into regimes with excessive state control.

The economic reforms in India started in 1991 when it opened up several sectors to foreign investment. The liberalization policy and globalization gave an enormous energy to push India's corporate sector. As a result numerous Indian companies have gone global and earned a name in the global marketplace. Similar type of 'Policy Reforms' is required to give a boost to the Education sector. Private Players in the education sector must have the choice to enter, operate and exit. India still needs number of educational institutions and universities.

There is a dire need in India for 'Curricular Reforms' because the technological know-how is evolving with each day. Educational institutions and Universities must have free hand to liaise with the industry and change the curricula as and when required. Educational institutions must prepare themselves to teach according to the industry needs.

'Financial Reforms' are also required in the education sector. The need is much higher for the higher Education. The government needs to ensure that scholarships and loans are given to the students who need it the most, and let the academic fee be decided by the market forces. This will make our Educational institutions relevant and self-sustaining. These reforms need to be rapidly implemented.

India is a large Knowledge Economy and it runs on its educated workforce. If we really need to become a super power, then our Education system needs to be strong and should respond to meeting domestic and global requirements for talent. India just cannot afford to lose this opportunity.

Impact of Liberalization on Education System in India

The liberalization has both favourable as well as unfavourable impact on our Education System. Following are the *positive impacts* on the education system:

- Liberalization has helped in expanding the supply which is in scarcity and also enhanced the competition among various educational institutions which has

ultimately resulted in competitive fees. Monopoly would have resulted in exorbitant fees. Increase in the supply of education has also resulted in the fall of education expenditure.

- Liberalization has brought a constant stream of funding for facilitating a research-based career and makes it a workable option for the future of Indian students and teachers.

- The economy of our country is majorly fuelled by the service industry and gets a boost with the education sector becoming a large chunk of economic source.

- Millions of Indian students go abroad for higher studies at an annual estimated cost of around US$ 1 billion. Liberalization in education sector can even prevent Indian students from leaving the country to study abroad. It will definitely save immense capital of the country.

- Liberalization gives the students a choice of studying close to home with the added advantage of a degree which has validity worldwide. It also curtails brain drain which is again a big loss to the country.

- Allowing corporates in the education sector ensures the development of better industry oriented graduates with specific skills.

- Rapid Increase in literacy rate has resulted in rapid developments in technology and communications. We are now witnessing a shift of society from industrialization based towards information based society.

The *negative impacts* of liberalization are discussed as follows.

- The higher education internationally is mostly an unregulated market. Still there are many top class and prestigious universities in the world hopeful to recruit top students to their home campuses, and striving to build links overseas to strengthen their brand abroad. However, we also see a lot of low-end and sub-prime private educational institutions which are seeking to stave off bankruptcy through the export market and there are some good private universities which are looking for finances elsewhere due to government funding cutbacks.

- We see that in the developing countries, the educational institutions as well as students are unregulated. Most of the time they are inexperienced and ill-informed. The students at times get attracted to avail services without much understanding or information. They are also attracted to the foreign label in degree. Dubious or uninformed educational institutions or universities may tie up with low-quality colleges and universities in India.

- Many fake institutes and universities have been identified recently and it is a big risk. Such institutions mislead people and stuff their pockets whenever they get any opportunity.

- With liberalization the small educational institutes in India with limited capital will find it hard to survive, rendering many jobless. The reputed institutes too will face stiff competition from the foreign players as their degrees and

certificates will be less valued as compared to the degrees of the world's top class institutes.

General Agreement on Trade in Services, 1995

The GATS (General Agreement on Trade in Services) came into being in 1995. It is a multilateral agreement under the WTO that was negotiated in the Uruguay Round. GATS was basically inspired by the same objectives as the GATT (General Agreement on Tariffs and Trade), which is its counterpart in merchandise trade:

- To ensure fair and equitable treatment of all participants (principle of non-discrimination)
- To create a credible and reliable system of international trade rules
- To promote trade and development through progressive trade liberalization.
- To stimulate economic activity through guaranteed policy bindings

GATS was extended to educational services, specifically higher education, in the year 1996. Prior to emergence of WTO there was no multilateral agreement on services because services invariably are place specific and were considered to be non-tradable. The aim of GATS is to liberalize and increase international trade in education. GATS works by getting member countries to sign up to particular areas or types or services in which they agree to treat foreign investors the same as domestic interests. For example, trade in education is organized in five categories of service, based on the United Nations Provisional Central Product Classification (CPC):

- **Primary education** covers preschool and other primary education services, but excludes child care services;
- **Secondary education**, covering general higher secondary, technical and vocational secondary and technical and vocational services for disabled;
- **Higher education**, includes post secondary technical and vocational education services as well as other higher education services leading to university degree or equivalent;
- **Adult education** includes education for adults outside the regular education system;
- **Other education**; which covers all other education services not elsewhere classified; nonetheless education services related to recreation matters are not included.

The GATS includes a number of general obligations for various services, the most important of which is the *Most Favoured Nation (MFN)* rule. As we know that India has given MFN status to Pakistan. Pakistan is also in the process of offering the MFN status to India. The Principle of the Most Favoured Nation implies that each party *'shall accord immediate and unconditionally to services and service providers of any other party, treatment no less favourable than it accords to the service and service providers of any other country.'*

That means, if a country is allowing a foreign institution of a country to provide distance education services, all other countries can request to have the same treatment. Similarly, if subsidy is given to one, others can request the same advantage.

Another important issue of GATS and WTO, which is fundamental to its principles, is the notion of *National Treatment*. This implies an obligation to treat both foreign and domestic service suppliers in the same manner. It has been contended that this would imply, if implemented rigidly, that a foreign educational institution of, say, distance education, can demand subsidies similar to those received by public universities in an individual country.

Education industry has been growing at a great pace and presently it has crossed a trillion Dollar mark worldwide. The private players in this industry for that reason are attracted by the prospects of globalization and liberalization of this industry. As we see galloping demand for higher education across the globe, the governments are facing problems to provide adequate budgetary allocation. The advantage of GATS is that it also covers all kinds of educational services for all such countries whose educational systems are not exclusively provided by public sector or those systems that have a commercial purpose. Today there is barely any nation that has education entirely in the public sector domain and thus, almost all the world's educational systems come within the purview of GATS.

The GATS (General Agreement on Trade in Services) covers *four types of services*

1. It covers cross border supply of services from one country to another. *Distance education* falls into this category.

2. Citizens of a one member country can get education in the other member country. The example is *undertaking studies abroad*.

3. Commercial presence of service supplier of a member country on the territory of another member country, enabling the supplier to provide a service in that territory. This includes *activities carried out by foreign universities* or other institutions in another country.

Presence of natural persons enabling a form of trade resulting from mobility of people from one member country who supply a given service in another country. In education this would imply *courses offered by foreign teachers*.

Foreign Universities Bill, 2010

The Foreign Educational Institutions (Regulation of entry and operations) Bill, 2010 aims to standardize entry and operation of foreign educational institutions imparting or intending to impart higher education (including technical education and medical education and award of degree, diploma and equivalent qualifications by such institutions) and for matters connected therewith or incidental thereto.

Highlights of the Bill

- This Bill regulates the entry and operations of foreign educational institutions in the country. It governs institutions in the sector of higher education or technical education in particular. It provides for the recognition and notification of institutions and specifies standards for operations.

- Every foreign educational institution intending to operate in India has to be notified as a foreign educational provider by the central government on the recommendation of the Registrar (Secretary of the University Grants Commission) in the prescribed manner. The application has to be endorsed by the High Commission of that country in India. An existing institution has to apply within six months of the Act coming into force.

- A 'foreign educational institution' is defined as any institution established outside India, which has been offering educational services for a minimum of 20 years and proposes to offer courses which shall be taught through conventional teaching method (including classroom teaching). It excludes learning in distant mode in India.

- The programme of study offered by the foreign educational provider has to conform to standards laid down by the statutory authority (such as UGC, AICTE, BCI, MCI) and the quality in terms of curriculum, methods of teaching and faculty is comparable to that offered to students in the main campus.

- Every foreign educational institution has to publish a prospectus 60 days prior to admission which shall include information about fees, deposits and other charges, percentage of fees refundable to students, approved number of seats, conditions of eligibility, and details of teaching faculty.

- The Bill provides for withdrawal of recognition in case a foreign educational provider violates any provision of the regulations.

- The foreign educational institutions have to maintain a corpus fund of a minimum of Rs 50 crore. Maximum of 75 per cent of any income generated from the fund shall be utilized for developing its institution in India and rest should be put back in the fund. Revenue generated cannot be invested for any purpose other than development of the educational institution in India. The central government may exempt any institution from conforming to the requirements of the Bill except the penalty provision and the revenue provision.

- Any person who offers admission to an unrecognized institution or makes misleading advertisement shall be liable to a minimum fine of Rs 10 lakh (upto Rs 50 lakh) in addition to refunding the fees collected. Any recognized foreign educational provider who violates the law shall be liable to a fine between Rs 10 and 50 lakh and forfeiture of the corpus fund.

- The Bill lays down norms for foreign educational institutions conducting certificate courses.

There is a big debate in India over whether foreign educational institutions should be allowed to operate in our country. This debate is divided into three camps.

- Some people are of the opinion that allowing foreign education players in India would result in commercialization of higher education, ultimately that would result in withdrawal of the government from the sector. As a result disparity of access to quality education between the rich and the poor would further increase.

- While some others believe that this would have a positive impact as students will have more choices. There would be enhanced competition

in the education sector with potential for qualitative improvement in the Indian educational institutions. It will encourage the institutes to provide technical skills for the job market and retain some of the funds that flow overseas.

* Taking the middle view some experts feel that we should give limited entry to the foreign educational institutions so long as certain concerns over the quality of the education provided, the type of subjects that would be taught, and the possibility of faculty moving from Indian institutions are addressed.

Whatever be the particular opinions about the new change in the education system, there is no denying the fact that privatization and liberalization of education in India over the last twenty five-years, have enabled creation of huge capacity, which today fulfils the required demand. The youngsters are no longer denied the primary, secondary and tertiary education opportunity. Coupled with some affirmative action programs, the students from backward communities and rural areas have also started getting their share of the education. The initial liberalization of the education has resulted into its democratization.

However, the system suffers from lack of quality to a very large extent. In a country where about 3 million children get into higher education each year, less than 30,000 get quality education. Lack of high quality teachers is the primary reason and the poor compensation given to the teachers is the primary reason, we do not get enough eligible youngsters attracted to the profession. The teacher's remuneration needs to be increase by two to three times the current level, if we have to make a difference. The only way this higher compensation can become possible, is by increasing the fees significantly. This would not make any difference to the well off in India as the fees in higher education sector, are lower than what they are used to paying even for school education. For the not so well to do, bank loans with some Government Guarantees and change in certain laws, would be required. The institutions have to be regulated by an independent regulator to ensure that the higher fees are indeed used towards enhanced teacher's remuneration and creating certain amenities for students and also to see that quality is really improving.

If India has to establish its place in tomorrow's knowledge economy, fixing our higher education would be of utmost importance. While liberalization over last twenty years have got Indian economy get into a new trajectory, education sector has not sufficiently changed. Time has come to fix it. It is fixable and would take India significantly forward.

CHECK YOUR PROGRESS

5. What does liberalization mean in the context of globalization?

6. State any one positive impact of liberalization on the education system in India.

7. When was GATS established?

2.5 PEOPLE-PUBLIC-PRIVATE PARTNERSHIP IN EDUCATION

India currently has the world's largest student body with 135 million children attending primary school. The 86th Amendment makes free education of children aged 6-14 a fundamental right. Over the past decade the SSA programme has brought over 60 million additional children into school – expansion at a scale and pace unprecedented in history – achieving near universal enrolment and gender parity. ASER (2009) finds only 4 per cent of children in the 6-14 year age group who are not enrolled in schools. However, the International Sub regional Information System on

Child Labour of ILO in 2009 estimates that 12.6 million children are child labourers; 6.8 million boys and 5.8 million girls are in the 6-14 year age group. Kingdon (2007) estimates that the gross enrolment ratio for the 11-14 year olds or those in classes 6-8 is only 61 per cent, with 10.3 per cent girls and 7.7 per cent boys dropping out. At the secondary stage, the report points out that 10.6 million children are in classes IX and X; and 5.3 million in classes XI-XII, and that according to National Family Health Survey (2006), only 54 per cent of all children at the secondary school age (11-17 year) attend school. When data is broken down by incomes, the net enrolment ratio of children in the richest 20 per cent of households is 83 per cent compared to 29 per cent among children from the poorest households. All this points to enormous provisions required in the school education (K12) sectors.

2.5.1 Various Dimensions of Public Private Partnership in Schools

This section discusses the various dimensions of public-private partnership in schools.

Private sector in Education in India

Estimates offered by different sources vary. Yet, private sector in schooling is estimated to be around 14 per cent. Other estimates show that the share of unaided secondary schools has increased from 15 per cent in 1993-94 to 35 per cent in 2006-07. DISE data for 2007-8 places the number of schools under private, unaided management at 173,282 out of 1,250,775 schools in India. The National Sample Survey, 2009 reports that 7 per cent of students are in private aided and 20 per cent in private unaided schools. At elementary stage, the figures are 12 per cent and 17 per cent respectively. Private sector participation in secondary sector is considerable and it is estimated that 63 per cent schools are under private management. According to the World Bank (2011), the education sector in India caters to 600 million people up to the age of 30 years. The annual government spending is 30 billion USD, and it still only amounts to 2.8 per cent of GDP. Already, annual private spending on education is 43.2 billion USD, making it one of the largest capitalized spaces in India.

Private sector schools

The quality of education being offered by private sector varies widely. Good quality private schools charge commensurate fees which are affordable by only a relatively

select proportion of the population. In schools with medium fees, there are several reports of charging of additional amounts for study trips, building funds etc. There are also a large number of private unrecognized schools which have earned the sobriquet of 'teaching shops' run across the country in cramped rooms at least at the primary stage. NCAER household survey of 1993-94 puts this number to around 4-5per cent of all primary schools.

Teacher Education in the Private sector

There has been a sizable presence of private teacher education institutions which conduct elementary and secondary teacher training. Private institutions encompass a wide spectrum in terms of quality. Private teacher education institutions certainly suffered in terms of public perception when several were found to be operating sub-optimally. The challenge for the 12FYP is to ensure that only those private parties are in TE, who have a professional attitude, commitment and expertise.

Vocational Education and the Private Sector

Private sector provision of vocational education is less than that of the public sector, though difficult to estimate due to the large number of unaccredited training institutions according to EdCIL (Educational Consultants India Ltd.), which conducted a survey of private providers in 2002. The survey also shows that youth preferred public sector to private sector provisions, and continued to aspire for higher education.

Given that the private sector is the largest beneficiary in terms of qualified workforce, quality vocational education remains very much a space still to be explored in scale by the private sector.

From Private players to Private Public Partnership

It must be remembered that private schools can only be afforded by parents who can pay fees, which are often substantial and children from the educationally backward sections of society do not get to study in these schools. The expansion of fee paying schools which function effectively will be limited by the number of parents who can pay enough fees to enable effective education.

This proportion cannot be more than 40 per cent. Those private schools that run on low fees have been severely constrained in terms of quality education. In general the private schools tend to exclude rather than function as inclusive institutions. This inclusion refers not only to bringing in children with disabilities, but also to children from the marginalized sections of society. At the broader level, schooling in India needs to be neighbourhood based, it requires creation of infrastructure, and school compositions that are inclusive, provide a climate for equitable, sensitive teaching-learning, prepare teachers pedagogically, linguistically and sociologically to work effectively with children. At present, it can safely be said that there are very few private schools which fulfil any of these very reasonable criteria. If schools are effective, they are not inclusive, and so on.

Have private partners been effective in school education? Has the government? In both cases, the answer must be 'in parts'. While PPP sounds like an attractive proposition in the school education sector, there is a need to have

clarity of purpose, concept and philosophy behind the PPP approach and not take it as 'fait accompli'.

Concerns that arise regarding private partners are:

- It is believed that private sector has the competence for delivering quality education or they can quickly develop the same. A quick survey would reveal that there are very few private sector organizations or NGOs that have a solid competence and understanding to contribute to quality education. This too has happened only after they made efforts towards understanding issues, for years. Private agencies need to demonstrate capability to educate first generation learners through the full schooling cycle.

- Teachers, their accountability and their salary have long been an issue of debate. In several PPP models, while the government school and infrastructure and facilities are handed over to the private agencies, the agencies insist on hiring teachers on their own, at 'competitive' costs in the short run. While this may well be a successful model in BPO type of industries, it may not be appropriate for schooling. Being human resource intensive, teachers' experience base is critical for quality of public schooling. Under the RtE, teacher pay will be determined by the central/state authorities.

- Private sector is considered to be synonymous with efficiency, good governance, expertise, results and quality. This needs to be evidence based rather than a general 'given' and / or impressionistic.

- Private partner is generally taken to mean a corporate organization. We need to include NGOs, civil society organizations, SHGs, Community, Parent bodies etc. in the definition of 'Private Partner'. Many corporate organizations would be willing to establish schools under their CSR.

- We do not have well-articulated quality standards. These must be applicable across the board to all schools. Alongside, the standards for provisions that are required to attain these quality standards must be created. With this basic frame in place, it would be possible to assess what exactly is happening in every school, what is needed, and who can best provide what, when, where and how.

The challenge in education is a large and extremely complex one, and the energies and resources of the nation as a whole must be directed towards solving it; corporate / non-government players bring a number of unique and complementary skills to the table. The primary purpose of PPP is not merely to use the private party as an executor or a source of funds though these may be parts of the role in specific cases. Rather it needs to seek a collaborative engagement that builds on the strengths of different players and creates a whole greater than the sum of the parts. PPP can then become possible, meaningful and effective on credible parameters. PPP can be an important part of the overall strategy to achieve quality at scale, but is not a panacea. The PPP strategy must fit into and be in line with the overall school education strategy and priorities. PPP is useful to the extent that it helps meet the larger goals.

Also PPP should never limit or restrict government itself from offering educational services or running schools because it has a PPP partner in that area. To private partners, working amongst the dispossessed, is a new arena which will need much learning, and the learning curve will be steep; but not impossible. It may well be that the model of PPP evolving in this manner may well be very different from what we see today or envisage for the future. We need to proceed with the conviction and processes to make sure that the best amongst all players come forward.

2.5.2 Defining PPP for the 12 FYP

'PPP is often described as a private investment where two parties comprising government as well as a private sector undertaking form a partnership' Ministry of Finance, Government of India.

'A risk-sharing relationship based upon an agreed aspiration between the public and private (including voluntary) sectors to bring about a desired public policy outcome. More often than not, this takes the form of a long-term and flexible relationship, usually underpinned by contract, for the delivery of public funded service.' – Commission of UK PPPs 'A cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards'. – Canadian Council of PPPs

Some existing forms of PPP in Education

There are several areas of public education where PPP already exists in central and state school systems. The engagement may be one-time such as construction of school buildings, or recurring such as printing of textbooks, notebooks, stationery, library books, uniforms, etc. There may also be on-going engagement for provision of services such as security, cleaning, electricity, examination related printing, data processing, results, certificate printing, teaching aids etc. In recent years some of the school activities such as computer education, mid-day meals, sports, running of reading rooms/libraries have been outsourced to the private partners.

All these form a substantial portion of the schooling costs. Typically, most private engagement is focused on one or few strands of schooling. For instance, a private agency may take up computer education in a thousand schools, or security in a 100 schools and so on.

Institutional PPPs: Aided Schools: A form of PPP

There are no major examples of PPP in mass scale education – except the grant in aid schools which has been a long-standing model of PPP in schools. Aided schools are schools run by private managements, which receive substantial funding from the government. While the performance of aided schools varies from State to State and school to school, there are some commonalities. As the salary is paid by the government and schools are managed privately, the accountability link remains weak. Children in aided schools pay no or very low fees and are mostly drawn from the disadvantaged sections. By and large, it has been noticed (with exceptions such as

in Kerala and in minority institutions) that aided schools do not perform very much better than the government schools. Thus, the results are mixed and need to be assessed in a structured way with clearly defined parameters.

2.5.3 Challenges in the School Education Sector

India has never been challenged to provide quality education to first generation learners and vulnerable groups at the scale that RtE compels it to do today. Without marshalling large amounts of resources and skills from both government and non-government sectors, this challenge will not be met. There is already considerable private sector contribution to the construction of school infrastructure, supply of educational materials (including ICT hardware and software support), in the provision of support services such as cleaning, security etc., and in the provision of entitlements such as mid-day meals. And while it is critical to realize that PPP is not the panacea for all educational challenges, there is increasing recognition that private sector efficiency, innovation, and institutional effectiveness can play a significant role in directly supporting the provision of quality education.

The PPP strategy, however, must fit into and be in line with India's overall education sector priorities. Its effectiveness will be guided by the extent it helps to compliment and strengthen public sector education service delivery; it is not expected to either limit or restrict the government's role. The aim during the 12th FYP is to test PPP models to see if they can become meaningful and effective on credible parameters. We recognize that the models that finally evolve may very well be different from what we perceive today or envisage for the future.

However, as both potential private sector partners and the government explore viable PPP options in providing quality education to first generation learners and vulnerable children at scale, there is a need to recognize and take account of the number of areas where there is still a lack of adequate knowledge and experience till date:

- Provision of quality inclusive education, both in government and private schools.

- Research on how children learn, especially children from marginalized sections of society. Structural and functional inequalities of gender, class, caste, ethnicity, minorities that push children out of schools.

- Theories and practices for special supplemental teaching and learning for children in need of extra support.

- Techniques/sensitivities required for educating children with special needs (children with autism, learning disabilities, visually or aurally impaired, etc).

- Need for teachers to be foundationally re-oriented towards rights-based approach to children learning.

- How to introduce ideas of citizenship, rights, nationalism, pluralism and inclusion.

- How to reach millions of classrooms with the new ways of looking at delivery and pedagogy based on research in NCERT and elsewhere.
- How to train teachers to quickly learn the effective use of ICT.

There are also a number of constraints to attracting private sector participation/ investments to the education sector. Some of the more binding constraints are:

Table 2.1 Constraints to Education Sector Investment

Constraints	Description
Policy Framework	▪ Weakness in enabling policies.
Regulatory Framework	▪ Weak and inadequate regulation and enforcement.
Management and Operational Framework	▪ Absence of required coordination among and between the Center and State governments and agencies. ▪ Inadequate management capacity within government to manage the design, implementation, and evaluation processes. ▪ Inadequate capacity to develop bankable education sector projects.
Financial Framework	▪ Insufficient instruments to meet long-term equity and debt financing. ▪ Non-availability of land at terms that would make the project viable.
Advocacy	▪ Low acceptance of PPPs by stakeholders.

There are also risks involved that both the private sector and government need to be cognizant of. These risks should be recognized early in the discussions and negotiated so that they do not derail/delay the process once started. Some examples are enumerated below:

Regulatory Risks

- Multiplicity of Regulators
- Multiplicity of Agencies for obtaining clearance
- Possibility of conflict due to Ownership structure (Trust, Society, Section 25)

Procurement Risk

- Procurement processes poorly defined/lacking clarity
- Bidding specifications lacking clarity
- No bidding timeline

Client Capacity

- Client has limited experience with PPP
- Lack of project management skills and capacity
- Absence of PPP monitoring mechanisms

Recommended Key Policy Directions

An underlying premise of this report is that the general education sector needs augmentation of public sector financing. There is, therefore, a critical need to diversify sources of finance and institutionalize cost-recovery schemes where possible.

'Allocation' of resources becomes as important as the amount of resources made available. This will require clear definition of the role of both government and private sector and evidence-based choices in the allocation of resources (i.e. most effective, in terms of cost and quality, in their impact on learning).

Effective systems need to be developed to promote and ensure access by the poor.

The non-government education sector (both community and private-led) should play an increasingly prominent role in the financing of education.

While encouraging private sector participation, it is essential to ensure that school education responds effectively to both national priorities as well as to the expectations of local communities. Nurturing local community support, therefore, shall be vital.

Mere annuitizing of capital costs may not be sufficient, rethinking in this area is required.

Significant flexibility in management also needs to be provided to private sector to allow them to be effective.

A variety of PPP models should be promoted to respond to the different local enabling environment and conditions; it is unlikely that one single model could prevail across the whole country.

Key performance indicators shall be drafted and carefully monitored through the Concession Agreements/Contracts under PPP arrangements to ensure achievement of intended results.

2.5.4 Policy Instrument grouping for Educational Objectives

The Government of India has a number of policy instruments at its disposal to meet its educational policy objectives. They are funding, regulation, ownership of schools, and provision of information. Reforms in the sector, in the context of PPPs, can be grouped under the following themes:

- Improving the way private schools are regulated.
- Improving the way private schools are funded.
- Increasing access to finance for private institutions.
- Strengthening the capacity and capability of the sector to deliver PPPs.
- Improving information available to students, parents, and regulators to support informed educational decision-making.
- Financing educational opportunities, including cost recovery

The MHRD intends to set up an Education Commission, which could among other things deliberate and suggest ways to deal with the above issues in a comprehensive manner.

2.5.5 Some ways Forward

There are therefore, many reasons why governments are increasingly opting for PPPs to assist in meeting their policy objectives in the school education sector. The following initiatives are suggested for creating an environment to encourage PPPs in school education:

- Organise workshops for Ministers, Ministerial advisers and government officials on new directions in education policy and the changing role of government in education;

- Develop a resource and training programme outlining good practice in regulation, with a focus on approaches to "light-handed" regulation;

- Provide training and mentoring in good regulatory practice for selected education officials from the State, District and Panchayat levels of administration;

- Establish a 'PPP in Education Portal' with similar components as that employed by DEA with the www.PPPIndia.com;

- Establish a central PPP Unit in the MHRD as well as PPP Cells at the State level with cross-agency participation as well as participants from the private sector;

- Learn lessons from the considerable experience that has been gained over the past decade in India with the rollout of PPPs in the other sectors.

CHECK YOUR PROGRESS

8. Define PPP (Public Private Partnership).
9. State any two procurement risks that the public and private sectors need to be aware of.

2.6 SUMMARY

- Internationalization of higher education is described as a process of interchange of higher education between nations. It involves partnership between nations between national systems and between institutions. Without partnership there is no international education.

- Universities of different countries with different cultural background provide scholarships to their students to go to the other university in a different country for a particular semester to study a particular paper and the final degree is awarded by the host university.

- Corporate training programmes are developed to obtain skilled workers. Even in advanced countries with large pools of highly trained workers, corporations regularly train new hires for a few months. Corporations may provide training in collaboration with universities.

- Offshore Campuses are formal cross-border higher education initiatives structured from the outset with the intent of awarding participating students with a joint degree in the name of the participating partners or under the brand name of the foreign participating university even though none of the education may have taken place in the university's origin country.

- Programme partnerships are defined as international institutional collaborations under which each of the anticipating partners awards course credit. While some Program Partnerships may require Study Abroad participation as part of the degree, as long as the degree is awarded by a single institution to students enrolled in the study program in the university's home country, it can remain outside of a country's regulatory framework.

- The term 'privatization' is a wide term referring to many different educational programmes and policies. As an overall definition, 'privatization is the transfer of activities, assets and responsibilities from government/public institutions and organizations to private individuals and agencies' (Levin, 2001).

- There are a number of factors that drive privatization in education. The factors may differ in intensity between countries and across the three sectors of primary, secondary and tertiary education. When we combine these factors they represent a powerful force that may increase privatization, even when government officials are resistant to change. The two main factors that determine privatization in education are discussed here. They are demand and supply factors.

- The advantages of privatization include: (a) Decentralization and de-bureaucratization of educational institutions (b) Innovativeness and novelty in teaching and evaluation (c) Promotion of competition (d) Quality education and training.

- Some of the limitations of privatization are: (a) It undermines equity, diversity and openness (b) It deprives many of availing education and badly affects the poor (due to excessive fees) (c) It leads to accountability problems (d) It creates apprehensions about job security and retrenchment of staff.

- In India there are different kinds of schools. The Schools are run either by the state governments or by Central government are government sector schools.

- In the private sector, there are three types of schools: (a) Schools which are privately run but receive grant-in-aid from the government (b) Schools which are recognized by the governments based on certain criterion outlined and must follow certain regulations. They receive little government funding (c) Schools which are still not been recognized by the government and might not meet the criteria – such as infrastructure or teacher salaries – needed for recognition.

- Establishment of Private Universities has been a major milestone in field of higher education in India. Private Universities is a new concept where self-financed private universities can be established by private players without financial assistance from the State. A number of private universities have been established in various States as also Central Government of India has granted Deemed University status to a number of educational institutions.

- The economic reforms in India started in 1991 when it opened up several sectors to foreign investment. The liberalization policy and globalization gave an enormous energy to push India's corporate sector. As a result numerous Indian companies have gone global and earned a name in the global marketplace. Similar type of 'Policy Reforms' is required to give a boost to the Education sector. Private Players in the education sector must have the choice to enter, operate and exit. India still needs number of educational institutions and universities.

- India is a large Knowledge Economy and it runs on its educated workforce. If we really need to become a super power, then our Education system needs to be strong and should respond to meeting domestic and global requirements for talent. India just cannot afford to lose this opportunity.

- Education industry has been growing at a great pace and presently it has crossed is a trillion Dollar mark worldwide. The private players in this industry for that reason are attracted by the prospects of globalization and liberalization of this industry. As we see galloping demand for higher education across the globe, the governments are facing problems to provide adequate budgetary allocation.

- If India has to establish its place in tomorrow's knowledge economy, fixing our higher education would be of utmost importance. While liberalization over last twenty years have got Indian economy get into a new trajectory, education sector has not sufficiently changed. Time has come to fix it. It is fixable and would take India significantly forward.

- India currently has the world's largest student body with 135 million children attending primary school. The 86th Amendment makes free education of children aged 6-14 a fundamental right. Over the past decade the SSA programme has brought over 60 million additional children into school – expansion at a scale and pace unprecedented in history – achieving near universal enrolment and gender parity.

- The quality of education being offered by private sector varies widely. Good quality private schools charge commensurate fees which are affordable by only a relatively select proportion of the population. In schools with medium fees, there are several reports of charging of additional amounts for study trips, building funds etc.

- There has been a sizable presence of private teacher education institutions which conduct elementary and secondary teacher training. Private institutions encompass a wide spectrum in terms of quality.

- 'PPP (Public Private Partnership) is often described as a private investment where 2 parties comprising government as well as a private sector undertaking form a partnership' Ministry of Finance, Government of India.

- There are several areas of public education where PPP already exists in central and state school systems. The engagement may be one-time such as construction of school buildings, or recurring such as printing of textbooks, notebooks, stationery, library books, uniforms etc.

- The Government of India has a number of policy instruments at its disposal to meet its educational policy objectives. They are funding, regulation, ownership of schools, and provision of information.

2.7 KEY TERMS

- **Internationalization of Education:** The process of integrating an international, intercultural and global dimension into the goals, teaching/learning, research and service functions of a university or higher education system.

- **Privatization of Education:** It is the transfer of assets, management, functions or responsibilities, relating to education, previously owned or carried out by the State to private actors.

- **Liberalization of Education:** It refers to relaxing certain reforms and policies of the education system.

2.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Corporate training programmes are developed to obtain skilled workers. Even in advanced countries with large pools of highly trained workers, corporations regularly train new hires for a few months.

2. Programme partnerships are defined as international institutional collaborations under which each of the anticipating partners awards course credit.

3. Privatization is the transfer of activities, assets and responsibilities from government/public institutions and organizations to private individuals and agencies.

4. The two main factors that determine privatization in education are demand and supply factors.

5. In the context of globalization, liberalization generally means removing the regulations and controls at various levels of the economy that facilitate market forces to determine its course and direction.

6. Liberalization gives the students a choice of studying close to home with the added advantage of a degree which has validity worldwide. It also curtails brain drain which is again a big loss to the country.

7. The GATS (General Agreement on Trade in Services) came into being in 1995.

8. 'PPP is often described as a private investment where two parties comprising government as well as a private sector undertaking form a partnership'.

9. Two procurement risks include: (a) Procurement processes poorly defined/lacking clarity (b) Bidding specifications lacking clarity.

2.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What is off-shore and distance education?

2. What do you understand by privatization of education?

3. What are some of the privatization policies and programmes in education?

Long-Answer Questions

1. Discuss the need for privatization of education.

2. Describe the impact of liberalization on the education system in India.

3. Discuss the highlights of the Foreign Universities Bill, 2010.

2.10 FURTHER READING

Ghanta, R. and R. N Dash. 2004. *Foundations of Education*. Hyderabad: Neelkamal Publications.

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UNIT 3 FUNDAMENTAL ASPECTS OF EDUCATION

Structure

3.0 INTRODUCTION

In this unit, you will learn about population education, environmental education, non-formal education, adult education and human rights education.

Population Education Project was initially started in the year 1987 as an integral part of Adult Education Programme with the financial assistance of United Nations Fund for Population Activities (UNFPA). Three phases of the Population Education Project has been successfully completed.   The project has tremendous potential in promoting the targeted Population & Development Education themes as fixed by UNFPA.   The funding from UNFPA was discontinued in December 2001.

In view of the high rate participation of women in literacy programmes, significant of the issues like gender equality, reproductive health and rights, family life education, sexual health education, HIV/AIDS for the out of school youth, etc, it has been decided to give continued support to the Population Education Project during the Tenth Plan also.   Population Education Project has also been integrated as a part of SRC Scheme.   The Population Education Units have also been evaluated by the external evaluating agencies as a part of State Resource Centre.   All the external evaluating agencies appreciated the efforts and the contribution made by the Population Education Units to the out of school youth.

Population and Development Education is being implemented through the State/Regional Resource Centres for Adult Education, National Documentation Centre (located at Indian Adult Education Association, New Delhi) and Regional Documentation Centres located in the State Resource Centres of Hyderabad and

Jaipur. Population and Development Education Cells were created in all the 25 State/Regional Resource Centres of Hyderabad, Guwahati, Patna (ADRI & Deepayatan), Delhi, Ahmedabad, Rohtak, Shimla, Srinagar, Mysore, Thiruvananthapuram, Bhopal, Indore, Aurangabad, Pune, Shillong, Bhubaneshwar, Chandigarh, Jaipur, Chennai, Lucknow and Kolkata for this purpose. Later, three more PDE Cells were sanctioned to the SRCs of Ranchi, Agartala and Dehradun.

3.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss population education and its needs and objectives
- Describe the various causes of population explosion in India
- Explain environmental education, and discuss its objectives and importance
- Assess the importance of human rights education

3.2 POPULATION EDUCATION

Population explosion is now one of the most fundamental problems of the world, especially for developing countries like India. Not only are economic growth and standards threatened by rapid growth of population but also the quality of life as a whole.

Even with the best intentions and planning, it may not be possible to solve the problems of expansion of education, unemployment, poverty, shortage and inadequacy of civic amenities, etc., unless these problems are tackled in the context of the total population problems of the country. Any planning to develop the nation's material and human resources without a concurrent reduction in the incidence of births is doomed to fail. Therefore, It is now being realized that family planning programme should be supported by formal education about awareness of population problems so that right attitudes are developed at an early age to take rationale decisions. The children of today are the parents of tomorrow. Thus population education may be a relevant and motivational tool that will inject these new entrants with a desire to adopt family planning as a way of life. It is through population education that we may strengthen and enlarge the area of commitment towards checking population growth by developing right attitudes amongst the vast population which has yet to enter the fertility age group.

Meaning of Population Education

The term population education is not to be used interchangeably with birth control, family planning and sex education, etc. It is now a much wider concept. A UNESCO Regional Workshop on Population, Family Planning and Life Education, held at Bangkok in 1970, defined population education as: 'Population education is an educational programme which provides for a study of the population situation of the family, community, nation and world with the purpose of developing in the students rational and responsible attitudes and behaviour towards that situation.'

Population Reference Bureau, Washington (1917), has observed, 'Population education is an attempt to create a deep, universal, action-guiding perception of the consequences of demographic change. It seeks to bring about a realization of the individual family, social and environmental effects of the explosive increase in human population, the rapid shifts in the concentration and distribution of people, the implications of changing age and other demographic patterns, and the conceivable options that may be open to mankind to cope with the consequent problems. While it is confined exclusively to a particular age group, it is focused primarily on students, who will become the principal child bearers within one or two decades.'

Stephen Videman defines population education as 'the process by which the student investigates and explores the nature and meaning of population process, population characteristics, the causes of population change and the consequences of these processes, characteristics and changes for himself, his family, his society and the world.'

Population education may be seen as the development of proper attitude towards population problems and the capacity to take rational decisions in this regard.

Population Education is Neither Family Planning Nor Sex Education

Population education is not sex education. There are differences between the two terms. Whenever we talk of sex education, the stress is on prevention of sexual disease and on family planning. Family planning is one of the aspects of population education. At the same time population education is not to be considered a counterpart of family planning programmes for the younger generation. In the words of D. Gopal Rao, 'the need for population education mainly arose because of the consequences of the imbalance between population and world resources. Family life education in the west grew out of growing evidence of disintegration of family, whereas sex education developed as a reaction to an increase in venereal diseases and out of wedlock pregnancies.'

In sex education the stress is on individual whereas in population education, it is the integration between individual, family and society.

Objectives of Population Education

1. To develop among the students a keen insight into the inter- relationship between population change and the process of socio-economic development vis-à-vis the individual, the family, the society, the nation and the world.

2. To create among the students and the teachers an awareness about the population situation in the country and the strategies adopted to meet this critical situation.

3. To create an awareness among children that the present population explosion in our country is due to steady birth rate as against rapid death rate over the past few decades.

4. To develop desirable attitudes and behaviour in the students and the teachers as well as in the community at large towards the population issues so as to enable them to arrive at rational decision about the quality of life that suits them best.

5. To impress upon the children that the use of sciences and technology has helped us in bringing down the death rate and that the same can help us in bringing down the death rate as well.

6. To help children realize the socio-economic burden involved in bringing up large families usually resulting in deterioration in quality of living.

Why Do We Start Giving Population Education In Schools?

Population education may be given in schools because:

1. Schools are exclusively meant for teaching younger generation
2. Schools have a tradition of being future oriented
3. Schools promote social change
4. Schools are engaged in adopting new innovations and changes

Need for Population Education: Population Explosion

Population explosion is a world-wide phenomenon. However, the magnitude of the problem and the urgency to gauge its seriousness are perhaps nowhere as pressing as they are in India, which alone accounts for about 17 per cent of the world's population with no more than 2.4 per cent of the total land area of the world.

Next only to China, India is the most populous country of the world. People are to be supported, sustained, nourished and educated on its limited land. The population of India as per 2001 census was 102 crore against 36 crore in 1951. In 40 years, we have had an increase of one crore per year on an average. The country, has no doubt, accomplished growth and development in agriculture, industry and other aspects of life including education during the last three decades. However the net growth is largely nullified by a sharp increase in population. The population explosion has adversely affected the quality of life. Though the percentage of literacy increased from 29.45 per cent in 1971 to 65.38 per cent in 2001, yet the number of illiterate persons increased substantially because expansion in educational facilities lagged behind increase in population. Over 18 million people are added to our population annually. The population's at present is about 134 crores. It is estimated that by the year 2050 India will rival China as the world's largest nation with about 153 crore people.

China has managed to bring down their growth rate to 1.2 per cent. In India we have yet to attain this target. There is an urgent need to take appropriate measures to bring down population growth so as to ensure a reasonably good standard of living and avoid human disaster. The least that the educator can do is to create awareness of the magnitude of the problem in view of limited resources and develop appropriate understanding and attitude towards population growth and its implications so that the individuals take a rational decision about the size of the family.

Meaning of Population Explosion: India's Booming Population—World Scenario

Population explosion implies an alarming increase in population resulting in low level of living, i.e., inadequate food, education, health and other necessities of life.

It is universally accepted that 'other things being equal', the growing population of a country poses several challenges in all areas of national life. Unchecked population has far-reaching economic, educational, political and social implication. All these challenges are interrelated.

Population planning is needed both by developing and developed countries.

Some of the developed countries are experiencing manpower shortages as there is negative population growth, i.e., population is declining.

India's population as on 1 March 2001 according to *Final Results of the Census of India 2001* stood at 1,028,610,328 (102.8 crore). Thus, India became only the second country in the world after China to officially cross the one billion mark. According to *Final Results*, published in 2004, India's population in 2001 was as under:

Table 3.1 *India's Population (2001)*

Total Population	1,028.610,328
Males	5,32,156,772
Females	4,96,453,556

Note: Excluding the population of Mao Maran Paomata & Paul subdivision of Senapati District of Manipur.

Source: India: Census of India 2001. Final Population Totals, Registrar General and Census Commissioner, India 2004.

The estimated world population according to the Population Division of the United Nations in 2006 was 6,577 million. The population of the ten most populous countries of the world and their relative share in the global population is shown in Table 45.2.

India accounts for a meagre 2.4 per cent of the world surface area of 135.79 million square km. Yet it supports and sustains a whopping 16.8 per cent share of the world's population. In 1956 China with 22 per cent of the world's population led the scene followed by India, which had a share of 14.2 per cent. According to UN Population Division estimates, by 2050 India will most likely overtake China to become the most populous country on earth.

Table 3.2 *Global Population and India's Share (2006)*

Sl. No.	Country	Population (in Millions)	Relative Share in the Global Population
1.	China	1,320	21.03%
2.	India	1,151	16.87%
3.	USA	302	4.63%
4.	Indonesia	228	3.49%
5.	Brazil	189	2.8%
6.	Pakistan	161	2.58%
7.	Bangladesh	156	2.42%
8.	Russian Federation	143	2.97%
9.	Nigeria	144	1.84%
10.	Japan	128	2.09%

India's population exceeds the combined population of six most populous countries of the world, namely, USA, Brazil, Pakistan, Russia Federation, Bangladesh and Japan (excluding only China, Indonesia and Nigeria).

India's population is equal to the total population of Europe comprising 47 countries and Northern America (comprising five countries including USA).

India adds every ten years to its population the equivalent of 6 Canadas, or 3 Frances, or 3 UKs or 2.3 Germanys.

Causes of Population Explosion in India

1. Gap between birth rate and death rate
2. Early marriage age
3. High fertility rates
4. High reproductive age group
5. Unmet demand for contraceptives
6. Lack of adequate knowledge of family planning methods
7. Sexual activity and behaviour
8. Less abortion rate
9. Large family concept
10. Indifferent male attitude towards family planning
11. Backward agricultural economy
12. Low standard of living
13. General illiteracy
14. Neglect of girls and women's education
15. Satisfaction through sharing a joint family
16. Attitude of dependence
17. Lack of means of entertainment
18. More leisure time
19. Preference for son
20. God-given children
21. Universality of marriage
22. Social stigma for not having a child

Consequences of Population Explosion

1. Low per capita income
2. Low rate of capital formation
3. Unemployment and under-employment
4. More pressure on land
5. Increased density of population

6. Poverty and subsistence level

7. Low standard of living

8. Unfavourable balance of payment

9. Growth of slums

10. Under-nourished population

11. Growing pollution

12. Uneven age structure, i.e., high ratio of dependent population

13. Depletion of natural resources

14. Unhygienic living conditions of the people

15. Unhealthy economy of the country

16. Illiteracy on a large scale

17. Fatalist attitude

18. Eating away the fruit of development

Impact of Population Explosion on Education

1. Abnormal rush for admission at all levels.

2. Insufficient infrastructure

3. Insufficient accommodation

4. Overcrowded classes

5. Recruitment of untrained teachers in certain schools

6. Inadequate staff in schools

7. Lack of individual contact between the teacher and the student

8. Wastage and stagnation

9. Very high drop-out rates

10. Indiscipline and unrest among students as well as teachers

11. Under-employed and unemployed educated persons

12. Deterioration in standards of education

Major Areas of Population Education

On the basis of the overall objectives laid down, the following six major areas of population education have been identified which are not exclusive to particular disciplines but draw from several social sciences and biological sciences. They also have a wide scope for encompassing most of the concepts related to population education at the school stage. These areas are:

(*i*) The population growth (determinants and demographic situation)

(*ii*) Economic development and population growth (consequences)

(*iii*) Social development and population growth (consequences)

(*iv*) Health, nutrition and population

(*v*) Biological factor—family life and population

(*vi*) Population programmes—national and international

Source: Population Education—A Draft Syllabus—Mehta, Saxena, Chandra, NCERT.

CHECK YOUR PROGRESS

1. What is population explosion?
2. State any two objectives of population education.

3.3 ENVIRONMENTAL EDUCATION

Environmental education implies establishing ecological equilibrium which implies proper use and conservation of resources and also control of environment pollution. Environmental education is a process of recognizing values and clarifying concepts relating to the environment and its problems. The aim is to develop skills and attitudes necessary to understand the environment. Environmental education has been described as education for the environment, education about the environment and education through the environment.

Environmental education is designed to open our eyes to the havoc we have brought on ourselves. Environmental education should enable people to learn how hazardous environmental pollution, population explosion and resource depletion could be. The best place to start such learning is school.

History of Environmental Education

One of the landmarks in the history of environmental education is the 1972 Stockholm Conference on Human Environment organized by UNESCO. This was followed by International Environmental Education Workshops in Belgrade, Yugoslavia, in October 1975. The Belgrade Workshop was followed by Regional Workshops. Environmental education is concerned with the improvement of all ecological relationships, including the relationship of humanity with nature and people with each other.

Objectives of Environmental Education

1. **Awareness:** To help individuals and social groups acquire an awareness of and sensitivity to the total environment and its allied problems.

2. **Knowledge:** To help individuals and social groups acquire basic understanding of the total environment and its associated problems.

3. **Attitude:** To help individuals and social groups acquire social values, strong feelings of concern for the environment and the motivation for actively participating in its protection and improvement.

4. **Skills:** To help individuals and social groups acquire the skills for solving environment problems.

5. **Evaluation ability.** To help individuals and social groups evaluate environmental measures and education programmes in terms of ecological, political, economic, social, aesthetic and educational factors.

6. **Participation:** To help individuals and social groups develop a sense of responsibility and urgency regarding environmental problems to ensure appropriate action to solve those problems.

Primary Objective of Environmental Education: Better Life and Environment

Better life is dependent upon both types of environment, i.e., physical as well as social. While physical environment is generally emphasized, social environment in life is not adequately stressed. Social environment is also concerned with clean administration and clean politics. It is very unfortunate that there has been a gradual erosion of ethical and moral values, which must be restored. True, education can play an important role in promoting higher values of life, but this task does not seem to be an easy one when there is all-round deterioration of moral standards.

National Policy on Education (1986 and as amended in 1992) on Environment

In Part VIII entitled 'Reorienting the Content and Process of Education', the National Policy on Education (NPE) under the caption 'Education and Environment' in Para 8.15 states, 'There is a paramount need to create a consciousness of the environment. It must permeate all ages and all sections of society, beginning with the child. Environmental consciousness should inform teaching in schools and colleges. This aspect will be integrated in the entire educational process.'

Supreme Court Directive on the Compulsory Teaching of Environment

On a public litigation petition in 1991, the Supreme Court of India asked the National Council of Educational Research and Training (NCERT) and other concerned authorities to take steps to enforce compulsory education on environment in a graded way from the academic session 1992–93. Since the order was not implemented even after eleven years, advocate M.C. Mehta filed an application to ensure implementation of the earlier order. The Supreme Court passed the order on 22 April 2004 for compliance.

The Supreme Court issued a notice on 13 July 2004 to the concerned authorities to inform them whether they had implemented orders for inclusion of environment as a subject in the institutions under their court.

It may be recalled that on 22 April 2004 the court had endorsed a model syllabus prepared by the NCERT for introducing environmental studies as a compulsory subject from class one to class twelve.

The NCERT is the model agency to monitor the implementation of the model syllabus in schools. The syllabus has been prepared after consultation with several experts and institutions, State governments, the Central Pollution Control Board and non-government organizations.

Pattern of Environmental Education

- Environmental education should be integrated into the whole system of formal education at all levels;

- Environmental education should be interdisciplinary in nature;

- Environmental education should adopt a holistic perspective which will examine the ecological, social, cultural and other aspects of particular problems;

- Environmental education should be centred on practical problems related to real life and

- Environmental education should aim at building up a sense of value.

Environmental Education in the School Curriculum

- At the primary stage, Environmental Studies (Social Studies, Nature Study and Health Education) is one of the prescribed areas of curriculum. It gets about 20 per cent time.

- At the middle level, environmental studies or environmental education is not prescribed as a subject. But Science as an integrated course is heavily based on the use of pupil's day-to-day observation in the environment and includes topics like the balance of nature, population, etc.

- At the secondary level, the subject of science includes many topics concerning environmental education.

Target Populations for Environmental Education

As recommended by the Tbilisi Conference, environmental education should be directed to:

- The general public at every age and at all levels of formal education for pupils, students and teachers, and in the various non-formal education activities for young people and adults;

- Specific occupational or social groups with a focus on those whose activity and influence have an important bearing on the environment, for instance, engineers, architects, administrators and planners, industrialists, trade unionists, policy makers and agriculturists. Various levels in formal and non-format education should contribute to this training. It is important, moreover, that the training of certain professionals and scientists who are involved with problems of the environment, such as biologists, hydrologists, sanitary engineers and others include an interdisciplinary environmental component.

Curriculum Patterns of Environmental Education

The various curricular patterns for environmental education that is advocated most often include the following:

(a) **Single-Subject Approach:** Where components are drawn from a single academic discipline.

(b) **Interdisciplinary Approach:** Where components are drawn from two or more academic disciplines and focussed simultaneously on a single topic.

(c) Multidisciplinary Approach: Where components are drawn from two or more academic disciplines and focussed sequentially on a single topic.

(d) Holistic Approach: Where there is coordination in separate courses such that the diverse fragments of knowledge and understanding are woven together.

The UNESCO (United Nations Educational, Scientific and Cultural Organization) Training Workshop on Environment Education (1980) suggests the following two models:

1. Interdisciplinary or Fused Model

In this model a distinct environment education unit, course or module is created by selecting, presenting and dwelling upon the relevant components of various disciplines.
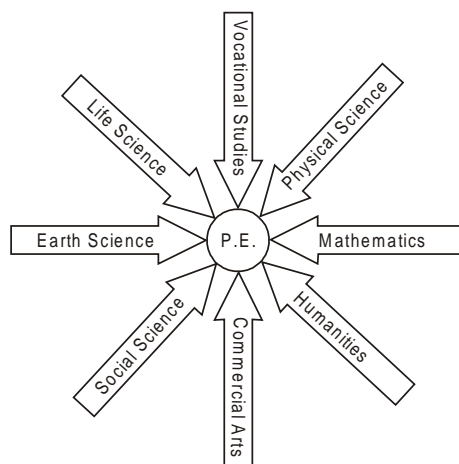
Fig. 3.1 Indisciplinary or Fused Model of Environmental Education

2. Multidisciplinary or Infusion Model

In this model, the concept of environmental education and problem-solving skills are incorporated in various disciplines wherever appropriate. No separate unit, course or module is created.
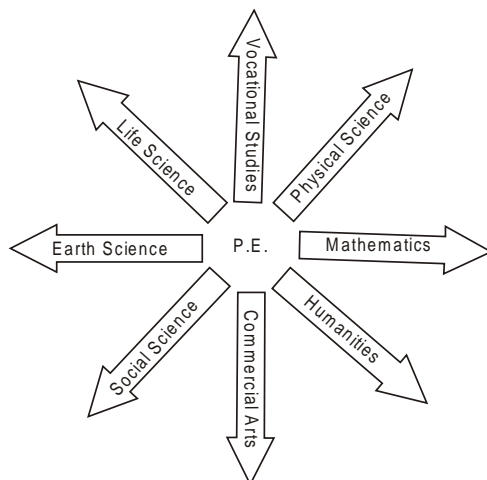

Fig. 3.2 Multidisciplinary or Infused Model of Environmental Education
Source: UNESCO Strategies for Developing EE Curriculum, Paris, 1986.

Suggestive School Programmes for the Conservation and Protection of Environment or Checking Environment Degradation

The school is expected to discharge the following functions in relation to the conservation issues and sustainable development:

1. Developing awareness about environmental issues
2. Providing specific and scientific knowledge topic-wise
3. Organizing conference, group discussions and seminars
4. Organizing community surveys on issues relating to conservation and protection of environment
5. Organizing Social Service and Community service programmes
6. Organizing 'Population Days' and 'Environmental Days'
7. Organizing 'Awareness campaigns'
8. Organizing visits to pollution control centres
9. Organizing exhibitions on environmental pollution and control
10. Organizing tree plantation or *Vanmahotsavs*
11. Organizing lectures and workshops for the benefit of the community
12. Developing habits of cleanliness among students
13. Ensuring cleanliness of the school plant
14. Arranging lectures of experts on environmental issues
15. Impressing upon students to adopt the following ways of protecting and improving the environment:

    - Dispose the wastes after separating them into biodegradable and non-biodegradable waste material;
    - Start a compost heap or use a compost bin. This can be used to recycle waste food and other biodegradable materials;
    - Send their waste oil, old batteries and used tyres to a garage for recycling or safe disposal; all these can cause serious pollution;
    - Never put any leftover chemicals, used oils down the drain, toilet or dump them on the ground or in water or burn them in the garden. If it is done, it will cause pollution;
    - Don't burn any waste, especially plastics, as the smoke may contain polluting gases;
    - Reuse carrier bags;
    - Use unleaded petrol and alternate sources of energy, and keep the engine properly turned and serviced and the tyres inflated to the right pressure, so that your vehicle runs efficiently;
    - Avoid fast starts and sudden braking of automobiles;
    - Walk or cycle where it is safe to do so. Walking and cycling also help to keep you fit;

- Use public transport wherever it is possible, or form a car pool for everyday travel;
- Avoid unnecessary or wasteful packaging of products;
- Plant trees. They will help to absorb excess carbon dioxide;
- Observe World Environment Day on 5th June.

Practical Work and Project Activities to be Undertaken by the School for Environmental Conservation and Sustainable Development

1. Preparing charts showing common flora and fauna in the neighbourhood
2. Arranging trips to a wildlife sanctuary and the zoo
3. Writing observations about local environment and vegetation
4. Organizing debates and discussions on topics related to various aspects of environmental conservation and sustainable development
5. Preparing posters on river pollution, local water pollution, noise pollution
6. Preparing posters on the consequences of deforestation
7. Preparing posters on global warning
8. Preparing posters on soil erosion
9. Identifying plant protection chemicals
10. Organizing debates and discussions on population and its effect on the environment
11. Organizing debates and discussions on the relationship between values and environment
12. Organizing surveys of the areas regarding environmental status in the locality
13. Organizing quizzes
14. Conducting simple practicals on environmental-related issues
15. Keeping the school plant clean
16. Organizing exhibitions on environmental-related issues
17. Arranging lectures by experts on environmental-related issues
18. Maintaining scrapbooks on environmental-related issues

Role of Teachers in Environmental EDUCATION: Conservation And Sustainable Development

All teachers in the school are expected to play a significant role in environmental conservation and sustainable development as these issues are closely related to national development. They should take due interest in all programmes in this respect. However, a special responsibility rests with those teachers who teach this subject. They should:

1. Select, develop and implement curricular materials which will effectively make learners aware of:

(a) How our cultural activities (religious, economic, political, social, etc.) influence the environment from an ecological perspective,

(b) How individual behaviour has an impact on the environment from an ecological perspective,

(c) A wide variety of local, regional, national and international environmental issues and the ecological and cultural implications of these issues,

(d) The possible alternative solutions available for remediating discrete environmental issues, and ecological and cultural implications of these alternative solutions,

(e) The need for environmental issues' investigation and evaluation as a prerequisite to sound decision making,

(f) The roles played by differing human values in environmental issues and the need for personal values clarification as an integral part of environmental decision making,

2. Utilize current theories of knowledge, attitude and behaviour in selecting, developing and implementing a balanced curriculum which maximizes the probability to desired behaviour changes in learners;

3. Adopt current theories of learning in selecting, developing and implementing curricular materials and teaching strategies to effectively achieve environmental education goals;

4. Apply the theory of transfer of learning in selecting, developing and implementing curricular materials and strategies to insure that learned knowledge, attitudes and cognitive skills are transferred to lifestyle decision making by learners;

5. Select effective instructional methodologies which are appropriate for desired cognitive and effective outcomes, characteristics of learners and existing classroom conditions;

6. Effectively infuse appropriate environmental education curricula and methods into all disciplines to which the teacher is assigned;

7. Effectively evaluate environmental education curricular methods and learners' achievement in both cognitive and effective domains;

8. Take positive environmental action for the purpose of achieving and maintaining a dynamic equilibrium between quality of life and the quality of environment, and to develop, select and implement curricular material and strategies to develop similar competencies in learners to take individual or group action when appropriate;

9. Investigate environmental issues and evaluate alternative solutions, and to develop, select and implement curricular materials and strategies which will develop similar competencies in learners, including:

(i) The knowledge and skills needed to identify and investigate issues, using both primary and secondary sources of information and to synthesize the data gathered,

(ii) The ability to analyse environmental issues and the associated value perspectives with respect to their ecological and cultural implication,

(iii) The ability to identify alternative solutions for discrete issues and the value perspectives associated with these solutions,

(iv) The ability to autonomously evaluate alternative solutions and associated value perspectives for discrete environmental issues with respect to their cultural and ecological implications,

(v) The ability to identify and clarify their own value positions related to discrete environmental issues and their associated solutions,

(vi) The ability to evaluate, clarify and change their own value position in light of new information.

Major Environmental Actions Taken in India

1. There is a full-fledged Ministry of Environment and Forests at the Central level, i.e., Government of India.

2. In 1972, the Government of India, after playing a prominent role in the UN Conference on Environment at Stockholm, set up the National Committee on Environmental Planning and Co-ordination (NCEPC). This apex body at the national level identifies important problems and seeks their solutions, and reviews policies and programmes. It has also founded a number of research projects on environmental preservation and biosphere studies.

3. In 1974, the government passed a law for the prevention and control of water pollution and set up a Central Water Pollution Board.

4. Environmental Boards have also been set up in every State with the Chief Minister of the State as its Chairman.

5. At the Centre, an Environmental Information Service has been set up to collect information related to environmental matters from all parts of the country.

6. A separate Department of Environment has been set up by the Government of India recently to coordinate the activities and advise the government on environmental matters.

7. Then non-official efforts include the National Environmental Engineering Research Institute (NEERI), which Nagpur, has kept a constant vigil on air pollution in large cities and industrial centres.

8. People's initiative. There has been appreciable spread of environmental awareness among the people. In 1973, in the hill district of Chamoli, Uttar Pradesh, for instance, the village people started the 'Chipko' movement for the protection of the forests. The movement is preventing the felling of trees in some areas and in others it is engaged in reforestations.

Centrally Sponsored Scheme of Environmental Education

A Centrally Sponsored Scheme of Environmental Orientation to School Education has been started with effect from 1989–90, under which 100 per cent financial assistance is provided to States/Union Territories and voluntary organizations working in the field of environment education. Various programmes aimed at creating environmental consciousness among the students and the community would be organized on project basis in selected areas comprising homogenous ecological conditions. The project activities include review of curriculum, preparation of revised textbooks, curricular and extra- curricular materials, preparation of general informative books/brochures/posters/audio-visual materials, adoption of monuments by schools for study and upkeep, study of ecological problems in the neighbourhood, participation in conservation projects, etc. Setting up of school nurseries will be taken as one of the preferred activities with the help of State Departments of Environment and Forests and National Wastelands Development Board. The scheme also provides for involvement of voluntary organizations in innovative projects relating to environment education.

The scheme has received a very good response from the voluntary organizations. Some of the proposals sanctioned are:

(a) Uttarakhand Seva Nidhi, Almora, for environmental orientation to elementary education in Kumaon and Garhwal regions of Uttar Pradesh.

(b) Sanchal Foundation, New Delhi, for a project on social imperatives of development which seeks to establish a linkage between the natural disasters and environmental degradation.

(c) Centre of Environment Education (CEE), Ahmedabad, to act as a nodal agency for involving NGOs (non-government organizations) working in the area of environment education to take up locale-specific activities in a cluster of schools around which programmes would be designed and implemented with the national and State-level perspectives. The full intent of environmental education will not be achieved because the environmental concerns are locale specific and, therefore, do not admit global solution. These efforts, therefore, need to be supplemented by more intensive locale- specific efforts.

International Environmental Initiatives: Checking Environmental Degradation

The UN has been greatly concerned about environmental issues. Following important measures have been initiated by it.

The United Nations Conference on Environment Stockholm, June 1972

The UN Conference was a major event for those concerned with the quality of the environment of the world. This conference resulted in the creation of the United Nations Environment Programme (UNEP). It also focused attention on an international environmental education programme.

The UNEP is conceived as a catalysing agency for the United Nations family to help focus on international issues, monitor trends and facilitate coordinated international action to safeguard the environment.

In the 1980s Member States negotiated to reach an agreement on several aspects of environmental concern. The leading scientists met at the World Climate Conference in 1990 to find ways to redress the harmful effects of environmental degradation and climatic change. It was followed by the United Nations Conference on Environment and Development held at Rio de Janeiro in 1992, which became known as the Earth Summit. The summit adopted a declaration which defines the rights and responsibilities of States and provides guidelines for the management of forests worldwide. Among other things, it was declared that the states have a right to exploit their own resources but not to cause damage to the environment of other states. In a conference in Berlin in 1995, it was realized that industrialized countries did not carry out the general commitments to limit emissions of toxic gases. It was decided that the northern industrialized countries should reduce the emissions of poisonous gases by about 50 per cent.

Selected Programmes Included in Earth Summit Agenda 21 at the United Nations Conference on Environment and Development (UNCED) Conference Held at Rio de Janeiro (1992)

1. Promoting and protecting human health conditions

2. Integrating environment and development in decision making

3. Protecting the atmosphere

4. Combating deforestation

5. Managing fragile eco-systems: combating desertification and drought

6. Promoting sustainable mountain development

7. Promoting sustainable agriculture and rural development

8. Conserving biological diversity

9. Ensuring environmentally sound management of biotechnology

10. Protection of the oceans, all kinds of seas, including enclosed and semi- enclosed seas and coastal areas, and the protection, rational use and development of their living resources

11. Protecting the quality and supply of fresh water resources: application of integrated approaches to the development, management and use of water resources

12. Promoting environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products.

3.4 NON-FORMAL AND ADULT EDUCATION

Any organized educational activity outside the formal education system, whether operating separately or as an important feature of some broader activity that is intended to serve identifiable learning clientele and learning objectives, is termed as non-formal education. The non-formal education usually embraces all forms of learning activities that are basically organized outside the formal education system such as distance education and hobby courses.

While defining non-formal education, famous thinker Coombs, P.H. stated that non-formal education is 'Any organized programme of learning, carried on outside the framework, the rule and logistics of the formal education system'.

Non-formal education is structured systematic non-school educational and training activities of relatively short duration in which sponsoring agencies seek concrete behavioural changes in fairly target population.

Thus, the programme of non-formal education is a significant step to boost the education system of a country.

Essential features of non-formal education

The following are the essential features of non-formal education:

- **Support system:** Non-formal education is not an alternative to the formal education system. It is a support system or a support service to the formal education system to realize the goal of Universalization of Elementary Education (UEE).

- **Out-of-school children:** Non-formal education caters to the needs of out-of-school children in the age group of 6-14. Children who have never been enrolled in a school, children who have dropped out of the school and the children who belong to SC/ST, rural communities and urban slums are primarily beneficiaries of the non-formal education system.

- **Flexible system:** Children can be enrolled in the non-formal education centre at any age, not necessarily at the age of six. There is no fixed age of entry, no fixed time table, in fact, nothing is rigidly followed in the non-formal education centre. Classes can be held in the morning, afternoon or even in the evening depending on the convenience of the local beneficiaries. Therefore, so children

who work in the fields or are engaged in household works can be enrolled in the non-formal education centers.

- **Need based curriculum:** Problems and needs of the local community provide the content of the non-formal education curriculum. These problems and needs are related to several aspects of life such as health, vocation, family life, citizenship, culture, society and physical environment. The non-formal education does not prescribe any syllabi in language, arithmetic and environmental studies as is in the formal system. It follows the integrated approach to curricular transaction.

- **Place of education:** The classes for the non-formal education can be held in a primary school, community centres or at any place in local communities.

- **Organization:** Non-formal education can be organized by the government departments and non-government organizations (NGO).

- **Less expensive:** Compared to the formal education, the non-formal education is less expensive in terms of material costs, teacher's salary, etc.

Continuing education, as the term indicates, is essentially a follow-up education. Its starting point depends on from where one wishes to take off and continues one's education in whatever field one wants. It can be in the nature of post-literacy to-post-graduation programmes or anything in between. However, but in most cases, it would be highly flexible and unstructured—a point closer to the nature of the non-formal education. Continuing education is obviously a component, and essential strategy in the life-long education concept.

Continuing education takes on from where the formal education or adult education leaves a learner. Therefore, the starting point for continuing education may be many-neo-literate, school dropouts with permanent literacy skills, secondary school leavers, college and university leavers and those who have completed the college and university education.

In the Indian context, the problem of continuing education is more pronounced at three levels, namely, neo-literate, school dropouts and the secondary school leavers. For the college and university leavers, or those who have completed these, there is a necessity of continuing education, though not as acute as to warrant priority over the neo-literate and school dropouts with permanent literacy. Women's welfare programmes and their related educational components are also included in this.

There have been myriad efforts with success in the preparation and dissemination of post-literacy materials, more specifically under the National Literacy Mission's post-literacy programmes. Seen in the perspective of continuing education, quite a few agencies have been engaged in this activity. Agriculture, health and family welfare departments, cooperatives, banks, etc. have been producing materials for their extension programmes, which could also be used for continuing education purposes. Similarly, for the school leavers, there is a lot of scope for material preparation in areas like 'Do it Yourself', Vocational Education materials and materials for small-scale entrepreneurship programme. Mention must be made of the systematic work in this regard of the NCERT, which produces vocation-based-materials primarily meant for the senior secondary education programmes for the school leavers.

Further, the culture centres established in the different regions of the country also provide a potential avenue to further the cause of continuing education. However, these have not been visualized as continuing education agents, and whatever agencies have been responsible for these programmes have viewed them from their own perspective and have not considered them as an activity of continuing education.

3.4.1 Adult Education

A nation that is literate is one where its citizens are empowered to ask questions, seek information, take decisions, have equal access to education, health, livelihood, and all public institutions, participate in shaping ones realities, create knowledge, participate in the labour force with improved skills, exercise agency fearlessly and as a consequence, deepen democracy.

Systems are to be in place to build a nation that builds citizenship which is truly informed and literate and in the process, the content of governance, development and democracy is also vitalised.

It is only when there is a credible, whole hearted and institutionalized effort on a long term basis that the learner would take the programme of adult education seriously. The first step, therefore, is to understand Adult Education Programme as a continuous and lifelong education programme. It must contain all structures and institutions from national to habitation levels, on a permanent basis, as part of the education department. The structures and processes should be receptive to the learners' needs on the ground.

Compared to the model in vogue, these imperatives represent a basic transformation in the character of the programme, with pronounced permanency in learning centres for adult and continuing education in the lifelong learning perspective. This will qualify for the shift from Plan to Non-Plan phasing for planning and budgeting.

Principles of Curriculum Framework

Assuming that the institutional structures would be transformed towards permanency, it then becomes a challenge to define the pedagogy of Adult Education as a long term ongoing process which would be implemented through such a structure. Minimally, Adult Education is a literacy program that imparts rudiments of basic education. That is more or less how it has been envisaged over the years. However, based on the theory and practice of Adult Education internationally, it is much more than literacy and post literacy; it is the convergence of education, democracy, cultural practice, developmental practices, gender empowerment and much more. Accordingly, it is useful to first outline a set of principles that should inform policy and practice of Adult Education.

Some of the principles that should inform the Curriculum Framework for Adult Education include:

- Developing learners' critical consciousness, leading to their empowerment, and informing pedagogy.
- Empowerment that leads to participants becoming politically, socially and culturally active, aware and confident.

- Enabling democratic participation and inculcation of constitutional values.
- Respecting the learner as a productive person with dignity, sense of well-being and ability to realize his/her creative potential, removing social and other forms of discrimination, and in particular, fostering gender equality.

Pedagogy

- Recognize that pedagogical approaches to adult learning are completely different from that of children and need to be further differentiated for adolescents and women.
- Non-literate adults possess experiential skills, knowledge and wisdom. Adult pedagogy must be based on this fact and help expand their mental horizons. It should be relevant to their learning needs, flexible and participatory, in order to sustain their interest and motivation.

Curriculum

- The context and principles of adult learning must inform the contents and processes.
- Contents must combine new skills, awareness and knowledge, learners' lived experiences and needs.
- Structure the programme not as a short-term engagement but as beginning of lifelong education that includes avenues for equivalency.
- Learning materials for adults need to be diverse and varied.
- Curriculum must address skills and cognitive development as well as the affective domain including values, self-confidence and dignity.
- For curriculum and material development, Adult Education needs to be viewed as a lifelong learning engagement, plural and flexible.

Brief History of Adult Education

Post-independence India inherited a system of education which was characterised by large scale inter and intra-regional imbalances. The system educated a select few, leaving a wide gap between the educated and the illiterate. The country's literacy rate in 1947 was only 14 per cent and female literacy was abysmally low at 8 per cent. Only one child out of three had an opportunity for enrolment in primary schools. Educational inequality was aggravated by economic inequality, gender disparity and rigid social stratifications.

Eradication of illiteracy has been one of the major national concerns of the Government of India since Independence. The need for a literate population and universal education for all children in the age group 6-14 was recognised as a crucial input for nation building and was given due consideration in the Constitution as well as in the successive five-year plans. A number of significant programmes have been taken up since Independence to eradicate illiteracy among adults. Some of the important programmes have included:

(i) **Social Education:** The main elements were literacy, extension, general education, leadership training and social consciousness. The programme was implemented in the First Five-Year Plan (1951-56).

(ii) **Gram Shikshan Mohim:** Movement for literacy in the rural areas was started in 1959 in Satara district of Maharashtra, and was later extended to other parts of the state. The programme aimed at imparting basic literacy skills within a period of about four months and by 1963, it spread to all the districts of the state. The programme, however, suffered from a lack of systematic follow-up and consequently, relapse to illiteracy was massive.

(iii) **Farmers' Functional Literacy Project:** Started in 1967-68 as an inter-ministerial project for farmers' training and functional literacy, the project aimed at popularisation of high yielding varieties of seeds through the process of adult education. The programme was confined to 144 districts of the country where nearly 8,640 classes were organised for about 2.6 lakh adults.

(iv) **Non-formal Education:** In the beginning of the Fifth Plan, a programme of non-formal education for 15- 25 age-group was launched. Although the scope, content and objective of the non-formal project was clearly spelt out, its understanding in the field was very limited and the programmes actually organised indistinguishable from the conventional literacy programmes.

(v) **Polyvalent Adult Education Centres:** Workers' Social Education Institutes and Polyvalent Adult Education Centres were reviewed by a group in 1977, which recommended adoption of Polyvalent Adult Education Centres in the adult education programme for workers in urban areas. In pursuance of this decision, Shramik Vidyapeeths were set up in the states.

(vi) **Education Commission (1964-66):** The appointment of the Education Commission (1964-66) was a significant event in the history of education in India. Among several measures, it recommended that high priority be accorded to ending illiteracy. It urged that adult education be promoted both through "selective" as well as "mass approach" and stressed on the active involvement of teachers and students and the wider use of the media for the literacy programme."

The Education Commission also stated that in the world of science and technology, the main objective should be to relate it to life, needs and aspirations of the people so as to make it an instrument of socioeconomic and political change.

(vii) **Functional Literacy for Adult Women (FLAW):** The scheme of Functional Literacy for Adult Women (FLAW) was started in 1975-76 in the experimental ICDS project areas. It was gradually expanded along with the expansion of ICDS up to the year 1981-82.

Till then, 300 ICDS projects were approved. Sanctions were also given for FLAW scheme in these project areas. However, the Planning Commission decided to stop the expansion of FLAW scheme in ICDS project areas mainly due to a constraint of resources.

The aim of the FLAW scheme was to enable illiterate adult women to acquire functional skills along with literacy, to promote better awareness of health, hygiene, child-care practices and to bring about attitudinal changes. The target age group was 15-45, with greater attention to those in the 15-35 age group.

(viii) **National Adult Education Programme (NAEP):** The first nation-wide attempt at eradication of illiteracy was made through the National Adult Education Programme launched on October 2, 1978. It was a massive programme which aimed at educating 100 million non- literate adults in the age group of 15-35 years within a time frame of five years.

The objectives of the National Adult Education Programme were not merely to impart literacy in the conventional sense, but also to provide learners with functional awareness which were conceived as three integral components of the skills of reading, writing and arithmetic. Functionality implied the ability to utilise and apply the skills acquired with a view to promote efficiency of the neo-literate. The social awareness component aimed at knowing, understanding and taking action on issues which affect the individual community and society.

(ix) **Rural Functional Literacy Project (RFLP):** This was a major centrally sponsored scheme started in 1978 for rural areas. The erstwhile 144 Farmers' Functional Literacy Projects and 60 Non-formal Education Projects were merged into it. Further, projects were added and the number of projects throughout the country in 1987 were 513, each having up to a maximum number of 300 adult education centres and each centre having 25-30 learners.

(x) **State Adult Education Programme (SAEP):** The states also similarly took up centre based projects under the state plan funds on the lines of RFLPs.

(xi) **Adult Education through Voluntary Agencies:** To ensure greater participation of voluntary agencies, the Central Scheme of Assistance to Voluntary Agencies was revived in April 1982. Under this scheme, registered societies were sanctioned Centre-based projects for functional literacy and post-literacy, where they were allowed to run projects in a compact area.

Review of the National Adult Education Programme

Intended to be a mass programme, the National Adult Education Programme (NAEP), however, remained a traditional centre-based programme, which was also honorarium based, hierarchical and government-funded and government controlled. As against the target of 100 million, a total of 44.22 million learners were enrolled in adult

education centres in different years up to March 1988. On the basis of sample evaluation studies, it has been estimated that only about 45 per cent of the enrolled learners attained literacy. Thus, the level of achievement of this programme in relation to the target set for it was only about 20 per cent. The centre-based programme was reviewed and evaluated by several institutes of social science research and later, the Government of India also appointed a review committee headed by Prof. D S Kothari to assess the strengths and weaknesses of the programme. The strengths and weaknesses of the NAEP as revealed through various evaluation studies are summarised below:

Strengths

- Women's motivation and participation had been high;
- Coverage of weaker sections of the society (SCs and STs) was higher than the target;
- The project approach to management adopted for adult education programme is feasible;
- The quality of teaching-learning materials prepared by the National Resource Centre and the State Resource Centres was found to be positive;
- The programme worked well where special recruitment procedures were adopted.

Weaknesses

- Quality of training of the functionaries was poor;
- The learning environment in the adult education centres was poor;
- Mass media did not provide appreciable support;
- Voluntary agencies did not receive willing co-operation from State Governments. The existing procedures for their involvement were discouraging.
- There was no linkage between basic literacy, post-literacy, follow-up and continuing education, resulting in the relapse of large number of neo-literates into illiteracy;
- Achievement levels of literacy were below the desired level;
- Training of adult education functionaries at all levels lacked participatory and communicative techniques;
- Political and administrative support of the State Governments and the Panchayati Raj institutions was not forthcoming.

CHECK YOUR PROGRESS

6. Write down any one essential feature of non-formal education.
7. What is FLAW? When was it started?

3.5 HUMAN RIGHTS EDUCATION

Human rights are comprehensive, and applicable to every individual. Respect for individual rights needs to be upheld at all times irrespective of circumstances and political system. Human rights consist of minimum entitlement that a government must provide and protect. They are fundamental in the sense that they cannot be denied under any circumstances. Men and women are equal in maintaining a society. Members of a society depend on each other to grow and live their lives. Around this societal system, men and women, and activities big or small, revolve. As far as rights and dignity are concerned, all men and women are equal in the eyes of the law. Mankind's conscience and reasoning are the foundations of human rights. The term 'human rights' in general, refers to the civil rights, civil liberties, political rights and social and economic rights of a human being.

The Universal Declaration of Human Rights was implemented on 10 December 1948 and is officially recognized by most countries. It includes individual's rights, which can be classified into the following:

- **Civil rights:** These refer to freedom from slavery and servitude, torture and inhuman punishment, and arbitrary arrest and imprisonment: freedom of speech, faith, opinion and expression: right to life, security, justice, ownership, and assembly.

- **Political rights:** These refer to the right to vote and nominate for public office: right to form and join political parties.

- **Social and economic rights:** These refer to the right to education, work, food, shelter, and medical care. These rights establish the 'new' rights, which range from the right to economic welfare and security to the right to share and to live the life of a civilized being.

The concept of human rights implies that a human being is equal in the eyes of the law irrespective of his or her caste, creed, colour, nationality, etc. Thus, 'equality' and 'dignity' are the fundamental principles of human rights. Human rights should not be compromised as these have been enshrined in the Constitution of India. As members of society, we need to create a conducive environment, not only for normal residents but also for the downtrodden and the needy. Every single individual should be able to grow mentally, physically, and socially and should lead a happy life. This can only be achieved if we respect each other's individuality and self-respect and treat others as we would like others to treat us.

Meaning and Significance of Human Rights and Duties

The concept of human rights is quite old. A general view of human rights considers all human beings to be equal in the eyes of the law. Human rights are inherent, individual and automatically exercised. At the international level, the legal standard of human rights has been adopted since 1948 in the UN Universal Declaration of Human Rights. Later on, in 1966 in the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights were codified.

The content and scope of human rights are still debated. Some limit them to the traditional civil liberties and political freedoms whereas others extend to a broader concept that includes social and economic rights. Human rights are important for all individuals and an ideological starting point is respect for human dignity and a final purpose is that it is a guarantee of basic rights. The international and national community has initiated steps time and again to promote and protect human rights by a number of ways.

Every human being is entitled to some basic rights, which are neither created nor can be withdrawn from them. These rights are commonly known as human rights. Human right is a generic term and embraces civil rights, civil liberties and social, economic and cultural rights. Human rights are rights and freedoms to which all humans are entitled. For the reason of being human beings, we are entitled to certain rights. These rights are justified as moral norms and exist as shared norms of humanity. These are natural rights based on reasons or legalese. No consensus, however, no consensus is available for the precise nature of what should/should not be regarded as a human right.

English philosopher John Locke (1632–1704) defined them as absolute moral claims or entitlements to life, liberty, and property. One of the finest expressions of human rights is in the US Declaration of Rights (1776) which proclaims that 'all men are by nature equally free and independent and have certain inherent natural rights of which when they enter a society they cannot be deprived or divest their posterity.' These are also called fundamental rights.

Ex-chief Justice of India, J.S. Verma, (1978) stated that 'human dignity is the quintessence of human rights. All those rights, which are essential for the protection and maintenance of dignity of individuals and create conditions in which every human being can develop his personality to the fullest extent, may be termed human rights. However, dignity has never been precisely defined on the basis of consensus, but it accords roughly with justice and good society.

The World Conference on Human Rights (1993) held in Vienna stated in that all human rights derive from the dignity and worth inherent in the human person, and that the human person is the central subject of human rights and fundamental freedoms.

Constitutional commentator D. D. Basu (2008) defines human rights as those minimum rights, which every individual must have against the state or other public authority by virtue of his being a member of human family, irrespective of any other consideration.

Thus, it could be understood from these definitions that human rights are, those rights that belong to an individual as a consequence of being human and are a means to human dignity. They are provided to all men everywhere at all times.

Human beings should be protected against unjust and mortifying treatment by fellow human beings. Arbitrary power cannot be operated on them. A State or any other such organized community can realize human rights. In a state of anarchy, where there is lawlessness and chaos, human rights cannot be expected to be invoked.

These rights are required for the holistic development of human beings in society and should be protected and available at all costs.

Human rights are indivisible and interdependent, and there is no differentiation in the typology of human rights. All human rights are equally important, inherent in all human beings. The Universal Declaration of Human Rights has not categorized human rights but simply enumerated them in different articles. The most common categorization of human rights is as follows:

- Civil and political rights, and
- Economic, social and cultural rights

1. **Civil and political rights:** Civil and political rights are enshrined in Articles 3 to 21 of the Universal Declaration of Human Rights (UDHR) and in the International Covenant on Civil and Political Rights (ICCPR). Civil rights or liberties are referred to those rights, which are related to the protection of the right to life and personal liberty. These are essential for living a dignified life. Right to life, liberty and security of persons, right to privacy, home and correspondence, right to own property, freedom from torture, inhuman and degrading treatment, freedom of thought, conscience and religion and freedom of movement are inclusive of these rights. Political rights allow a person to participate in the state governance. Right to vote, right to take part in the conduct of public affairs, directly or through chosen representatives are instances of political rights.

   Civil and political rights can be protected by the State, are cost-free and could be immediately provided if the state decides to. The provision of these rights is easy to judge and measure. They are justifiable real legal rights.

2. **Economic, social and cultural rights:** Economic, social and cultural rights are enshrined in Articles 22 to 28 of the Universal Declaration of Human Rights (UDHR) and in the International Covenant on Economic, Social and Cultural Rights (ICESCR). Economic, social and cultural rights (also called 'freedom to') are related to the guarantee of minimum necessities of the life to human beings. The existence of human beings is likely to be endangered in the absence of these rights. Right to adequate food, clothing, housing and adequate standard of living, freedom from hunger, right to work, right to social security, right to physical and mental health and right to education are included in this category of rights. These are positive rights; which means that these require positive entitlements by the state. These rights are massive investments and are by nature progressive. Social and economic rights are cannot be measured quantitatively and it is difficult to determine if these have been breached.

Karel Vasak, the first secretary general of the International Institute of Human Rights, has categorized human rights into three generations. The first comprise of civil and political rights which have been derived from reformist theories associated with the French, English and American Revolutions of the 17th and the 18th centuries. They were first enshrined at the global level by Universal Declaration of Human

Rights, 1948, and given status in international law in Articles 3 to 21of the Universal Declaration.

The second generation of human rights was recognized by governments after World War I. These are associated with equality and were fundamentally economic, social and cultural in nature. Second generation rights include the right to be employed, right to housing, etc. They are also incorporated in the Universal Declaration of Human Rights, and further embodied in Articles 22 to 27 of the Universal Declaration, and the International Covenant on Economic, Social and Cultural Rights.

Third generation of human rights go beyond the mere civil and social rights. They have been expressed in many progressive documents of international law, like the 1972 Stockholm Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration on Environment and Development. The term third-generation human rights are largely unofficial, and have not been enacted in legally binding documents. These include an extremely broad spectrum of rights such as:

- Group and collective rights
- Right to self-determination
- Right to economic and social development
- Right to a healthy environment
- Right to natural resources
- Right to communicate and communication rights
- Right to participation in cultural heritage
- Rights to intergenerational equity and sustainability

In this categorization of human rights, the third generation is the most debated and lacks both legal and political recognition. This is explained in Table 3.3.

Table 3.3 Three Generations of Human Rights

	First generation	**Second generation**	**Third generation**
Name	Civil and political rights	Economic, social and cultural rights	Collective rights
Example	Right to life, liberty and security privacy, home and correspondence, own property, freedom from torture, freedom of thought, conscience and religion and freedom of movement	Right to adequate food, clothing, housing and adequate standard of living, freedom from hunger, right to work, right to social security, right to physical and mental health and right to education	Right to self determination, economic and social development, healthy environment, natural resources

Despite different meanings and explanations, the basis of all the rights is that they are derived from the inherent dignity of the human beings and are essential for free and full development.

Characteristics of Human Rights

As per United Nations System and Human Rights (2000), human rights are universal legal guarantees protecting individuals and groups against actions that interfere with fundamental freedoms and human dignity.

Some of the most important characteristics of human rights are as follows:

- Guaranteed by international standards
- Legally protected
- Focus on the dignity of the human being
- Oblige states and state actors
- Cannot be waived or taken away
- Interdependent and interrelated
- Universal

Human rights are natural rights that stem from human dignity and have some peculiar characteristics. These are described as follows:

Ñ **Internationalism:** United Nations Charter, the Universal Declaration of Human Rights, and the Vienna Declaration of Human Rights guarantee respect for human dignity and the right to pursue happiness. These international efforts have been agreed on internationally making human rights a subject of international concern. All the countries are expected to observe these right equally and with sincerity. Consequently, the guarantee of human rights is given not only by individual States but by the international community as a whole. It is a vital and ever-increasing issue. It has become the common ideology of the whole international community that is beyond State borders.

Ñ **Universality:** Human rights go along with the progress of human society, and have always been a universal concern of human beings in various international documents. The dignity, worth and right to happiness of all must be accepted without any condition or clause. Race, colour, sex, language, religion, political opinion, nation, social position, property, origin or other circumstance should not be used for discrimination and that everybody is endowed with all rights and freedoms. Moreover, nobody can be discriminated against because of membership in a particular self-governed or dependent state, nor limited in his rights because of political, legislative or international position. They are objectively accorded regardless of anyone's will.

Ñ **Inheritance:** Human rights guarantee human dignity and because they were given originally to the people they are recognized as natural inherent rights. Human rights are not granted in accordance with any law or by any State.

Ñ **Absoluteness:** Human rights are inalienable rights. So, they are recognized universally and are absolute rights. The essence of human personality, human

dignity and worth, confirms them to be inviolable. As such the State must guarantee the people's dignity, respect and happiness by preventing any law which would do otherwise.

Ñ **Inviolability:** Human rights cannot be violated as they are inherent and are internationally enforced. In addition to this, the guarantee of human rights is the duty of the State. The State should neither alienate these rights nor, limit or violate them.

Ñ **Permanence:** Human rights are not to be guaranteed temporarily for a certain period of time but should be permanently assured of which nobody could be deprived. The dignity and worth of human beings does not change over time by the status or position

Ñ **Individuality:** Human rights have their basis in people's dignity, worth and happiness. Every human being is independent and each person possesses a right to be independent which cannot be taken away in lieu of any other thing. Every person has a right to determine own destiny, which is a prerequisite of personal right. In simple terms, human rights are a subject of neither a nation nor of a collective body, but of the individual.

Ñ **Self-determination:** All people have the right to self-determination on the basis of inherent human dignity. It means that all people freely determine their own political position and independence, seek their own economic, social and cultural development. As human dignity, worth and happiness are intrinsic to personal rights, personal rights become a necessary prerequisite for the individuals to determine their own destiny. The subject of human rights is natural human, so individuals have the right to determine their lives.

Ñ **Self-evidence:** Men are born equal and with certain fixed, inherent, inalienable rights, including the right to life, freedom and happiness. This is accepted as a self-evident truth.

Ñ **Fundamental:** Human rights include the principle of obtaining a guarantee of human dignity, worth and happiness. It is a fundamental norm and produces a basic principle, which has become a standard for analysing the essence of effectiveness of laws and ordinances. Thus, it should be considered a standard of human dignity and worth as far as it is included, both in establishing the laws and analysing them.

Bases and Sources of Human Rights

The initial point of conception of human rights can be located in the notion of 'natural rights' that was propounded in the 17th century by John Locke, who urged that certain rights are 'natural' to individuals on the basis of being human. He asserted that these have existed even before the development of societies and emergence of the state. Proponents of natural rights urged that natural rights are inherent to an individual simply because he or she belongs to the human species and not because he or she is a citizen of a particular country. Its tone was radical and in its ultimate employment, was revolutionary. Historically, the rising commercial/middle class made the demand for individual rights, which was the result of industrial revolution. The

American Independence Movement of 1776 and the French Revolution of 1789 were inspired by the ideal of natural rights and both movements sought to challenge governments that curtailed the natural rights of people.' The Preamble to the American Declaration of Independence, 1776, reads:

> All men are created equal, that they are endowed by their Creator with certain unalienable Rights that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, governments are instituted among Men, deriving their just powers from the consent of the governed. That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.

However, it was during the French Revolution in 1789 that natural rights were elevated to the status of legal rights with the formulation of the 'Declaration of the Rights of Man'. The Declaration defined the 'natural and imprescriptible rights of man' as 'liberty, property, security and resistance to oppression.' The American Bill of Rights in 1791 also incorporated natural rights. The above conception of natural rights was deployed in several political and social movements through the 19th century. For instance, the Suffragette Movement was based on the natural equality between a man and a woman. The different views of various thinkers were put forward regarding bases of rights, according to which, various theories have been propounded.

3.5.1 Sources of Human Rights

The recognition of human rights law has been developing extensively since the creation of the United Nations. It establishes a set of rules for all the people across the globe. The variety of sources from where international human rights laws have been derived are as follows:

- **Religion:** The term 'human right' as such is not found in most of the world's religions. Nonetheless, theology serves as the basis of a human rights theory stemming from a law higher than the State and whose source is the Supreme Being. This presupposes an acceptance of revealed doctrine as the source of such rights. Every individual is considered sacred in the religious context. The fact that human beings have been created by a common creator gives rise to the theory of a common humanity; from this rise the universality of these rights. A wide intercultural tradition has been constructed by the common bond of religion that supports various principles of justice and equality that underlie human rights.

- **Natural law:** Natural law theory has underpinnings in Sophocles and Aristotle's writings. It was first elaborated during the Greek period and later during the Roman period. Natural law, embodied elementary principles of justice which were right, that is they were in accordance with nature, unalterable and eternal. The natural rights theory evolved from the natural law theory. John Locke, the chief exponent of the natural rights theory developed his philosophy within the framework of the 17th century humanism and enlightenment. The 18th

century saw the birth of absolutism, against which the natural rights theory provided impetus to revolt. The same impetus is also seen in the French Declaration of the Rights of man, in the American Declaration of Independence. It is also evident in the later States which declared their independence against anti-colonial terrorism and also in the principle United Nations human rights documents. The natural rights theory has identified human freedom and equality from which other human rights originate and has thus contributed tremendously to the evolution of human rights internationally.

- **International treaties:** Treaties are the most important sources of international human rights law. At present, there are a number of multilateral human rights treaties in operation, which are legally binding for the countries that have ratified them. The most important amongst them is the United Nations Charter. It is binding on all the countries in the world and establishes at least general obligations to respect and promote human rights. United Nations has also enacted a number of other multilateral human rights treaties that have created obligations to the contracting parties. European Convention on Human Rights, American Convention on Human Rights and African Charter on Human and People's Rights are other regional treaties on human rights. They are also legally binding on the contracting States. They, therefore, are the sources of international human rights law.

- **International custom:** Certain international human rights have acquired the status of customary international law by their widespread practice by countries and are binding on all whether they have expressed the consent or not. For example, violations such as genocide, slavery or slave trade, the murder or causing the disappearance of individuals, torture or other cruel, inhuman or degrading treatment or punishment, prolonged arbitrary detention, systematic racial discrimination, or a consistent pattern of gross violations of internationally recognized human rights are condemned unanimously. Consequently, they are the source of international law.

- **Judicial decisions:** Decisions of the various national bodies like National Human Rights Commission and international judicial bodies like International Court of Justice and European Court of Human Rights are relevant in the determination of the rules on human rights issues. The decisions of the Supreme Court and high courts on human rights issues have contributed immensely to the development of human rights law. In addition to the judicial decisions, opinions of the arbitral bodies whose function is to mediate on complaints of human rights violations under the various treaties also help in the determination of the rules relevant to international human rights.

- **Official documentations:** The United Nations and its subsidiary bodies through their official documents have produced a vast amount of records relating to human rights matters. Human Rights Law Journal, Human Rights Review and European Law Review and the collective work done under the auspices of the international and national bodies are of considerable value.

- **Other international instruments:** A great number of international declarations, resolutions and recommendations connecting to human rights have been adopted with the support of the United Nations. Though they are not legally binding on the States but have established broadly recognized standards in connection with human rights issues. The most important of these is the Universal Declaration of Human Rights of 1948, which has moral or political force for persuading government officials to observe human rights standards. Some of the rights referred therein have acquired the character of customary rule of International Law and also serve as the source of the commitment by the international community.

The above are the important sources of international human rights law but they by no means are exhaustive. Many international and national institutions contribute to the protection of human rights. Further, a variety of actions taken by the United Nations organs and other international bodies have too supported specific efforts to protect human rights.

Significance of Human Rights

Human rights are universal in nature. All persons everywhere, at all times ought to have something of which no one may be deprived without a grave affront to justice. From this emerges the importance of human rights.

Human rights are the natural rights of the people. It means that they ensure dignity of the people, thus, themselves are the main subject of human rights and fundamental freedoms. They originate from human dignity, which is not granted to the people by the State or the law, but it is nevertheless an inherent, absolute and basic right of the people.

This has been stated in the Virginia Bill of Rights (1776), often called the First Declaration of Human Rights, French Declaration of the Rights of Man and of the Citizen (1789) and in American Declaration of Independence. These declarations state that all people are born free and independent and have the right of their own life. Article 2 of the Universal Declaration of Human Rights also establishes the right to freedom, property, security and resistance.

So, the ideological basis of human rights is human dignity. It is acknowledged universally. All people are born with human dignity and worth, have the right to seek happiness and lead lives worthy of their dignity. Human dignity is the basis of equality and solidarity between human beings in society. It is the absolute worth of human beings existence and thus is the formative element of a human personality.

People have the dignity to exist freely. This dignity requires specific freedoms, namely, self-control and their own personal rights. It gives people the right to be own judges, value formers and designers. Therefore, human dignity is not connected to any law. It is an absolute value entitled to all persons regardless of whether it is stated in the positive law.

The principle of respect for human dignity has value on an ethical and psychological level and as well as on the legislative level. It is applied or enforced by nations in order to force respect for existing laws.

3.5.2 Child Rights

According to the United Nations Convention, any human being below 18 years of age falls in the category of a child, except if the age of majority is attained earlier under a state's own domestic legislation.

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) was adopted in 1979 by the UN General Assembly. Generally it is also referred to as an International Bill of Rights for Women. It comprises a preamble and 30 articles. It defines what constitutes discrimination against women and sets up an agenda for national action to end such discrimination.

The Beijing Declaration and Platform for Action, approved in September 1995 at the Fourth World Conference on Women, is an international pledge to achieve equal opportunity, progress and peace for women all over the world.

> 'We are guilty of many errors and many faults, but our worst crime is abandoning the children, neglecting the fountain of life. Many of the things we need can wait. The child cannot; right now is the time his bones are being formed, his blood is being made and his senses are being developed. To him we cannot answer 'tomorrow'. His name is 'today'. —Nobel Laureate Gabriel Mistral

Children by virtue of their tender age and physical vulnerability require care and protection for their all-round development.

1. International Standards

The Geneva Declaration on the Rights of the Child, 1924, which was evolved under the aegis of the League of Nations, recognizes that 'mankind owes to the child the best that it has to give'. The Universal Declaration of Human Rights, 1948, asserts that childhood is entitled to special care and assistance. The Declaration on the Rights of the Child, 1959, observes that the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth.

The International Covenant on Civil and Political Rights, 1966, to which India is a state party, seeks to guarantee civil and political rights to all without any distinction. In particular, it provides a child's right to nationality. According to it:

- All children shall be, irrespective of discrimination of race, colour, sex, language, religion, national or social origin, property or birth, be entitled to such measures of protection as are required by his status as a minor, on the part of his family, society and the State.

- All children shall be registered as soon as they are born and shall have a name.

- All children have the right to get a citizenship.

The International Covenant on Economic, Social and Cultural Rights, 1966, to which India is a state party, guarantees a range of rights. In particular, Article 10 seeks to guarantee protection for the family, mothers and children. Article 10(1) of that covenant declares 'that the widest possible protection and assistance should be accorded to the family, which is the natural and fundamental group unit of society,

particularly for its establishment and responsibility for caring and educating dependent children.' Article 10(3) further stipulates that:

> '…special measures of protection and assistance should be taken on behalf of all children and young persons without any discrimination for reasons of parentage or other conditions. Children and young persons should not be economically and socially exploited. Their employers, who give work that is harmful to their morals or health or is dangerous to life or likely to hamper their normal development, should be punishable by law. States should also set age limits below which the paid employment of child labour should be prohibited and punishable by law.'

The Committee on Economic, Social and Cultural Rights, which monitors the implementation of that covenant, has dedicated focus on the rights of the child as they are established under Article 10(3). It has paid particular attention to child labour and the state of affairs of children.

The Convention on the Rights of the Child, 1989 (CRC) was adopted by the UN General Assembly in 1989, and came into force in 1990. As of now, 191 countries have signed and ratified CRC with the United States of America and Somalia being exceptions. In 54 Articles, CRC covers the right to survival, protection, participation and development. It is the main children's treaty covering their civil, political, as well as economic, social and cultural rights. Its objective is to safeguard children from discrimination, negligence and ill-treatment. It seeks to guarantee their rights in peace as well as war times.

The CRC represents four universal principles to guide implementation of the rights of the child:

- Non-discrimination that ensures equal opportunities, the decision-making by state authorities pertaining to children should primarily focus on the best interests of the child
- The right to life, survival and development that comprises physical, mental, emotional, practical, social and cultural development
- Children should have the freedom to express their views
- Their opinions should be given fair importance considering the age and maturity of the child

Additionally, the CRC also provides for the state parties to agree that children's rights comprise: free and compulsory primary education; protection from economic exploitation, sexual abuse and protection from physical and mental harm and neglect; the right of the disabled child to special treatment and education; protection of children affected by armed conflict; child prostitution; and child pornography.

Under the convention, the Committee on the Rights of the Child was established to monitor the implementation of the convention by the state parties. The Convention on the Rights of the Child 1989 requires that no child will be subjected to torture or other cruel, inhuman or degrading treatment or punishment and that every child deprived of liberty will be treated with humanity and respect for the inherent dignity of the human person.

Article 32 of the Convention on the Rights of the Child requires the state parties to take all possible measures to ensure that the child is safeguarded from being economically exploited and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. India stated that it can only progressively implement the requirements under Article 32(2)(a) on providing for a minimum wage or minimum age for admission to employment by entering the following Declaration to the Convention on the Rights of the Child.

While fully subscribing to the aims and purposes of the Convention, realizing that certain rights of child, specifically those related to the economy and social and cultural rights can only be increasingly put into practice in developing countries, depending on the scope of the resources in hand and in the 'list of things to do' of international cooperation; recognizing that the child needs to be safeguarded from exploitation of every category including economic exploitation; considering the causes that force children of different ages to work in India; having prescribed minimum age for employment in hazardous line of work and other specific domains; having taken administrative measures in terms of duration and conditions of employment; and the awareness of the impracability of immediate prescription of minimum age for admission to all domains of employment in India—the Government of India attempts to adopt measures to constructively put in to action the provisions of Article 32, especially paragraph 2(a), according to its national legislation and relevant international instruments to which it is a state party. India reiterated this position, while it was reviewed under the Universal Periodic Review mechanism of the Human Rights Council in 2008. The Indian Government maintained that:

> Government of India fully subscribes to the objectives and purposes of the Convention on the Rights of the Child (to which India is a party) as well as the ILO Conventions No. 138 and 182 (which India is yet to ratify). India fully recognizes that the child has to be protected from exploitation of all forms including economic exploitation. Towards this, the Government of India has taken a wide range of measures including prescribing minimum age of 14 years for employment in hazardous occupations, as domestic helps, at eateries as well as in certain other areas. Regulatory provisions regarding hours and conditions of employment have also been made.

Recently, a National Commission for the Protection of Child's Rights has been set up for speedy trial of offences against children or of violation of child's rights. The present socio-economic conditions in India do not allow prescription of minimum age for admission to each and every area of employment or to raise the age bar to 18 years, as provided in the ILO Conventions. Government of India remains committed to progressively implement the provisions of Article 32 of the Convention on the Rights of the Child, particularly paragraph 2(a), in accordance with its national legislation and international obligations.

The CRC was supplemented by two optional protocols that were adopted by the United Nations General Assembly in 2000. The optional protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict was adopted by the UN General Assembly on 25 May 2000 and put into implementation

on 12 February 2002. India signed this Optional Protocol on 24 September 2001 and ratified it on 30 November 2000. It seeks to put limits on the use of children in armed conflict as follows:

- It makes it illegal to employ persons below 18 years of age by the non-state actors.

- It makes it obligatory for the States to increase the minimum age of recruitment more than that established by the Convention on the Rights of the Child.

- It makes it obligatory for the States to take all practical steps to keep people, below the age of 18 years, from getting directly involved in hostilities.

- It sees that the States come up with secure measures at the time of voluntary employment of individuals who are less than 18 years in age.

- It makes it obligatory for the States to be accountable to the committee on the Rights of the Child, after it is implemented.

India entered a Declaration to Article 3(2) of the Optional Protocol to the Convention on the Rights of the Child on the involvement of Children in Armed Conflict. It declared that:

- The minimum age for recruitment of prospective recruits into Armed Forces of India (Army, Air Force and Navy) is 16 years. After enrolment and requisite training period, the attested Armed Forces personnel is sent to the operational area only after he attains 18 years of age.

- The recruitment into the Armed Forces of India is purely voluntary and conducted through open rally system/open competitive examinations. There is no forced or coerced recruitment into the Armed Forces.

The Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography entered into force on 18 January 2002. India signed it on 15 November 2004 and ratified it on 16 August 2005. It supplements the provisions of the CRC by providing for, among others, the following:

- The violation in terms of the 'sale of children', 'child prostitution' and 'child pornography'.

- It establishes benchmarks for dealing with breaches, within the domestic law, including with regard to offenders, protection of victims and prevention efforts.

- It also provides a framework for increased international cooperation in these areas, in particular for the prosecution of offenders.

The Government of India has ratified the United Nations Convention on the Suppression of the Traffic in Persons and the Exploitation of the Prostitution of Others 1949 on 25 July 1991.

International Conventions

India is still not a member of the following International Labour Organization (ILO) Conventions:

- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)

The International Labour Organization (ILO) Convention No. 182 on the Worst Forms of Child Labour, 1999, focuses on ending slavery, debt bondage, forced recruitment of children in armed conflict, prostitution, drug trafficking and any work harmful to the health, safety and morals of children. While India was reviewed under the Universal Periodic Review of the Human Rights Council, Brazil, the Netherlands, and Sweden recommended to India that it consider signing and ratifying the above two Conventions.

2. Domestic Standards

The Constitution of India, 1950, has a number of provisions which seek to guarantee the rights of children in Part III dealing with Fundamental Rights and Part IV dealing with Directive Principles of State Policy. Article 14 guarantees equality before the law and equal protection of the laws within the territory of Indian Article. Article 15(1) and (2) prohibit bias on the basis of religion, race, caste, sex or place of birth, while Articles 15(3) to (5) enable the State to make special provisions for women and children and for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes. Right to life and personal liberty is guaranteed under Article 21. Article 21A which has been inserted by the Constitution (Eighty-Sixth Amendment) Act, 2002, is quite significant insofar as rights of children are concerned. It asserts that the State shall provide free and compulsory education to all children of the age of 6–14 years in such manner as the State may, by law, determine.

Articles 23 and 24 under Chapter III of the Constitution deal with right against exploitation and are very significant in the context of the rights of the children. Article 23 renders human beings trafficking and begging as illegal, along with other similar forms of forced labour, while Article 24 prohibits any child less than fourteen years of age to be employed to work in any factory or mine or engage in any other hazardous line of work.

A number of Articles under Chapter IV of the Constitution dealing with the Directive Principles of State Policy are relevant to children. Article 30 outlines certain principles to be followed by the State. It stipulates that the State shall direct its policy toward securing, among other things, '(e) …the tender age of children are not abused…and not forced by economic necessity to enter avocations unsuited to their age or strength; (f) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood…protected against exploitation and against moral and material abandonment.'

Article 45 of the Constitution which has been amended by the Constitution (Eighty-Sixth Amendment Act), 2002, provides that the State shall endeavour to provide initial childhood care and education for every child until he reaches the age of six years. Article 46 requires the State to promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, while Article 47 requires it to raise

the level of nutrition and the standard of living of its people and the improvement of public health.

Article 51 A(k) under Chapter IV A dealing with Fundamental Duties requires a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years. This fundamental duty, which was inserted by the Constitution (Eighty-Sixth Amendment) Act, 2002, is quite significant in the context of right to education of children.

The Child Marriage Restraint Act, 1929, as amended in 1979 and in 2006; the Child Labour (Prohibition and Regulation) Act, 1986; the Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992; Immoral Traffic Prevention Act, 1986; the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994; the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1996; and Juvenile Justice (Care and Protection of Children) Act, 2000, are some important legislations enacted by Parliament to protect the rights of children. The Commission for Protection of Child Rights Act, 2005, seeks to set up the National Commission for Protection of Child Rights, State Commissions for Protection of Child Rights, and children's courts.

Along with the mentioned listing, other legislations that are also significant in the context of the rights of the children are as follows: Indian Majority Act, 1875; Guardian and Wards Act, 1872; Factories Act, 1954; Hindu Adoption and Maintenance Act, 1956; Probation of Offenders Act, 1958; Bombay Prevention of Begging Act, 1959; Orphanages and Other Charitable Homes (Supervision and Control) Act, 1960; Bonded Labour System (Abolition) Act, 1976; Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1987; Right to Information Act, 2005; Delhi Schools Education Act, 1973; and Goa Children's Act.

These legislations are complemented by a number of National Policies which seek to ensure child rights and improvement in their status: National Policy for Children, 1974; National Policy on Education, 1986; National Policy on Child Labour, 1987; National Nutrition Policy, 1993; Report of the Committee on Prostitution, Child Prostitutes and Children of Prostitutes and Plan of Action to Combat Trafficking and Commercial Sexual Exploitation of Women and Children, 1998; National Health Policy, 2002; National Charter for Children, 2004; and National Plan of Action for Children, 2005.

Prospects and Challenges

Despite constitutional safeguards, plethora of legislations and policies, there are many significant gaps in the protection of the rights of the child and in particular, the girl child.

The discrimination against the girl child starts even before birth and manifests itself in the form of selective elimination of female fetuses (sex selection). The female feticide and female infanticide have distorted sex ratio and contributed to what Amartya Sen termed as 'missing millions'. There has been a steady decline in sex ratio over past several decades. If one takes into account juvenile sex ratio (0–

6 years) it is much worse. As per 2001 census, there were only 927 girls for every 1000 boys which indeed is a decline from 945 girls for every 1000 boys registered in 1991 census. If one looks into disaggregated data, there are some districts in which the ratio is a little over 650. Sex ratio is the lowest in prosperous states. There appears to be no correlation between economic level and educational level on the one hand and practice of female feticide on the other.

Though Pre-Conception Pre-Natal Diagnostics Act was enacted in 1994, the number of prosecutions launched all over the country till a couple of years back stood at 500. This paltry figure when viewed in the backdrop of a country with over one billion population and that more than a decade and a half existence of PCPNDT Act is indeed shocking. It speaks volumes about the poor enforcement of this legislation.

The discrimination against the girl child also manifests in inadequate access to adequate nutrition, education and health care. UNICEF has compared child malnutrition to a silent emergency. One in every three malnourished children in the world lives in Indian Article Sex-bias in health care accounts for higher female mortality and poor girl child survival. Infant mortality rate is as high as 57 per 1000 live births. Some of the causes for denial of health care are lack of public health services in remote and interior regions, poor access to healthcare facilities, declining state expenditure on public health, and lack of awareness about preventive child healthcare.

The key indicators of deficit in the development of children in India can be gauged from Table 3.4.

Table 3.4 *Deficit in Development of Children in India*

Issue	Infant Mortality Rate/1000 (Live Births)	Children under Age 3 with Underweight	Vaccination coverage	Coverage Institutional Deliveries	Drop Out Rates in Class I–X
	(2005–06)	(2005–06)	(2005–06)	(2005–06)	(2004–05
	57%	46%	44%	40.70%	61.92%

The figures in Table 3.4 speak for themselves and mirror the situation of the rights of the children today. In particular, they depict the gap between law and reality with regard to child's right to life and survival, right to health, food and education.

The Convention on the Rights of the Child, 1989, defines a child as a human being below the age of eighteen years. However, if one carefully reviews various legislations enacted in India, the age of child differs. Under the Child Labour Prohibition and Regulation Act, 1986, a child is a person who has not completed 14 years of age. As per the Juvenile Justice (Care and Protection of Children) Act, 2000, the age is below 18 years to qualify as a child. A few other legislations put the figure between 14–18. We require uniformity in the definition of a child across legislations in conformity with the CRC.

Following Sarva Shiksha Abhiyan programme, though enrolment levels have registered an increase, levels of retention in schools remain a matter of concern. There is a sharp decline in the enrolment ratio at the upper primary level. There has been a marginal improvement in the percentage of students who stay in school until Class 5 from 61.2 to 62 per cent; but this is way below the global average of 83.3 per cent. It is matter of deep regret that either the girls are not sent to school or their education is discontinued at an early age. Thus, girls form more than half of illiterate children in the age group of 5–9 years.

According to 2001 Census, there were 1,26,66,377 working children in the age group of 5–14 years. However, NGOs put the figure even higher. It is a serious violation of the rights of the child. In the case of MC Mehta *vs.* State of Tamil Nadu AIR 1997 SC 699, the Supreme Court stressed the importance of educating all children until they complete the age of 14 years and numerous concrete steps for elimination of child labour, including:

- A cross-country survey of child labour to be completed within 6 months.

- The payment of 20,000 rupees by an employer who has broken the law, for each child employed in contravention of the Child Labour (Prohibition and Regulation) Act 1986, into a Child Labour Rehabilitation-cum-Development Fund.

- The State to ensure that an adult member of the family, the child of which has been recruited in a hazardous occupation, is employed anywhere, in place of the child.

- In case a substitute employment is not provided, the parent or guardian of the concerned child would be paid every month the income which would be earned on the corpus, which would be a sum of 25,000 rupees for each child, every month; on discontinuation of the employment of the child, his or her education must be assured in a suitable institution, it being pointed out that the Constitution mandates free and compulsory education for all children until they complete the age of 14 years.

In Bandhua Mukti Morcha vs. Union of India [(1997) 10 SCC 549], the Supreme Court held that employment of children in the carpet weaving industries is a violation of the Constitution of India. Compulsory education to children is one of the principal means and primary duties of the State to ensure stability of the democracy, social integration and to eliminate social tensions. Primary education to children, in particular to children from weaker sections, dalits, tribals and minorities is mandatory. Basic education and employment-oriented vocational education should be imparted.

In addition to child labour, trafficking in women and children, child marriage, sexual exploitation, etc., continue to pose serious challenges to the protection of the rights of the children. The Ministry of Women and Child Development in its publication, *Child Abuse in India 2007*, reported that two out of every three children faced physical abuse in India. The brutal killing of children in Nithari village in Noida, Uttar Pradesh has brought into sharp public focus the issue of missing children as well as their sexual abuse. Child rape, pedophilia and molestation leave a deep and adverse impact physically, mentally and emotionally on the victim.

The list of challenges is not an exhaustive one. It only serves to highlight that there a number of serious challenges with regard to protection of the rights of children. The children, by virtue of their tender age and physical vulnerability, are at risk. All sections of society have a role in the protection and promotion of the rights of children.

CHECK YOUR PROGRESS

8. When was the Universal Declaration of Human Rights implemented?
9. What are political rights?
10. Who was the first secretary general of the International Institute of Human Rights?

3.6 SUMMARY

- A UNESCO Regional Workshop on Population, Family Planning and Life Education, held at Bangkok in 1970, defined population education as: 'Population education is an educational programme which provides for a study of the population situation of the family, community, nation and world with the purpose of developing in the students rational and responsible attitudes and behaviour towards that situation.'

- Stephen Videman defines population education as 'the process by which the student investigates and explores the nature and meaning of population process, population characteristics, the causes of population change and the consequences of these processes, characteristics and changes for himself, his family, his society and the world.' Population education may be seen as the development of proper attitude towards population problems and the capacity to take rational decisions in this regard.

- Some of the objectives of population education include: (a) To create among the students and the teachers an awareness about the population situation in the country and the strategies adopted to meet this critical situation. (b) To create an awareness among children that the present population explosion in our country is due to steady birth rate as against rapid death rate over the past few decades. (c) To help children realize the socio-economic burden involved in bringing up large families usually resulting in deterioration in quality of living.

- Population explosion is a worldwide phenomenon. However, the magnitude of the problem and the urgency to gauge its seriousness are perhaps nowhere as pressing as they are in India, which alone accounts for about 17 per cent of the world's population with no more than 2.4 per cent of the total land area of the world.

- China has managed to bring down their growth rate to 1.2 per cent. In India we have yet to attain this target. There is an urgent need to take appropriate measures to bring down population growth so as to ensure a reasonably good standard of living and avoid human disaster.

- Population explosion implies an alarming increase in population resulting in low level of living, i.e., inadequate food, education, health and other necessities of life.

- Population planning is needed both by developing and developed countries. Some of the developed countries are experiencing manpower shortages as there is negative population growth, i.e., population is declining.

- A few reasons of population explosion in India include: (a) Gap between birth rate and death rate (b) Early marriage (c) High fertility rates (d) High reproductive age group (e) Lack of adequate knowledge of family planning methods.

- Environmental education implies establishing ecological equilibrium which implies proper use and conservation of resources and also control of environment pollution. Environmental education is a process of recognizing values and clarifying concepts relating to the environment and its problems. The aim is to develop skills and attitudes necessary to understand the environment.

- One of the landmarks in the history of environmental education is the 1972 Stockholm Conference on Human Environment organized by UNESCO. This was followed by International Environmental Education Workshops in Belgrade, Yugoslavia, in October 1975. The Belgrade Workshop was followed by Regional Workshops.

- Better life is dependent upon both types of environment, i.e., physical as well as social. While physical environment is generally emphasized, social environment in life is not adequately stressed. Social environment is also concerned with clean administration and clean politics.

- On a public litigation petition in 1991, the Supreme Court of India asked the National Council of Educational Research and Training (NCERT) and other concerned authorities to take steps to enforce compulsory education on environment in a graded way from the academic session 1992–93. Since the order was not implemented even after eleven years, advocate M.C. Mehta filed an application to ensure implementation of the earlier order. The Supreme Court passed the order on 22 April 2004 for compliance.

- A Centrally Sponsored Scheme of Environmental Orientation to School Education has been started with effect from 1989–90, under which 100 per cent financial assistance is provided to States/Union Territories and voluntary organizations working in the field of environment education. Various programmes aimed at creating environmental consciousness among the students and the community would be organized on project basis in selected areas comprising homogenous ecological conditions.

- Any organized educational activity outside the formal education system, whether operating separately or as an important feature of some broader activity that is intended to serve identifiable learning clientele and learning objectives, is termed as non-formal education. The non-formal education usually embraces all forms of learning activities that are basically organized outside the formal education system such as distance education and hobby courses.

- Non-formal education is structured systematic non-school educational and training activities of relatively short duration in which sponsoring agencies seek concrete behavioural changes in fairly target population.

- Post-independence India inherited a system of education which was characterised by large scale inter and intra-regional imbalances. The system educated a select few, leaving a wide gap between the educated and the illiterate. The country's literacy rate in 1947 was only 14 per cent and female literacy was abysmally low at 8 per cent. Only one child out of three had an opportunity for enrolment in primary schools. Educational inequality was aggravated by economic inequality, gender disparity and rigid social stratifications.

- Human rights are comprehensive, and applicable to every individual. Respect for individual rights needs to be upheld at all times irrespective of circumstances and political system. Human rights consist of minimum entitlement that a government must provide and protect. They are fundamental in the sense that they cannot be denied under any circumstances. Men and women are equal in maintaining a society.

- The concept of human rights implies that a human being is equal in the eyes of the law irrespective of his or her caste, creed, colour, nationality, etc. Thus, 'equality' and 'dignity' are the fundamental principles of human rights. Human rights should not be compromised as these have been enshrined in the Constitution of India.

3.7 KEY TERMS

- **Population education:** It is seen as the development of proper attitude towards population problems and the capacity to take rational decisions in this regard.

- **Population explosion:** The term refers to an alarming increase in population resulting in low level of living, i.e., inadequate food, education, health and other necessities of life.

- **Birth rate:** It is the number of live births per thousand of population per year.

- **Death rate:** It is the ratio of deaths to the population of a particular area or during a particular period of time, usually calculated as the number of deaths per one thousand people per year.

- **Environmental education:** It is a process of recognizing values and clarifying concepts relating to the environment and its problems.

- **Human rights:** Every human being is entitled to some basic rights, which are neither created nor can be withdrawn from them. These rights are commonly known as human rights.

3.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Population explosion implies an alarming increase in population resulting in low level of living, i.e., inadequate food, education, health and other necessities of life.

2. Two objectives of population education include: (a) To create among the students and the teachers an awareness about the population situation in the country and the strategies adopted to meet this critical situation. (b) To help children realize the socio-economic burden involved in bringing up large families usually resulting in deterioration in quality of living.

3. Environmental education is a process of recognizing values and clarifying concepts relating to the environment and its problems. The aim is to develop skills and attitudes necessary to understand the environment.

4. One curricular pattern for environmental eduction advocated most often includes: Multidisciplinary Approach: Where components are drawn from two or more academic disciplines and focussed sequentially on a single topic.

5. In 1974, the government passed a law for the prevention and control of water pollution and set up a Central Water Pollution Board.

6. Non-formal education is not an alternative to the formal education system. It is a support system or a support service to the formal education system to realize the goal of Universalization of Elementary Education (UEE).

7. FLAW is the abbreviation for Functional Literacy for Adult Women and it was started in 1975-76.

8. The Universal Declaration of Human Rights was implemented on 10 December 1948 and is officially recognized by most countries.

9. Political rights refer to the right to vote and nominate for public office, right to form and join political parties.

10. Karel Vasak was the first secretary general of the International Institute of Human Rights.

3.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. Define population education. What are the objectives of population education?

2. What are the causes of population explosion in India?

3. Environmental education should be targeted towards which group or groups?

4. What do you understand by non-formal education? State some of its essential features.

5. What is the meaning and significance of human rights?

Long-Answer Questions

1. Discuss the need for population education.

2. Describe the history of environmental education. What are the objectives of environmental education?

3. Describe, with the help of diagrams, the two models of environment education as suggested by UNESCO.

4. Explain the role of teachers in environmental education.

5. Discuss briefly the history of adult education in India.

6. Describe the various sources of human rights.

3.10 FURTHER READING

Pandey, V. C. (ed.) 2006. *Population Education*. New Delhi: Isha Books.

Kumar De, Anil. Arnab, Kumar De. *Environmental Education*. New Delhi: New Age International Publishers.

Bajaj, Monisha. 2012. *Schooling for Social Change: The Rise and Impact of Human Rights Education in India.* London: Bloomsbury.

UNIT 4 VARIOUS CONCERNS IN HIGHER EDUCATION

Structure

4.0 INTRODUCTION

Education is a tool that can play a vital role in improving the socio-economic condition of the nation. It empowers citizens with analytical abilities, leads to better confidence levels and fortifies one with will power and goal setting competencies. Education involves not only textbook learning but also a growth of values, skills and capacities. This helps individuals to plan for their career as well as play a useful part in building a new society with progressive values. Hence, education results in changing both individual lives as well as that of the entire community for the better.

The education sector has been of vital importance to the Indian Government which has been regularly formulating provisions and schemes for promoting elementary education. The Right to Education (RTE) has also been enshrined as a Fundamental Right by the Constitution of India. It states that 'The State shall provide free and compulsory education to all children of the age of six to fourteen years in such a manner as the State may, by law, determine.'

To promote literacy among its citizens, the Government of India has launched several schemes such as the Kasturba Gandhi Balika Vidyalaya Scheme, Mid-day Meal Scheme and the National Program for Education of Girls at Elementary Level (NPEGEL). One of the most fundamental and promising of these schemes is the Sarva Shiksha Abhiyan, which will be discussed in this unit. You will also learn about Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Rashtriya Uchchatar Shiksha Abhiyan (RUSA), quality in higher education, expansion of higher education and equity in higher education.

4.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss the objectives and importance of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Rashtriya Uchchatar Shiksha Abhiyan (RUSA)
- Explain quality in higher education and the Indian approach to quality enhancement
- Describe the steps taken to expand higher education in India
- Understand equity in higher education

4.2 UEE, RMSA, RUSA

Now, let us study some of the education related schemes in India.

Universalisation of Elementary Education (U.E.E.) is an educational term which refers to make education available to all children in the age group of 6-14 or in classes I-VII. It means the education for every child to complete the stage of Elementary or Primary education either by formal or non-formal means of education. It signifies that education is for all and not for a selected few. This concept accepts that education is the birth right of every child. This means all children belonging to the rich and the poor living in towns as well as rural areas or hills and plains, which are accessible with difficulty; have to be provided with facilities for elementary education. In short, universalisation of elementary education is the educational provision for all children to educate elementary education without any dropouts. Universalisation of elementary education also means free and compulsory elementary education for all children till they complete 14 years of age. Universalisation of Elementary Education involved the three years stages or steps, which are Universalisation of Provision, Universalisation of Enrolment, and Universalisation of Retention.

(a) Sarva Shiksha Abhiyan (SSA)

The Sarva Shiksha Abhiyan is the Government of India's flagship programme for achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory education to children of 6-14 years age group, a Fundamental Right.

SSA has been operational since 2000-2001 to provide for a variety of interventions for universal access and retention, bridging of gender and social category gaps in elementary education and improving the quality of learning. SSA interventions include inter alia, opening of new schools and alternate schooling facilities, construction of schools and additional classrooms, toilets and drinking water, provisioning for teachers, regular teacher in service training and academic resource support, free textbooks and uniforms and support for improving learning achievement levels /

outcome. With the passage of the RTE Act, changes have been incorporated into the SSA approach, strategies and norms. The changes encompass the vision and approach to elementary education, guided by the following principles:

- Holistic view of education, as interpreted in the National Curriculum Framework 2005, with implications for a systemic revamp of the entire content and process of education with significant implications for curriculum, teacher education, educational planning and management.

- Equity, to mean not only equal opportunity, but also creation of conditions in which the disadvantaged sections of the society – children of SC, ST, Muslim minority, landless agricultural workers and children with special needs, etc. – can avail of the opportunity.

- Access, not to be confined to ensuring that a school becomes accessible to all children within specified distance but implies an understanding of the educational needs and predicament of the traditionally excluded categories – the SC, ST and other sections of the most disadvantaged groups, the Muslim minority, girls in general, and children with special needs.

- Gender concern, implying not only an effort to enable girls to keep pace with boys but to view education in the perspective spelt out in the National Policy on Education 1986 /92; i.e. a decisive intervention to bring about a basic change in the status of women.

- Centrality of teacher, to motivate them to innovate and create a culture in the classroom, and beyond the classroom, that might produce an inclusive environment for children, especially for girls from oppressed and marginalised backgrounds.

- Moral compulsion is imposed through the RTE Act on parents, teachers, educational administrators and other stakeholders, rather than shifting emphasis on punitive processes.

- Convergent and integrated system of educational management is pre-requisite for implementation of the RTE law. All states must move in that direction as speedily as feasible.

(b) Rashtriya Madhyamik Shiksha Abhiyan (RMSA)

This scheme was launched in March, 2009 with the objective to enhance access to secondary education and to improve its quality. The implementation of the scheme started from 2009-10. It is envisaged to achieve an enrolment rate of 75 per cent from 52.26 per cent in 2005-06 at secondary stage of implementation of the scheme by providing a secondary school within a reasonable distance of any habitation. The other objectives include improving quality of education imparted at secondary level through making all secondary schools conform to prescribed norms, removing gender, socio-economic and disability barriers, providing universal access to secondary level education by 2017, i.e., by the end of 12th Five Year Plan and achieving universal retention by 2020.

Important physical facilities provided under the scheme are:

(i) Additional class rooms, (ii) Laboratories, (iii) Libraries, (iv) Art and crafts room, (v) Toilet blocks, (vi) Drinking water provisions and (vii) Residential Hostels for Teachers in remote areas.

Important quality interventions provided under the scheme are:

(i) Appointment of additional teachers to reduce PTR to 30:1, (ii) Focus on Science, Math and English education, (iii) In-service training of teachers, (iv) Science laboratories, (v) ICT enabled education, (vi) Curriculum reforms; and (vii) Teaching learning reforms.

Important equity interventions provided in the scheme are:

(i) Special focus in micro planning (ii) Preference to Ashram schools for upgradation (iii) Preference to areas with concentration of SC/ST/Minority for opening of schools (iv) Special enrolment drive for the weaker section (v) More female teachers in schools; and (vi) separate toilet blocks for girls.

Implementation mechanism of the Scheme

The scheme is being implemented by the State government societies established for implementation of the scheme. The central share is released to the implementing agency directly. The applicable State share is also released to the implementing agency by the respective State Governments.

Revision of Certain Norms of the Scheme

The Government of India has approved the following revised norms of RMSA, with effect from 01.04.2013:

- To permit State/UT Governments to use State Schedule of Rates(SSOR) or CPWD Rate, (whichever is lower) for construction of civil works permissible under the RMSA.

- To increase the Management, Monitoring Evaluation and Research (MMER) from 2.2 percent to 4 percent of the total outlay under the programme, with 0.5 percent of the 4 percent earmarked for national level and the rest of the 3.5 percent as part of the State allocation. In cases of States where even with this enhanced allocation of 3.5 percent MMER would not be adequate and would hamper the activities under the head, within the 3.5 percent of the overall State MMER component; variations across State/UTs can be approved by the PAB, subject to a maximum of 5 percent of the outlay in any particular State/UT.

- To subsume the other Centrally Sponsored Schemes of Secondary Education– Information and Communication Technology (ICT) @ School, Girls' Hostel, Inclusive Education for Disabled at Secondary Stage(IEDSS) and Vocational Education(VE) in their existing form under the Umbrella of RMSA.

- To extend the benefits of RMSA to aided Secondary Schools (excluding infrastructure support/core areas, i.e. Teacher's salary and Staff salary) for

quality interventions as per RMSA umbrella schemes components for aided schools.

- To continue existing fund sharing pattern of 72:25 for the remaining of the 12th Plan the period for non-NER States and 90:10 for NER States (including Sikkim).

- To authorize the RMSA Project Approval Board (PAB) of the Ministry of Human Resource Development to consider for approval Integrated Plan of the umbrella scheme of RMSA, including the four subsumed Centrally Sponsored Schemes of Secondary Education.

- To authorize the release of funds to the RMSA State Implementation Society directly for all components of the RMSA umbrella scheme.

(c) Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

Rashtriya Uchchatar Shiksha Abhiyan is a centrally sponsored scheme launched in 2013 aims at providing strategic funding to eligible state higher educational institutions. The central funding (in the ratio of 60:40 for general category States, 90:10 for special category states and 100% for union territories) would be norm based and outcome dependent. The funding would flow from the central ministry through the state governments/union territories to the State Higher Education Councils before reaching the identified institutions. The funding to states would be made on the basis of critical appraisal of State Higher Education Plans, which would describe each state's strategy to address issues of equity, access and excellence in higher education.

Objectives

The salient objectives of RUSA are to:

- Improve the overall quality of state institutions by ensuring conformity to prescribed norms and standards and adopt accreditation as a mandatory quality assurance framework.

- Usher transformative reforms in the state higher education system by creating a facilitating institutional structure for planning and monitoring at the state level, promoting autonomy in State Universities and improving governance in institutions.

- Ensure reforms in the affiliation, academic and examination systems.

- Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels of employment.

- Create an enabling atmosphere in the higher educational institutions to devote themselves to research and innovations.

- Expand the institutional base by creating additional capacity in existing institutions and establishing new institutions, in order to achieve enrolment targets.

- Correct regional imbalances in access to higher education by setting up institutions in unserved & underserved areas.

- Improve equity in higher education by providing adequate opportunities of higher education to SC/STs and socially and educationally backward classes; promote inclusion of women, minorities, and differently abled persons.

Components

RUSA would create new universities through upgradation of existing autonomous colleges and conversion of colleges in a cluster. It would create new model degree colleges, new professional colleges and provide infrastructural support to universities and colleges. Faculty recruitment support, faculty improvements programmes and leadership development of educational administrators are also an important part of the scheme. In order to enhance skill development the existing central scheme of Polytechnics has been subsumed within RUSA. A separate component to synergise vocational education with higher education has also been included in RUSA. Besides these, RUSA also supports reforming, restructuring and building capacity of institutions in participating state.

The following are the primary components of RUSA that capture the key action and funding areas that must be pursued for the fulfilment of the targets:

- Upgradation of existing autonomous colleges to Universities
- Conversion of colleges to Cluster Universities
- Infrastructure grants to Universities
- New Model Colleges (General)
- Upgradation of existing degree colleges to model colleges
- New Colleges (Professional)
- Infrastructure grants to colleges
- Research, innovation and quality improvement
- Equity initiatives
- Faculty Recruitment Support
- Faculty improvements
- Vocationalisation of Higher Education
- Leadership Development of Educational Administrators
- Institutional restructuring & reforms
- Capacity building & preparation, data collection & planning

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CHECK YOUR PROGRESS

1. What is the main objective of Rashtriya Madhyamik Shiksha Abhiyan (RMSA)? When was it launched?
2. State any one objective of Rashtriya Uchchatar Shiksha Abhiyan (RUSA).

4.3 QUALITY IN HIGHER EDUCATION

The meaning assigned to quality differs with context. Quality of life, for example, has a somewhat abstract connotation covering varied aspects like health, education, living conditions, the physical environment and the mental state. The quality of a product, on the other hand, can be described in terms of prescribed standards that are easily measurable. Thus, quality has a philosophical and pragmatic aspect (Rona-Tas, 2001). While discussing quality in higher education, it may be necessary to consider both these aspects.

Germane to a realistic approach to the subject of quality in higher education is the proper comprehension of the term 'quality'. It has to be recognized that quality means different things to different people (Sallis, 1993; Green and Harvey, 1993; Green, 1994). And with the number of stakeholders in higher education being varied–students, parents, teachers, educrats, bureaucrats, prospective employers, economic research groups, research and development institutions and the community–the matter may become both complex and confusing. The focus of students may be on the facilities provided, of teachers on the teaching-learning process, of parents on the overall ethos and the grades or scores achieved, of educrats and bureaucrats on the efficiency of the education system, of future employers on the 'employability' of the graduates and of society-at-large on the prospect of students becoming responsible citizens.

Green and Harvey (1993) have identified the following five different approaches to quality:

- In terms of the exceptional (highest standards)
- In terms of consistency (without defects and getting it right the first time)
- As fitness for purpose
- As value for money
- As a transformative (transformation of the participants)

Of these five approaches, the two that appeal the most are 'fitness for purpose' and 'value for money'. Industry, business, research institutions and even governments would probably classify as 'good' those universities and colleges that provide graduates who fit into their activities with the minimum amount of training/orientation. However, in the present knowledge era, when higher education is fast becoming a business, most students, and their parents, would most likely identify quality with 'value for money'. With public funds becoming scarce, and fees spiralling, for these stakeholders, quality education is one that ensures employment, a quick return on the money 'invested', and continued income thereafter. Governments, at least when justification of public expenditure is required, fall back upon performance indicators like number of graduates, completion rates and first destination in employment. This suggests a leaning towards value for money.

Rona-Tas (2001) argues that the modern society focusses on creating, sustaining and improving the quality of life. Therefore, good higher education is that

which optimally contributes to the betterment of the quality of life. Good quality education should produce individuals who are capable of:

- Working with maximum effectiveness and thereby contributing to the economy
- Making effective use of, and also generating, knowledge for the 'knowledge society'
- Developing individuals having the capacity to enhance social and cultural values

The real indicator of quality is, however, the value added to the product, in this case, the graduating student.

In higher education, the concept of quality has been drawn from industry. The British Standard BS 5700, its international equivalent ISO 9000 and Indian equivalent IS 14000, have attracted the attention of academics. Indian institutions in professional disciplines have started flaunting their ISO 9000 certifications. The rationale for obtaining the ISO 9000 is that there are many activities in technical education that can be equated with those in manufacturing or servicing units. The definition of quality, as used in these and related standards is, therefore, important. They define 'quality' as 'the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs' (Bureau of Indian Standards, 1988). In the present social and economic milieu, this definition of quality will appeal to many in the field of education, and especially to those students who join universities only to acquire professional skills and training that will establish them in the employment market. It may, however, be argued that in education, the assessment of quality cannot be only student-oriented for it is mainly society that largely pays for the operation of the education system. The views of other constituents of society also need to be considered (Henderikx, 1992). It is because of this, perhaps, that the approach to quality of education, favoured by most educators, is that of 'fitness for purpose', or 'value for money'.

The Indian Approach to Quality Enhancement

Since India attained Independence in 1947, rigorous efforts have been made in the country for the enhancement of quality of higher education. Various measures have been delineated in policy documents of the government including, for example, the Report of the Education Commission (1964-66), the National Policy on Education, 1986, the Programme of Action 1986, and Programme of Action, 1992 (Government of India, 1966, 1986a, 1986b, 1992). The responsibility of assuring quality is basically that of the University Grants Commission (UGC) and the different statutory bodies dealing with professional education. The University Grants Commission Act, 1956, empowers the UGC to take 'all such steps as it may think fit for promotion and coordination of university education and for determination and maintenance of standards in teaching, examination and research in the universities' (University Grants Commission, 1994). In keeping with this objective, the UGC has formulated and issued, from time to time, guidelines and regulations related to:

- Minimum infrastructure facilities to be fulfilled before a university is declared fit for central assistance

- Minimum infrastructure facilities to be fulfilled before the grant of affiliation to a college by a university

- Essential qualifications for the appointment of lecturers, readers and professors

- Workload of teachers, duration of courses, and minimum number of teaching days for first-degree programmes

- Schedule of academic events

- Evaluation and assessment of performance of teachers

Over the years, the University Grants Commission has been providing funds to ensure that the higher education institutions in the country have the minimum infrastructure and facilities, and adequate human resources in terms of the teaching, technical and administrative staff. It has also formulated various guidelines and regulations for the maintenance of standards. A major deterrent to its effort is that less than one-fifth of the 26,000-odd colleges are recognized under Section 12(B) of the University Grants Commission Act, 1956, and, therefore, eligible for financial assistance. The position regarding the universities is not much better. Out of the 529 universities, only 164 are provided with development assistance under plan grants and have access to other financial support from the UGC. The plan assistance is for staff, equipment, books and journals, buildings, campus development and approved programmes. During the Tenth Five-Year Plan, the UGC disbursed ₹481.13 crore (15 per cent of total allotment) for quality and excellence (University Grants Commission, 2008).

In order to bring about a qualitative improvement in teaching at the undergraduate level, the UGC adopted, in 1974-75, the College Science Improvement Programme (COSIP) and the College Humanities and Social Science Improvement Programme (COHSSIP) under which colleges were provided with special grants for the development of infrastructure.

A scheme of autonomous colleges was introduced in 1986 under which select colleges that enjoy a reputation for academic excellence have been given the freedom to develop their courses and syllabi, and to evolve methods of evaluation and conduct of examinations. At the end of 2009, the number of autonomous colleges was 324 in 17 states. A proposal under consideration related to the recognition of Empowered Colleges that will further have the right to confer degrees and diplomas.

In the late 1980s, the UGC established Curriculum Development Centres in 28 subjects. These centres prepared model curricula in their respective subjects. The model curricula thus developed were recommended to the universities for adoption. A second cycle of the preparation of model curricula was completed in 2001 and it is now more or less mandatory for the universities to adopt these curricula with small modifications, as necessitated by local needs.

The pivotal role played by teachers in the upgradation of quality teaching and learning has long been appreciated in India. The National Policy on Education, 1986 (Government of India, 1986) recognized the importance of staff development and in

the Programme of Action, 1992 (Government of India, 1992) made a reference to the critical link between teacher motivation and the quality of education. It noted, 'the present system does not accord teachers proper orientation in concept, technique and value-system to fulfil their role and responsibilities.' It, therefore, proposed, amongst other things, the organization of *(i)* specially designed orientation programmes in teaching methodologies, pedagogy, educational technology, etc., for all new entrants at all levels, *(ii)* refresher courses for serving teachers to cover every teacher at least once every five years. The UGC Committee Report on the revision of pay-scales of teachers of universities and colleges (University Grants Commission, 1986) also emphasized the importance of providing opportunities for professional development. Accepting these recommendations, the University Grants Commission initially established 48 Academic Staff Colleges in different universities throughout the country at the beginning of the Seventh Five-Year Plan period (1985-90)**.** The number has since risen to 57. These colleges have been assigned the responsibility of organizing orientation courses and refresher courses of a minimum of three weeks' duration.

In order to foster excellence in research, the UGC has devised a Special Assistance Programme under which selected departments in the faculties of science, humanities, social sciences, and engineering and technology are accorded support at three different levels. These are Departmental Research Support (DRS) that can be successively upgraded to grant to the departments the status of Departments of Special Assistance (DSA) and finally, Centres of Advanced Studies (CAS). The UGC also aids departments in the procurement of sophisticated and expensive equipment under a scheme put in place by the Committee for Strengthening of Infrastructure in Science and Technology (COSIST). New programmes introduced during the Ninth and Tenth Five-Year Plans include those for Strengthening of Infrastructure for Science and Technology (ASIST) and Strengthening of Infrastructure Humanities and Social Sciences (ASIHSS). For improvement of quality and excellence, the UGC has identified for substantial funding Universities with Potential for Excellence and Colleges with Potential for Excellence.

The UGC has established six autonomous Inter-university Centres for providing common facilities, services and programmes in frontier areas. The centres are the Nuclear Science Centre, New Delhi; Inter-university Centre for Astronomy and Astrophysics, Pune; Inter-university Consortium for Department of Atomic Energy Facilities, Indore; Consortium for Educational Communication, New Delhi; Information and Library Network Centre (INFLIBNET), Ahmedabad and the Inter-university Centre for International Studies, Hyderabad. In addition to these, the UGC has set up national facilities in different universities. These include the Western Regional Instrumentation Centre at University of Mumbai, Mumbai; the Regional Instrumentation Centre at Indian Institute of Science, Bengaluru; the Crystal Growth Centre at Anna University, Chennai; the M S T Radar Centre at Sri Venkateswara University, Tirupati; the Inter-university Centre for Humanities and Social Sciences at Indian Institute of Advanced Study, Shimla.

In order to promote excellence in technical education, the All India Council for Technical Education (AICTE) has introduced a Technical Education Quality Improvement Programme (TEQIP) under which well-performing technical institutions will be developed into 'Excellent Institutions' of world-class standard (Lead Institutions). These Lead Institutions will then network with four to six institutions in the neighborhood (Network Institutions) to bring about overall quality improvement.

Financial assistance can also be sought by departments in the universities from the Department of Science and Technology (DST), Government of India, from a 'Fund for Improvement of Science and Technology Infrastructure in Higher Educational Institutions (FIST)'. The DST realizing the need to provide researchers in universities access to sophisticated analytical instruments has, through its Sophisticated Analytical Instrument Facilities (SAIF) Programme, set up 12 Regional Sophisticated Instrumentation Centres (RSICs) in universities. These are functioning at the Indian Institute of Technology Madras, Chennai; Indian Institute of Technology Bombay, Mumbai; Bose Institute, Kolkata; Central Drug Research Institute, Lucknow; Punjab University, Chandigarh; North Eastern Hill University, Shillong; Nagpur University, Nagpur; Sardar Patel University, Vallabh Vidyanagar; Indian Institute of Science, Bengaluru; All India Institute of Medical Sciences, New Delhi; Gauhati University, Guwahati; and Indian Institute of Technology, Roorkee.

Two important agencies that monitor quality (both established in 1994) are the National Assessment and Accreditation Council (NAAC) under the University Grants Commission and the National Board of Accreditation (NBA) under the All India Council for Technical Education. While the NAAC does institutional assessment of mainly conventional universities and colleges, the NBA is involved in programme assessment in professional institutions. The responsibility of promotion and coordination of educational programmes in the distance education system is that of the Distance Education Council of the Indira Gandhi National Open University (DEC-IGNOU). The responsibility of maintaining standards in different professional disciplines is that of the various statutory councils that have been established through Acts of Parliament. These include the All India Council for Technical Education (AICTE), Council of Architecture (CA), Bar Council of India (BCI), Medical Council of India (MCI), Pharmacy Council of India (PCI), Indian Nursing Council (INC), Dental Council of India (DCI), Central Council for Homeopathy (CCH), Central Council for Indian Medicine (CCIM), Veterinary Council of India (VCI) and Rehabilitation Council of India (RCI).

CHECK YOUR PROGRESS

3. Write down any two guidelines formulated by UGC to ensure quality education.

4. What programme has AICTE introduced to promote excellence in technical education?

4.4 EXPANSION OF HIGHER EDUCATION

The overall demand for higher education, adult education, and professionally related courses, is increasing in developing countries like India. The changing demographics, the increased number of secondary school pass-outs, desire for continual learning, and the growth of the information technology are a few important reasons for this change. While demand in education sector is growing, the ability of the traditional institutions needs to be enhanced to meet this requirement. The students, especially in higher education, need to be well equipped to succeed in the complex global environment, where the employers expect their employees to analyse and to find solutions to the problems from multiple perspectives. Universities are adopting various plans, policies and strategies to internationalize education in response to such emerging global demands.

The internationalization of education has been defined by UNESCO as: "It is higher education that takes place in situations where the teacher, student, programme, institution or provider and course materials cross-national jurisdictional borders. Cross-border education may include higher education by public or private and not-for-profit/ for-profit providers. It encompasses a wide range of modalities in a continuum from face-to-face (taking various forms from students travelling abroad and campuses abroad) to distance learning (using technologies and including e-learning)."

In the arrangement of distance education, the educational institutions deliver educational programmes/courses to students all over the globe online. It may include some face-to-face support for students through domestic study centres. Higher Education in India has expanded many folds in last few decades. The number of universities has increased from 20 in 1947 to 378, and students' population in higher education from 1 lakh in 1950 to over 112 lakh in 2005. The growth in capacity of higher education has improved enrollment ratio from fewer than 1 per cent in 1950 to more than 10 per cent. Nowadays, education providers include public non-profit, private non-profit, and private for-profit institutions. There is, in general, only a virtual boundary between public and private institutions. This is because many public universities in India now look for private financing and charge a tuition or service charge. On the other hand, private institutions are eligible for public funds and engage in social non-profit actions.

In India, the expansion of public universities has been slow and distorted at regional distribution. Many universities, managed by the state governments have many affiliating colleges; and academic issues are not properly managed. Thus, there is need for expansion in the number of institutions, with the focal point being quality of education. Post-liberalization period of 1990s, today the count of the private higher education institutes is continuously increasing. These institutes are business houses providing education programmes or services for profit and only impart education and training programmes; and do not undertake research.

In 2001, the Association of Indian Universities conducted a Round Table on 'Internationalization of Indian Higher Education' at the University of Mysore to discuss the mechanisms to promote internationalization of Indian higher education at

selected universities. They adopted a statement (Mysore Statement), which pointed out that 'internationalization would lead to an improvement in the quality of education, promote Indian culture abroad, produce understanding and yield financial benefits'. It also recognized that 'partnership and networking are essential to enrich the teaching and learning processes', and in improving the quality of research. It resolved that 'the government, academic institutions and the Association of Indian Universities' should take necessary steps to promote Indian higher education internationally.

The Committee recommended following actions to the Government of India:

- Take suitable action to promote Indian culture abroad.

- Allow Indian universities to open offshore campus abroad. Amend the University Grants Commission Act, 1956, and the Acts of other statutory councils to include a specific provision allowing universities to open offshore campuses and export Indian education through the distance.

- Simplify the procedures about registration, entry test need, issue of 'No Objection Certificate' and the issue and extension of visas.

- Indian Embassies and High Commissions abroad must play a role in providing information about higher education available in India. They should help in the conduct of fairs, entrance examinations and student recruitment.

- Frame an open-door policy for financing students.

- They recommended creation of a central website to strengthen the information base and spread of information.

- Government and other statutory bodies' should grant greater autonomy and flexibility to universities to admit foreign students and to enter collaborative arrangements with foreign institutions.

- Create a Task Force including representatives of different bodies like UGC, All India Council for Technical Education and Medical Council of India for admitting students to different professional programmes.

- The government should consider extending financing for international education. This will enable institutions providing financial aid to Indian students going abroad, to foreign students coming to India and to educational institutions wishing to develop infrastructures for international education.

- There should be a suitable means to watch the standard of education given by foreign universities.

India has many advantages for continuing its internationalization of education. India ranks third, after USA and China, at having a large and diverse higher education system, with more than 10 million students in about 16,000 institutions. In India, formal programmes/training courses are available in almost all sectors needed for development, ranging from philosophy to information technology. The cost of education in India is fairly low. Most of the higher education institutes use English (the universal language) as the medium of instruction. Some Indian institutes like Centre for English and Foreign Languages at Hyderabad, have set up offshore campuses India also has non-university post-secondary institutions that provide

specialized training for the diverse needs in education. Many job-oriented private and corporate institutions, like NIIT and Aptech, work as ancillary educational providers and are quite successful. Availability of seats in higher education institutes is also high in India due to the arrival of national private providers in the education sector.

The demand for international education is very high, and to cater these needs, Indian institutions have started to taking new initiatives. Besides traditional providers of higher education, new knowledge providers from business houses have started developing innovative models for delivery of higher education. India needs to have a policy towards private higher education, including foreign universities desirous of setting up campus in India.

The concerns for education represent a sort of catalogue of problems and issues relating to instructional technology. These can be briefly listed as follows:

(i) The population explosion implies more students and fewer teachers, and the necessity for new educational arrangements.

(ii) The information explosion, which presents great problems in curriculum construction and requires greater efforts in increasing the efficiency of teaching and learning.

(iii) Education is seen as the main weapon in the war on poverty, for example, and the requirements of such an educational war include new methods and techniques to reach people.

(iv) The urge to raise the quality of life for all, which, in turn, requires raising the quality of education even though the institution is pressed on all sides by population, knowledge and various kinds of special demands. This situation also sets a requirement for a more efficient educational process.

(v) Research and development of all aspects of education have generated more knowledge about the process and the institution as part of the general knowledge explosion. From this situation rises a drive to introduce all kinds of innovations, most of them relating to instructional technology into the educational system. Practice in education has, until the last few years, lagged about 50 years behind research and theory. Today, the process of educational innovation itself is under study in an effort to speed up the rate of change.

(vi) The need for education and re-education and for training and retraining of manpower to meet individual personal needs and national needs increases as society becomes more automated and technologically sophisticated.

Nowadays, 'systems approach' in education has to be developed. The systems concept in education is related both to materials and to hardware, and also to certain psychological and philosophical concepts. Technically, if we consider such expressions as the educational system, the school system, and the state system of higher education, then an instructional system is a sub-system. One way to understand the developing instruction system is to approach it through the materials of instruction.

Strengthening of library services adds to the technological capital available to educational institutions, for example, library services comprising study and text materials other than books. Supplementary educational centres need to be developed. These need to conceived very broadly in the Indian education system.

The principal site of education innovation need to change from the lower levels of the school system to higher education. Universities, while sources of innovation for the whole culture, have made drastic changes in their own procedures, particularly teaching procedures.

The processes of analysis, synthesis and systematization are some of the power tools of India's new order scientific-technological educational society. The age of analysis in which we live is generating an age of assessment in education. Thus, we have a campaign developing for a national assessment programme. Further, another sign of the analysis–synthesis–system approach to evaluation in education is the continual invention, development and refinement of instruments for use in evaluation processes.

4.4.1 Eleventh Five-Year Plan and Higher Education

The main objective of the Eleventh Five-Year Plan was to raise the standard of higher education (general, vocational, technical and management). For the expansion of higher education, open education were to be expanded, and self-financed higher education institutions were to be promoted. And for the upliftment of higher education, new courses were to be started and all the curricula were be updated. It proposed the establishment of 16 new central universities in the financial year 2008–09. The Plan also proposed to establish 3 new Indian Institute of Technology (IIT) in the financial year 2008–09. Besides, the government declared to encourage foreign investment in the field of higher education.

The government pledged to raise public spending on education to 60 per cent of GDP. For accelerating public expenditure, the Central Budget 2004 introduced a cess of 2 per cent on major central taxes/duties for elementary education and Budget 2007 a cess of 1 per cent for secondary and higher education. In the Eleventh Plan, Central Government envisages an outlay of about ₹ 2.70 lakh crore at current price (₹ 2.37 lakh crore at 2006–07 price) for education. This is a fourfold increase over the Tenth Plan allocation of ₹ 0.54 lakh crore at 2006–07 price. The share of education in the total Plan outlay will correspondingly increase from 7.7 per cent to 19.4 per cent. Around 50 per cent of the Eleventh Plan outlay is for elementary education and literacy, 20 per cent for secondary education, and 30 per cent for higher education (including technical education).

The higher education sector has witnessed a brisk rate of increase in the last few years. CABE Committee on Financing of Higher Education concluded on the basis of international experience that an enrolment rate of 20 per cent or more is consistent with a turnaround in economic performance. A number of alternative estimates also show that the higher education sector in the country would need to expand at a rapid rate in order to meet the needs of an economy, which is poised to grow at a rate of nine per cent or more. This has also been stressed by the Approach Paper in the Eleventh Plan.

However, the higher education sector currently faces major challenges of quality and excellence, and of improving access with inclusiveness. The quality of education in the sector is uneven with large segments, both in the government-financed and private unaided sector, showing very poor standards. In the public-funded sector, these problems are largely related to the number and quality of teachers and availability of infrastructure. Secondly, the sector is ill equipped to face the challenge of inclusion due to a number of reasons. There are large disparities in enrolment rates across states—urban and rural areas, or poor and non-poor. Apart from changes in the policy framework, this itself demands higher investment in the field of higher education in backward and rural areas, along with promotion of schemes that can help inclusion and simultaneously expand enrolment.

There are large variations in the estimates of enrolment according to various sources of data, leading to various base level scenarios. At present, the Ministry of Human Resource Development compiles detailed enrolment data, by types of courses, based on data provided by states and councils of education. These are published annually in the Selected Educational Statistics (SES). This is the most comprehensive annual source for data on enrolment in higher education.

A projection of the growth rate of enrolment in the 1991 and 2001 Census provides an estimate of total enrolment in higher education of 2.07 crore or a GER of 15.6 per cent. With the proposed Eleventh Plan target, the total enrolment is estimated to increase to 2.97 crore (increase of 90.7 lakh) and the GER to 20.6 per cent in the terminal year of the Eleventh Plan. The Census estimates may be treated as upper bound estimates, covering both the formal and informal, public and private systems, as also recognized diploma and certificate education.

The various enrolment estimates provide some break-up of enrolment by streams. Almost all the estimates show that the technical/professional stream in education has grown at a much faster rate in recent years—varying from 1.5 times (SES) to nearly double (NSS). This is also consistent with the changing demand of the economy. Hence, the composition of enrolment is likely to change over the Eleventh Plan period. Estimates that have been prepared reflect this change. Thus, the share of technical and professional education is expected to change from 25 to 30 per cent over the Eleventh Plan period in the formal sector alone. Since technical education is separately provided for in the budgets, the estimates of financial requirements here are projected only for general education.

Enrolment on private unaided education is projected to increase to 16 per cent of total enrolment by 2006–07 and 20 per cent of total enrolment by 2011–12. The share of private education in technical education however, was projected to touch 60 per cent by the end of the Plan.

Given the overall policy of expansion of the universities in the Plan, it is absolutely critical that universities should be provided with adequate level of support for each of the faculty member to conduct research so that standards improve and doctoral students are given reasonable training. To fulfil these objectives, the Plan proposed the following:

- To enhance the quality of teaching, learning and research, UGC should identify institution (colleges) offering postgraduate and research programmes and encourage them with liberal research grants and provide broadband and digital resources. Postgraduate and research departments should be encouraged to do more research and their workload (teaching) should be considerably reduced.

- Age limit for women teachers may be extended for award of research grants.

- Priority should be given to achieve maximization of the level of access to research journals and development of e-journals.

- Besides providing research grants directly to the faculty, steps may be considered to make provision for Research Associates, Teaching Assistants and Post-doctoral Fellows for universities. UGC can also extend matching grant for resources generated by a state university through consultancy work to build up corpus fund to promote further research.

- The universities need to link their teaching and research initiatives with manpower training programme and innovation and entrepreneurship.

- Research funds, not only from the University Grants Commission but from other funding agencies also, should be extended to the colleges. At least 200 undergraduate colleges in science, technology and social sciences should be provided additional assistance to develop them into colleges of excellence.

- There are a large number of sanctioned faculty positions in universities that have been lying vacant for a prolonged period. Inducting talented faculty with a view to strengthening the research base should expeditiously fill up these positions.

- About 1000 positions of Research Scientists at various levels equivalent to that of Lecturer, Reader and Professor need to be created.

- There is a need to create 10 networking centres in Basic Sciences (two centres each in Physical Sciences, Chemical Sciences, Life Sciences, Material Sciences and Mathematical Sciences) in leading Departments of Universities in different parts of the country to promote collaborative research, access to advanced facilities and training in frontier areas.

- Formal linkage between the Universities and national level institutions including CSIR laboratories be promoted through joint research projects and training.

- The system of both Winter and Summer Schools must be supported. Each subject area of Basic Sciences may offer up to 10 programmes a year. There should be a provision for visiting Fellowships for faculty within the country.

- The number of Ph.Ds from Indian universities should increase fivefold within a span of 10 years with proper standards.

- Every institutions of higher learning should earmark 5 per cent of its non-plan budget for the furtherance of research in basic sciences. About 10 per cent of the capital grant allocated to each university should be provided as annual maintenance grants towards spare parts, annual maintenance contracts, some add-on facilities and repairs etc. The overhead charges provided to the universities should be made uniform at 15 per cent.

- Special assistance should be provided to 10 selected universities to establish them as world-class premier universities in the country.

- Leading postgraduate teaching universities and NTs should be encouraged to impart undergraduate science education.

- Encouragement be given to interdisciplinary movement between Science and Technology streams and industrial R&D by establishing 20 Engineering Schools that admit students with a bachelor's degree in Sciences for a two-year B.Tech. Degree in selected areas requiring strong science technology interface.

- The competitive Grant System for Research and Development should be further strengthened.

- National Merit Scholarships should be provided for 1000 B.Sc. and 500 M.Sc. students.

- Research fellowships for Ph.D. students need to be enhanced.

- Meritorious doctoral students should be recognized through teaching assistantships with stipends over and above the research fellowships.

- Post-doctoral research culture must be promoted for improvements in R&D.

- Refresher courses need to be strengthened for improvement in quality of existing faculty.

- Meritorious scientists should be recognized by creating positions of National Professors.

- Working conditions for women in Science and Technology need to be improved, all major institutions of higher learning and research should have on campus crèches.

- Every faculty member of the University must be provided with the minimum contingency grant every year.

- About 50 per cent of the funding available in the competitive grant system of various government agencies should be specifically marked for universities. Research grant should only be used only for consumables, minor-spares, data collection and analysis, field studies and publications.

- All new faculty members in experimental areas should be given a start up grant to set up their research laboratories or to acquire the tools necessary for their research.

CHECK YOUR PROGRESS

5. What is cross-border education?
6. What was the main objective of the eleventh five-year plan?

4.5 EQUITY IN HIGHER EDUCATION

The Government of India has been adopting various measures like reservation of seats for scheduled castes and scheduled tribes for promoting access with equity. However, the desired results have not been obtained. As per data provided by government sources, the percentage of students belonging to the SC and ST categories was 12.40 per cent in 1957, which saw a downswing to 6.75 per cent by 1987 and then recovered to 12.05 per cent in 1996. It would perhaps be more relevant to consider access in terms of GER. According to National Sample Survey data for 2000 (also see Thorat, 2006), the GER was 6.43 in case of STs, 5.09 in case of SCs, 7.00 in case of OBCs and 16.74 in case of general category students.

A number of studies have been done relating to the status of underprivileged classes and the manner in which it can be improved (see Powar, 2001). A matter of fact is that the enrolment of SC, ST and OBC students is unsatisfactory and they have a very high drop-out rate of up to 80 per cent. Pinto (1998) attributes this to social, cultural and economic disparities, and the elitist culture and curriculum of universities. He has pleaded for a separate 'dalit' culture, with courses relevant to the backward classes. This move for separate universities and colleges and for separate courses has been opposed by Barik (1998) who asserts that assimilation of the disadvantaged groups into the mainstream through the provision of better opportunities and facilities is a more effective way. The latter suggestion is clearly to be preferred. Obviously, greater efforts will have to be made to promote inclusiveness if the underprivileged categories are to be brought to the level of the general category students.

Access, Equity and Quality

It has long been stressed that access to higher education must necessarily be linked to equity. In keeping with this expectation, the National Policy on Education, 1986 (Government of India, 1986) emphasizes the need to remove disparities and to equalize opportunities, especially for those sections of society that have been denied equality in the past. The categories that have been identified for special consideration by the Government of India include women, scheduled castes, scheduled tribes, backward classes, other backward classes as also educationally backward sections and

educationally backward areas. The basic affirmative action is through reservations of different types.

A mechanism for ensuring equity is massification of higher education. However, the popular understanding is that massification has led to a general fall in the quality of education. The World Bank-UNESCO Task force on Higher Education and Society (World Bank, 2000; Bloom and Rosovosky, 2001) placed this problem in its proper perspective when it stated:

> 'Higher Education Systems need to find a way of reconciling the dual values of excellence and equity (and access). In an ideal society, excellence is best promoted by policies that select society's most creative and motivated members for advanced education. But selection based on prior achievement will only reinforce a history of discrimination and under-achievement. Equally, programmes to increase equity will prove unsustainable if they are seen to undermine the standards of excellence on which higher education is based.'

The solution to this dilemma provided by the Task Force is 'to combine tolerance at the point of entrance with rigour at the point of exit. Protective efforts to attract promising members of the disadvantaged groups must be coupled with well-designed, consistently delivered remedial support.'

The strategy outlined is not new and many of its attributes have been put into practice in India. Thus, there is reservation of seats in academic institutions for members of disadvantaged groups (except women), the minimum eligibility requirements are lower for them and they are granted fee waiver and other support. There are, at least in a few places, remedial classes and additional coaching programmes. The inadequate success, in spite of these provisions, is another case of 'knowing what to do but not caring to do it properly'. What is essential is careful planning, judicial utilization of resources and commitment to the cause, with dedicated persons providing the motivation and thrust. There has to be a campaign to highlight the benefits that accrue from higher education, as well as careful search for talent and its nurturing. It has to be ensured that the drop-out rate falls appreciably. Remedial classes and additional tutoring must be introduced in every institution on a mandatory basis. These measures need to be supplemented by confidence-building strategies, and, if necessary, by incentives (Powar, 2001).

CHECK YOUR PROGRESS

7. What was the percentage of students belonging to SC, SC category in 1957?

8. What solution was provided by the task force to solve the dilemma of higher education?

4.6 SUMMARY

- The Sarva Shiksha Abhiyan (SSA) is the Government of India's flagship programme for achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory education to children of 6-14 years age group, a Fundamental Right.

- Rashtriya Madhyamik Shiksha Abhiyan (RMSA) was launched in March, 2009 with the objective to enhance access to secondary education and to improve its quality. The implementation of the scheme started from 2009-10. It is envisaged to achieve an enrolment rate of 75 per cent from 52.26 per cent in 2005-06 at secondary stage of implementation of the scheme by providing a secondary school within a reasonable distance of any habitation.

- Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a centrally sponsored scheme launched in 2013 aims at providing strategic funding to eligible state higher educational institutions. The central funding (in the ratio of 60:40 for general category States, 90:10 for special category states and 100% for union territories) would be norm based and outcome dependent.

- The meaning assigned to quality differs with context. Quality of life, for example, has a somewhat abstract connotation covering varied aspects like health, education, living conditions, the physical environment and the mental state. The quality of a product, on the other hand, can be described in terms of prescribed standards that are easily measurable. Thus, quality has a philosophical and pragmatic aspect (Rona-Tas, 2001). While discussing quality in higher education, it may be necessary to consider both these aspects.

- In higher education, the concept of quality has been drawn from industry. The British Standard BS 5700, its international equivalent ISO 9000 and Indian equivalent IS 14000, have attracted the attention of academics. Indian institutions in professional disciplines have started flaunting their ISO 9000 certifications. The rationale for obtaining the ISO 9000 is that there are many activities in technical education that can be equated with those in manufacturing or servicing units.

- Since India attained Independence in 1947, rigorous efforts have been made in the country for the enhancement of quality of higher education. Various measures have been delineated in policy documents of the government including, for example, the Report of the Education Commission (1964-66), the National Policy on Education, 1986, the Programme of Action 1986, and Programme of Action, 1992 (Government of India, 1966, 1986a, 1986b, 1992).

- Over the years, the University Grants Commission has been providing funds to ensure that the higher education institutions in the country have the minimum infrastructure and facilities, and adequate human resources in terms of the teaching, technical and administrative staff. It has also formulated various guidelines and regulations for the maintenance of standards.

- The pivotal role played by teachers in the upgradation of quality teaching and learning has long been appreciated in India. The National Policy on Education, 1986 (Government of India, 1986) recognized the importance of staff development and in the Programme of Action, 1992 (Government of India, 1992) made a reference to the critical link between teacher motivation and the quality of education.

- In order to foster excellence in research, the UGC has devised a Special Assistance Programme under which selected departments in the faculties of science, humanities, social sciences, and engineering and technology are accorded support at three different levels. These are Departmental Research Support (DRS) that can be successively upgraded to grant to the departments, the status of Departments of Special Assistance (DSA) and finally, Centres of Advanced Studies (CAS).

- In order to promote excellence in technical education, the All India Council for Technical Education (AICTE) has introduced a Technical Education Quality Improvement Programme (TEQIP) under which well-performing technical institutions will be developed into 'Excellent Institutions' of world-class standard (Lead Institutions). These Lead Institutions will then network with four to six institutions in the neighbourhood (Network Institutions) to bring about overall quality improvement.

- Two important agencies that monitor quality (both established in 1994) are the National Assessment and Accreditation Council (NAAC) under the University Grants Commission and the National Board of Accreditation (NBA) under the All India Council for Technical Education. While the NAAC does institutional assessment of mainly conventional universities and colleges, the NBA is involved in programme assessment in professional institutions.

- The overall demand for higher education, adult education, and professionally related courses, is increasing in developing countries like India. The changing demographics, the increased number of secondary school pass-outs, desire for continual learning, and the growth of the information technology are a few important reasons for this change.

- The main objective of the Eleventh Five-Year Plan was to raise the standard of higher education (general, vocational, technical and management). For the expansion of higher education, open education were to be expanded, and self-financed higher education institutions were to be promoted.

- The higher education sector has witnessed a brisk rate of increase in the last few years. CABE Committee on Financing of Higher Education concluded on the basis of international experience that an enrolment rate of 20 per cent or more is consistent with a turnaround in economic performance.

- There are large variations in the estimates of enrolment according to various sources of data, leading to various base level scenarios. At present, the Ministry of Human Resource Development compiles detailed enrolment data, by types of courses, based on data provided by states and councils of education. These

are published annually in the Selected Educational Statistics (SES). This is the most comprehensive annual source for data on enrolment in higher education.

- The Government of India has been adopting various measures like reservation of seats for scheduled castes and scheduled tribes for promoting access with equity.
- It has long been stressed that access to higher education must necessarily be linked to equity. In keeping with this expectation, the National Policy on Education, 1986 (Government of India, 1986) emphasizes the need to remove disparities and to equalize opportunities, especially for those sections of society that have been denied equality in the past.

4.7 KEY TERMS

- **Sarva Shiksha Abhiyan (SSA):** It is a programme for universalisation of Elementary Education covering the entire country. It was started in 2001.
- **Rashtriya Madhyamik Shiksha Abhiyan (RMSA):** It is a flagship scheme of Government of India, launched in March, 2009, to enhance access to secondary education and improve its quality.
- **Rashtriya Uchchatar Shiksha Abhiyan (RUSA):** It is is a Centrally Sponsored Scheme (CSS), launched in 2013 and aims at providing strategic funding to eligible state higher educational institutions.

4.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Rashtriya Madhyamik Shiksha Abhiyan (RMSA) was launched in March, 2009 with the objective to enhance access to secondary education and to improve its quality.

2. One of the objectives of Rashtriya Uchchatar Shiksha Abhiyan (RUSA) include improving the overall quality of state institutions by ensuring conformity to prescribed norms and standards and adopting accreditation as a mandatory quality assurance framework.

3. Two guidelines formulated by UGC to ensure quality education are:
   - Essential qualifications for the appointment of lecturers, readers and professors
   - Workload of teachers, duration of courses, and minimum number of teaching days for first-degree programmes

4. In order to promote excellence in technical education, the All India Council for Technical Education (AICTE) has introduced a Technical Education Quality Improvement Programme (TEQIP) under which well-performing technical institutions will be developed into 'Excellent Institutions' of world-class standard (Lead Institutions).

5. Cross-border education may include higher education by public or private and not-for-profit/ for-profit providers. It encompasses a wide range of modalities in a continuum from face-to-face (taking various forms from students travelling abroad and campuses abroad) to distance learning (using technologies and including e-learning).

6. The main objective of the Eleventh Five-Year Plan was to raise the standard of higher education (general, vocational, technical and management).

7. As per the data provided by the government sources, the percentage of students belonging to the SC, ST categories was 12.40 per cent in 1957.

8. The solution to the dilemma of higher education provided by the task force is 'to combine tolerance at the point of entrance with rigour at the point of exit.'

4.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What is Sarva Shiksha Abhiyan (SSA)?
2. What are the revised norms of Rashtriya Madhyamik Shiksha Abhiyan (RMSA)?
3. What is the Indian approach to quality enhancement in education?
4. Why is access, equity and quality required in higher education?

Long-Answer Questions

1. Discuss the objectives of Rashtriya Uchchatar Shiksha Abhiyan (RUSA) in detail.
2. Describe the various components of Rashtriya Uchchatar Shiksha Abhiyan (RUSA).
3. Explain the importance of higher education in the eleventh five-year plan.

4.10 FURTHER READING

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UNIT 5 E-LEARNING AND EVALUATION IN EDUCATION

Structure

5.0 INTRODUCTION

Today teaching and learning is no more confined to the traditional method of face-to-face interaction between the teacher and the student, heavily dependent on the print learning resources. Technology has completely revolutionized the way in which people interact with each other and at the same time has brought changes in the world around us. As a result of this, it is being openly recognized that use of technology as a tool is necessary for students and to ensure a bright future. Technological developments lead to changes in the way we work and, therefore, required competencies are also changing. The possibility of transforming learning has been greatly enhanced by the use of these technologies. With the rise of social media, education can be delivered in many versatile ways. Education technology is a new concept which has emerged during the last few decades only and revolutionized educational thinking and practice. Modern Educational Technology has its potential in present day schools, in the teaching of content to students, in the examination system, in research and development, in systemic reforms and above all, in the field of teacher education. This has resulted in overcoming many problems and now knowledge can be achieved online, anytime and anywhere.

Education technology can contribute immensely to the qualitative as well as quantitative improvement of education. The development of education technology would open up the prospect of creating and recreating new types of educational institutions in future, radically different in structure and function from traditional ones.

In this unit, you will study e-learning, uses of computer in evaluation, grading system and Choice Based Credit System (CBCS).

5.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss e-learning, its characteristics and advantages
- Describe the uses of computer in evaluation
- Explain the history of Internet
- Discuss the concept of grading system, its merits and limitations
- Describe Choice Based Credit System (CBCS) and its uses

5.2 E-LEARNING

Computers with their unimaginable working and functioning capacity coupled with a tremendous progress in the field of electronics and communication technology have yielded much power, abilities and capacities to human beings.

Teaching and learning that entirely happened to be a domain of the human factors—teacher and students—is now no longer limited to its traditional boundaries or ways. It has gradually turned into a subject of technological progress. Computer operation and networking have almost revolutionized the field of teaching and learning. Instead of the total dependency on the instructions imparted by the teachers and the subject matter available in the books, or other printed publications, the learners are now able to utilize the computer's database and networking facilities not only for seeking information but also for interacting with them online in the manner as happens in the real classroom encounters. Therefore, there is no exaggeration in saying that the future of education and classroom instructions lies to a great extent in the concept and practices of e-learning and virtual classrooms.

E-learning, or 'electronic learning', in general, may refer to all types of learning facilitated and supported through the use of information and communication technology; in real practical sense, its use is limited and associated nowadays with the field of advanced learning in learning using networking and/or multimedia technologies. In this sense, e-learning may call for the services of the advanced electronic information and communication media and means like CD-ROMs and DVDs, teleconferencing, video-conferencing and computer based conferencing, e-mail, live chat, surfing on the Internet and Web browsing, online reference libraries, video game-style simulation, customized e-learning courses, and Web blogs. Identified in this way, e-learning may be taken as an electronically carried out learning facilitated and supported by the use of advanced learning technology particularly calling for the services of computers, networking and multimedia.

The term 'e-learning' has entered the realm of teaching and learning in the similar way as other related terms like e-mail, e-banking, e-booking and e-commerce tend to exist with us in our day-to-day lives. What seems to be common in the nature, functioning and use of these terms may be summarized as follows:

- They all call for the services of the computers, laptops and their technologies in their functioning.

- The use of the Internet services and Web technology is must for their functioning.

Having a proper look at the nature and use of e-learning dominated by the Internet technologies, Rosenberg (2001) tried to define the term e-learning as: 'E-learning refers to the use of the Internet technologies to deliver a broad array of solutions that enhance knowledge and performance'.

Nature and characteristics of e-learning

The characteristics of e-learning are as follows:

- E-learning is a generic term used to refer to computer enhanced learning.

- Its use should be strictly limited to 'online learning' carried out through the Internet or Web-enabled technology.

- It conveys broader meaning than the terms 'computer-based learning' and 'computer-aided instruction'.

- It is broader in its meaning than that conveyed through simple terms like 'online learning' or 'online education' (that may call for the absolute Web-based learning without any follow-up, communication and interaction between the teacher and students).

- It should not be taken as being synonymous to audio–visual learning, multimedia learning, distance education or distance learning. It is true that the audio–visual and multimedia technology and distance education programmes rest heavily nowadays on the use of the Internet and Web services provided through the computers, yet these are not identical but complementary.

- It should be made absolutely clear that the use of the term 'e-learning' should be restricted to the type of learning carried out, facilitated or supported through Web-enhanced instructions and the Internet-based communication like e-mail, audio and video conferencing, mail list, live chats, and telephony. As a result, all types of non-Internet and non-Web technology should not be included in the domain of e-learning.

Taking a clear stand on this issue, Santheesh Kumar and Sagy John (2008) wrote: 'Though computer is used for instruction and learning, the non-Web technology does not come under e-learning. The entire computer-based instruction like computer-assisted instruction, computer-managed instruction, integrated learning systems, multimedia, interactive video, virtual reality, artificial intelligence, etc. which are not delivered through the Internet but are still used for learning and instruction cannot be included in e-learning. However, these techniques, when delivered via Internet for instruction and learning, become e-learning.'

Advantages of e-learning

E-learning as an innovative technique provides unique opportunities to the learners for gaining useful learning experiences both on the individual level and the group level. Its advantages are as follows:

- Most of the learners who may not have the time and resources for getting access to the traditional class-bound learning experiences may get it now easily at their convenience in the form of e-learning. A learner can now satisfy his desire and fulfil his ambition of getting access to school or higher education or take up a hobby course without learning his job, compromising his comfort or feeling handicapped in one or the other sense on account of his limitations. The learners can access information and educational contents any time, any place.

- E-learning has enough potential to make the education, instruction and learning opportunities provided to the learners adaptable to their needs-mental and skill level-local needs and resources at their hands.

- It has a unique feature of providing an access to the same quality of the content that a full-time student has. The best of the world's educational content, treasury of knowledge and the opportunities are available through e-learning to an increasing number of learners, especially in the developing and underdeveloped countries.

- Unlike traditional classroom education, e-learning can cater to different learning styles and promote collaboration among students from different localities, cultures, regions, states and countries.

- E-learning can prove an effective media tool for facing the problems of lack of the trained and competent teachers, paucity of schools and the needed infrastructure and material facilities for providing quality education to the number of students residing in the far and wide corners of the country.

- The flexibility of e-learning in terms of delivery media (CD, DVD, laptops, and mobile phones), type of courses (modules or smaller learning objects) and access (real time or self-paced) may prove a big advantage and attractive option.

- E-learning may make the students more interested and motivated towards learning as they may get a wide variety of learning experiences by having access to multimedia, the Internet, Web technology and mobile-learning along with the verbal and non-verbal presentation of the learning contents.

- The opportunities of having an online, offline and live interaction between the students and teachers and among the students themselves may make the task of e-learning a joy and best alternative to the lively face-to-face interaction and real time sharing of the experiences in a traditional classroom setting.

- E-learning through audio-visual recording technology has a unique advantage of providing learning experiences that can be paused and reversed for observing, learning and imitating at the will and convenience of the learners. Such self-pacing gives a special weightage to the process of learning.

- It may also provide opportunities for testing and evaluating the learning outcomes of the learners through teachers, peers and auto-instructional devices and software available with the reading material online, or through the Internet and mobile phone facilities. It may work for them as a desired source for the proper feedback along with the needed diagnostic and remedial teaching.

- Learning experiences via simulated and gaming techniques, may also provide the benefits of getting richer experiences on the useful pedagogical footings of play-way spirit and learning by doing or living.

CHECK YOUR PROGRESS

1. What is e-learning?
2. State one advantage of e-learning.

5.3 USES OF COMPUTER IN EVALUATION

In this section, we would briefly discuss the importance of computers and the Internet in education.

History of the Internet

Internet is a 'network of networks' that links computers around the world. It allows communication across networks, i.e., one can communicate between one network and any other network. This allows people to have access to information from different websites, locations or machines. It literally puts a world of information and a potential worldwide audience at your fingertips.

The internet started with the launch of sputnik, the ensuing space race, the cold war and the development of arpanet (department of defense advanced research projects agency network) in 1950. But it really took off in the 1980s when the national science foundation used arpanet to link its five regional supercomputer centres. From there evolved a high-speed backbone of internet access for many other types of networks, universities, institutions, bulletin board systems and commercial online services. The end of the decade saw the emergence of the world wide web, which heralded a platform—independent means of communication enhanced with a pleasant and relatively easy-to-use graphical interface.

The Internet

The Internet is an abbreviation for the Internet System. It is known as the largest WAN in the world. It may be defined as the world's largest inter-network system (the network of networks) that provides the fastest, easiest and cheapest means for the countless users to receive, provide and communicate information on a global basis.

Thus, the Internet (often named as the Net) may be considered as a name for a fast World Wide System consisting of people, information and computers, capable of communicating and sharing data among indefinite number of users at a time scattered all over the world.

This great game of the Internet can be played only with the help of two types of computer programs (software): (a) servers and (b) clients. In brief, the servers are programs that provide resources and the clients are programs that you use to access these resources. Besides the Internet, involves millions of computers, and a lot of wires, cables, telephone lines, satellite links, and so on. In other words, the Internet is so designed and made to work in the way the client programs (which you use) can talk to server programs (which provide resources). Thus, learning how to use the Internet means how to use the client programs run on your computer.

The Internet (a network of networks) utilizes the services of a number of computer machines (hardware) for its operation. Working as a server or client, these machines make use of specialized software (server or client programs) for exchanging information between them. However, the software used in different types of machines must be understood by all of them and for this purpose, it must follow a set of rules. Such a set of rules observed by the software in the Internet operation is called Internet Protocols. There exist various types of Internet Protocols, namely File Transfer Protocol (FTP) and Hypertext Transfer Protocol (HTTP). For getting and providing information (access to data, graphics, sound, software and text, etc.) and communication among the people, the Internet makes use of a variety of services and tools such as e-mail, WWW and e-commerce.

With reliable services of networking, the e-mail has made inter action possible quickly and easily with millions of people around the globe, any time of the day or night for the cost of a local phone call. In its latest development, it has also made possible to have Internet telephony (talks among people just the way they do on telephone lines), chatting, (communicating with other people by typing messages on the keyboard and receiving their reply on the screen), video chat, and so on. All these developments in the Internet services are the result of an appropriate synthesis of the sources provided by e-mail and WWW along with some sophisticated additional input and output devices and proper software packages. For communicating through e-mail, the person involved must know each other's address (like postal address).

The World Wide Web (WWW) or simply the Web, is a fast growing valuable service offered on the Internet to the users worldwide. Technically, it consists of a large system of servers (the computer providing resources) that offer all kinds of information to anyone on the Net. The information can be in the form of text, pictures, sounds or other types of data.

A cot of information is available on Websites maintained by individuals or organizations in the form of Web pages. This information may be accessed by using a client programme called a Web browser.

A Web page may be defined as a single unit of information, often called a document available through WWW. It can be larger requiring more than one piece of paper or smaller requiring a very small portion of it. The college of education,

thus, may put Web pages on its Website containing information about its men-material resources, the types of courses it offers, the procedure of admission. The information may also include the type of training and facilities provided, the activities conducted in the year, the past achievements and many other things about the present, past and future of the institution that may be a subject of interest for anybody on the Internet.

An organization-commercial, academic or professional may also offer online services to its clients for the various types of enquiries and online services through the Web pages that can be downloaded or interacted at will. A distant education institution or university may help its students around the world, apply and register for course, and complete course work electronically through its Website.

The creation of Websites may be possible with the help of the resource-generating computer known as 'server'. It makes use of a server programme by following HTTP. Here all information put on the Website is first organized in the shape of a series of 'documents' or 'Web pages'. These Web pages contain hypertext (including pictures and other multimedia elements) and are prepared through the use of HTML. HTML helps in creating hyperlinks (especially coded section of the Web page) for providing useful link to other information resources. Thus, each Web page can hold both information and links to other pages of the same Website or other Websites. As you read a page, you can follow a link to jump from one page to another. The main purpose of the Web, thus, is to fetch and display Web pages, i.e. the pages of hypertext.

Information and access to resources is available on the Web pages. You can request a Web page from a Website or server by using the Web browser. Web browser helps you as a client in contacting a Web server, sending a request for the information you desire, receiving the information, and then displaying it on your PC/laptop. Examples are Netscape Navigator and Microsoft Internet Explorer. Thus, you can have access to the desired resources and information available on the Web by using an appropriate Web browser. For this purpose, what you generally do is to engage in the process of visiting different Websites on the Internet maintained by various individuals and organizations. This is known as 'Internet browsing' or 'net surfing'.

Surfing is a process of browsing without tools. Here, you may start with a particular Web page and then follow links from page to page, making intelligent guesses along the way for ultimately having access to your desired piece of information. But now with a developed Web technology, it is possible to make use of new tools like search engines for searching the desired piece of information on the Web. There are many engines available, e.g., Yahoo! (http:www.yahoo.com) and Google (www.goggle.co.in). A search engine contains a useful database containing references to thousands of resources and also acts as database. Acting as an interface, it initiates the process by providing you a place to type your request like 'brainstorming' or 'emotional intelligence'. The search engine with the help of its database then may provide you a list of resources/Websites matching your request by displaying the results and may further help you link to these displayed resources directly for getting the desired information.

Changes in Technology through the years

- 1969: ARPANET (Advanced Research Projects Agency Network) was designed to support military research - in particular and it was financed by the U.S.Defense Department.

- 1971: Email was first developed in 1971 by Ray Tomlinson, who also made the decision to use the '@' symbol to separate the user name from the computer name (which later on became the domain name).

- 1972: ARPANET was put into operation. It was presented to the public and soon academic and users were able to access it. Demand for networking quickly spread and many other universities joined the four original locations - Stanford Research Institute, University of California at Santa Barbara, University of California at Los Angeles and the University of Utah.

- 1981: ARPANET and CSNET (network of the Computer Science Researchers)were connected. Development of the new transfer protocol (TCPIP)

- 1984: ARPANET was split into MILNET (for public military informations) and ARPANET (for non-military research).

- 1990: ARPANET has become obsolete and was eliminated. The connection between many different networks, communicating by means of TCP/IP, was called internet.

- 1995: Nearly 4 million hosts and over 30 million academic, commercial, national and private users take advantage of the Internet information.

Commercialization of the internet: 1995 is often considered the first year the web became commercialized.

The mid 90s saw the emergence of search engines, and the browser wars between Netscape and Microsoft began in earnest. In 1999 the first full service bank available only on the Internet came into being.

- 1997: The term 'weblog' is coined

While the first blogs had been around for a few years in one form or another, 1997 was the first year the term 'weblog' was used.

- 1998: Google!

- 2000: The Internet survive Year 2000 problem (Y2K).

The size of the World Wide Web is estimated to exceed 1 billion pages

- 2001: Wikipedia is launched

- 2004: Web 2.0 AND Social Media and Digg

The term 'social media', believed to be first used by Chris Sharpley, was coined in the same year that 'Web 2.0' became a mainstream concept.

- 2004: 'The' Facebook opens

- 2005: YouTube – streaming video for the masses

- 2007: The iPhone and the Mobile Web

Computer in Education

The computer is now regarded as a super teaching machine, its use in education has been tried as an innovation and it has proved its teaching efficiency in many developed countries. Exposure to computers and its application in the field of education have been found to be very much useful. The computer has been helping the teacher in gaining new experiences in education, which are as follows:

- Computer-Assisted Instruction (CAI) is helpful in such situations where students themselves interact with the machine and where instruction is presented.

- They are well suited for testing students' progress.

- It also proves useful in the drilling and practice approach as well as dialogue approach.

- Individual help is made available to students, through CAI, which might otherwise be ignored in a crowded class.

- It enables them to move at their own pace; thus the gifted are not bored, slow-learners are not rushed and shy students are not embarrassed if incorrect answers are given by them.

- Moreover, teachers are relieved of routine drills; instead, they can devote more attention to individual students.

- The students get continuous feedback and teachers get a report of errors so that corrective action can be planned.

- Computer stimulation is also taken up as a useful teaching technique. Students learn by making decisions and by learning the consequences of those decisions.

- Theories can be put into practice and valuable information can be gained in a safe and inexpensive way.

- Computer usage in the classroom could lead to improve student performance in thinking logically, formulating problem-solving procedures and understanding relationships.

- They are being used in education for planning and decision-making, controlling, assisting instruction and simulation.

- Computers are helpful in administering aptitude tests and achievement tests at the time of entrance. On the basis of computerized results, the courses that need to satisfy the students' goals are framed.

- The computers also assist the teachers in managing individual instruction programmes by way of testing him/her periodically and determining an appropriate tutoring plan for those having difficulty with some phase of the programme.

- Computers enable children to participate more actively in the educational process and develop the ability to initiate action on their own.

- Current use of computers in schools (very few, of course) shows its utility in the teaching of biology, chemistry, geography and physics.

Thus, computers with their ability to produce a large amount of information quickly are considered to be particularly useful as a very good teaching aid. They have helped the teachers in the following functions:

- Evaluation of students' performance and classification on the basis of abilities.
- Preparation of time-table and schedules.
- Allocation of learning materials according to individual needs and interests.
- Maintenance of progress cards efficiently and confidentially.
- Providing information/data for guidance and reference.
- Provision of direct interaction between pupils and subject-matter.
- Engaging students in tutorial work.
- Providing immediate feedback to students for better interaction and motivation.
- Distance learning has been made easily assessable by using the Internet and tele-conferencing.
- Researchers have been benefitted by keeping their data and records in a small place. Analysis and interpretation of data has become very easy.

A computer is included in the hardware approach of educational technology. It is one of the machines of automation in teaching and learning. It is used for presenting the individualized instruction. A computer is also used in commerce, trade, industries and administration. The computer services are very common in research for data processing and instructional purpose.

The computer is known as electronic brain. The computer services take the decision about instructional material according to the entering behaviour of the learner. Other teaching machines simply present the instructional material systematically, but a computer has to decide and present the instructional material according to needs of the learner.

Potentially, the most effective device for an instructional programme is the computer. With its speed, accuracy, and storage capacity, a computer is an entirely different class from a teaching machine. It can be made to handle a learning programme of any degree of complexity. A computer can respond to the particular characteristics of the individual learner. This is because it can store, retrieve and act on whatever data the learner feeds into it. Since the data are converted into electric pulses, they can always be activated. A computer may be made to serve hundreds of users simultaneously with different programmes, whereas a teaching machine can be used by only one learner at a time and must be related for every user with a fresh copy of the programme.

A computer can also provide instruction to large numbers of students simultaneously; each if need be at a different point in the curriculum. A computer with 200 terminals can serve up to 6,000 students a day, while forthcoming computers with a thousand terminals will be able to handle five times that number.

A computer can also adjust an instructional programme to the needs of the individual learner. It does so by remembering and evaluating the responses of each

user. Having appraised the learner's performance, the computer presents him with appropriate material; and if he is slow, the learner is advanced more gradually. By appraising the learner's answers and relaying material according, by the computer enables him to proceed at his own pace and in line with his own abilities.

The computer can be used to fulfil the following purposes of the educational system:

(i) **Teaching and instruction:** A computer can be used for teaching and instruction purposes in the field of education. From a teaching point of view, a computer is only a device for presenting a programme. It is the programme that has to carry out the instruction. For a computer, to handle the instructions of a wide range of programme it presents, it must contain a wide range of appropriately sequenced information. Home assignments are being provided on the school and institute websites. Parents can see the progress of the teaching learning process from home on the concerned institute's website.

(ii) **Data processing for research work:** A computer is used in research institutes or universities for analysing the data, for obtaining results and verifying the research hypotheses. In Indian conditions, a computer is now being used most frequently in analysing the research data. It is very economical, speedy and an accurate device. For this purpose, it has made his difficult task simple. A large sample may be selected because huge data can be easily analysed by the use of computer services.

(iii) **Educational guidance and counselling:** Now computer also assists in guidance and counselling services. The students are diagnosed for educational guidance, their weaknesses are identified and remedial instructions are provided for them by a computer. It also functions as tutorial teaching and instruction. In addition to that, vocational guidance is also given by the computer. A card is prepared for the abilities of a student and it is given to the computer. It takes a decision and provides the guidance for the job through an electric typewriter. These services are not available in India. It may also be termed as 'guidance technology'.

(iv) **Evaluation:** Teaching and testing are the two main tasks of education process; and computers are used for both the purposes. To prepare an examination result is very time-consuming process. Board Examination bodies in the world are using computer. The use of computer has made their task speedy, accurate and objective. In Indian conditions, the computer services are employed in preparing examination results of universities, States Boards and other competitive examinations.

(v) **Educational administration:** Computers are very helpful in educational administration like maintaining fee records, faculty records, salary statement etc. Computers also play a vital role in conducting entrance examination, students counselling, merit of the candidates and their

allotment in the institutions. Now online submission of examination forms, entrance examination system, result declaration have immersed as the benefits of using computer in educational administration. In schools and colleges, computers keep students records of attendance, performances in tests, scholarships etc. With the emergence of E-learning and M-learning, students have now been preferring learning while earning. In libraries, the issue and submission of the books are being maintained by the computers. Informations are available on the School, Institute, Board and University websites. Any concerned person and stakeholder can assess these websites and collect related information in no time. Date of admission, last date of submission of form, exam date sheet and other different information are being provided by the different educational institutions.

(vi) **Distance learning:** Initially, distance education mode was started through correspondence. Now the computer has changed the form of distance education. Those who want to continue their education are opting for a distance learning system. In this system, candidate can appear in the examination even from their home. Assignments can be submitted online and feedback can also be received online. Through tele-conferencing, students can attend virtual classes and clear their doubts from subject experts all over the world.

CHECK YOUR PROGRESS

3. Define Internet.
4. What is a server and a client?

5.4 GRADING SYSTEM

Grades in the realm of education are standardized measurements of varying levels of comprehension within a subject area. Grades can be assigned in letters (for example, A, B, C, D, or E, or F), as a range (for example 4.0–1.0), as a number out of a possible total (for example out of 20 or 100), as descriptors (excellent, great, satisfactory, needs improvement), in percentages, or, as is common in some post-secondary institutions in some countries, as a Grade Point Average (GPA). Most nations have individual grading systems unique to their own schools. However, several international standards for grading have arisen recently.

Concept of Grading

The ancient Indian education system has changed over time and a new system was introduced in 2009–10 after studying the consequences of the existing system. This new system is called the grading system which is not only concerned with academics

but other skills of the students are also considered in this system. Its main purpose is to reduce the stress of the child and undertake continuous evaluation in various areas.

The grading system not only focuses on academics; but also provides opportunity to a child to explore other abilities. For this, it gives stress on the practical aspects of learning. This system provides a varied range of opportunities, so that the students can prove their talent and pursue their interests traditionally.

The implementation of the system encourages students to cope with the stress. Students are evaluated on a 9-point grading system, which will diminish the difference between a student scoring 99 per cent and the one scoring 91 per cent. Both students will get the A+ grade.

Merits of grading system

The merits of the grading system may be summarized as follows:

- It is useful in comparing the result of various examination institutions, because scores attainted by the students are not considered to be very relevant in comparison to grades.
- It is more reliable technique of evaluation.
- It works as a common scale for comparing educational achievement of the students of various subjects of faculties.
- It helps students in the selection of future course as per their aptitude and ability.
- It minimizes discrimination of students on the basis of marks.
- It helps in eliminating unhealthy competition among high achievers.
- It provides more flexibility for the learner by reducing pressure of competition.
- It creates a better learning environment with a feeling of positive competition and create stress free learning environment.

A grading system must be comprehensive and take into account all aspects of a student's development, besides the marks scored in tests and examinations. To achieve an effective, all-round grading system:

1. Teachers must collaborate on it and come up with the grading system jointly so that everyone's style of teaching is included.
2. All the class projects, unit tests, homework assignments must be factored into the grading system so that everything the student contributes is taken into account and the progress monitored. Each of these should be assigned a percentage as per its learning value and the total percentage must add up to 100 per cent.
3. There should be a section, which lists the penalty deduction of marks for factors such as lateness, sloppy work, lack of concentration in class etc.
4. The basic points of the grading system should be shared with the students so that they know how to improve their grades and the areas in which they need to focus or they may lose points.
5. Exceptional performance must be rewarded.

Types and Application of Grading

The Ministry of Human Resources Development (HRD) and the CBSE have made the board examination optional from the year 2010-11. They have started a new system of evaluation called 'Continuous and Comprehensive Evaluation (CCE)' that is totally based on grades. It is based on the twice-a-year evaluation system, i.e, two terms in one academic session. Continuous and Comprehensive evaluation refers to a system of school based assessment that covers all aspects of student's development. It emphasizes two fold objectives: continuity in evaluation and assessment of broad- based learning, and behavioral out come.

The grading assessment system includes a variety of tools and techniques for assessment of the learners.

1. Scholastic evaluation: It includes:

- Academic evaluation
- Work experience
- Physical and health education
- Art education

2. Co- scholastic evaluation: It includes:

- Life skills
- Attitudes and values
- Outdoor activities

The total academic evaluation system is divided into two forms:

1. Formative evaluation (done in the mid of the session)
2. Summative evaluation (done at the end of the session)

1. Formative evaluation

The characteristics of formative evaluation are as follows:

- It is to **evaluate and grade class work, homework, assignment and project work.**
- There is one term end examination for each term.
- The first term examination carries 20 marks.
- The second term examination carries 40 marks.

2. Summative evaluation

The characteristics of summative evaluation are as follows:

- It is based on term end examination.
- There will be two academic evaluations in the session.
- Final result will be the sum of both.

Application of scholastic and co-scholastic grading system

Grades in scholastic areas are decided on the basis of both formative as well as summative evaluation. It follows a grade point system prepared by experts as indicated in Table 5.1

Table 5.1 *Grading System for Scholastic Assessment*

Marks	Grade	Grade point
91—100	A1	10
81—90	A2	9
71—80	B1	8
61—70	B2	7
51—60	C1	6
41—50	C2	5
33—40	D	4
21—32	E1	—
20 & below	E2	—

In co-scholastic areas, A+, A, B+, B and C grades are given.

Indicators for Grading: CBSE and State- Evolved Indicators

CBSE initiated this system of awarding grades in place of marks. No students will get compartment or will fail in the examination. Students will get result in two forms, namely 'Eligible for qualifying certificate (QUAL)' and 'Eligible for improvement of performance (EIOP)'. Even if a candidate fails in all subjects, he will now have five chances to improve their performance without having to repeat a year.

Criteria for scholastic evaluation

The criteria for scholastic evaluation may be discussed as under:

- External assessment of both theory and practical examinations is in numerical form. In case of internal assessment subjects, only grades are shown.
- In an internal examination, the assessment is done on a five-point scale, i.e., A, B, C, D and E.
- The grades are based on the scores got in the external examination. In case of subjects of internal assessment, the grades are awarded by the schools.
- In an external examination, the qualifying percentage is 33, separately in theory and practical.

Till high school, average percentage is provided. A percentage over 80 is considered excellent; candidates securing marks between 60–80 are awarded 'first division'; and candidates securing marks between 40–60 are awarded 'second division'.

Indicators of assessment of life skills

The life skill assessment includes thinking skills, social skills and emotional skills. The indicators for these three categories of skills are discussed as follows:

1. **Thinking skills:** Students demonstrate the ability to:
   - Be original, flexible and imaginative.
   - Raise questions, identify and analyse problems.

- Implement a well thought out decision and take responsibility
- Generate new ideas with fluency
- Elaborate/build on new ideas

2. **Social skills:** Students demonstrate the ability to:
   - Identify, verbalize and respond effectively to others' emotions in an empathetic manner.
   - Get along well with others.
   - Take criticism positively
   - Listen actively
   - Communicate using appropriate words, intonation and body language

3. **Emotional skills:** Students demonstrate the ability to:
   - Identify their own strengths and weaknesses
   - Be comfortable with their own self and overcome weaknesses for positive self-concept
   - Identify causes and effects of stress on themselves
   - Develop and use multi-faceted strategies to deal with stress
   - Express and respond to emotions with an awareness of the consequences

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CHECK YOUR PROGRESS

5. Write down any one merit of the grading system.
6. State any two characteristics of summative evaluation.

5.5 CBCS SYSTEM

Higher education in India has seen many changes in the last 50 years. After the Kothari Commission report in 1966, a debate on college autonomy began and a few colleges became autonomous since 1978, and recently, a few of them have completed 25 years of this freedom. Academic freedom has led colleges to formulate new curricula, start relevant courses, design new syllabi and establish new evaluation techniques. These have made the Indian education system more comprehensive and modern. Let us learn more about the new methods in the following sections.

Choice Based Credit System (CBCS)

Research and experience has revealed that the learner-centric contextual curriculum recommended and the desired learner outcomes projected can be achieved mainly through Choice Based Credit System (CBCS). The system, which is implemented in most universities of North America and Europe, is considered a fundamental tool for transforming the orthodox and outdated system of higher education in India. CBCS functions on a modular pattern based on module/units called 'credits'. Here,

credit defines the quantum of contents/syllabus set for a course/paper and decides the minimum number of teaching-learning hours required. One credit denotes 15 hours of instructions per semester. CBCS permits students to:

1. Learn at their own pace.

2. Select subjects from a broad range of electives offered by the university.

3. Opt for supplemental/value added courses and obtain more than the requisite credits, based on the learner's capabilities.

4. Implement an interdisciplinary approach in education.

5. Utilize the expertise of faculty across the university apart from the specific department faculty.

6. Acquire knowledge, skill and attitude of learning outcomes through participatory teaching and learning and continuous evaluation process.

Vision of CBCS System

To evolve a higher education system that is suitability blended with provision for knowledge values and skill practice where every student learns in without sacrificing his/her creativity.

Objectives

- To introduce Choice Based Credit System (CBCS) at Undergraduate level
- Development of Curricula that would facilitate student centric learning
- Examination Reforms
- Administrative Reforms

All of the above objectives have to be realized with an aim to transform teaching learning processes in academics- a transformation where students change from being passive listeners of knowledge to becoming active participants of the knowledge imbibing process.

Rationale

The current higher education curriculum does not impart the necessary skills that would make the students employable adequately. There is a lack of interdisciplinary approach as well as there is a very little scope for value based courses to be taught. In addition the evaluation methods are largely based on memory recall processes. In addition the students don't learn to think and analyze on their own. Also, the system is not effective enough in meeting/ empowering students to think or matters/issues independently.

The eleventh five-year plan of India as well as the National Knowledge Commission have recommended revamping of higher education through academic and administrative reforms. The UGC particular in its 11th plan, has emphasized on such reforms and this was followed by the recommendations were made on similar lines by the Association of Indian Universities (AIU).

Strategy

1. To introduce Semester system
2. To develop a structured programme for CBCS that would
   - Enable students to have a flexible learning within a structured model
   - Enable students to have wider choices outside their discipline of their study
   - Enable students to have an exposure to real life experience by participation in internships as well as vocational training
   - Enable students to have facility of Credit transfer across the country
3. To design the curriculum with sufficient/appropriate/adequate provision for Value oriented courses, Interdisciplinary courses and Vocational courses. Each course shall have a clearly defined course objective and course outcome.
4. Teacher training and capacity building
5. Revamping of learning processes by changing in teaching pedagogy by
   - Use of ICT
   - Use of Sandhan
   - Use of ALM
   - Use of computer laboratories to be set up across the state as learning
   - Introduction and Implementation of concept of Teacher fellow(TF) and Course Assistant(CA)
6. Content preparation as per the curriculum. This will include both textual content as well as E content.
7. Preparation of Question Banks
8. To create facilities for On Demand On Line Examination (ODOLE)

Methodology and Plan of Action

The methodology to introduce CBCS will follow the sequence as:

- To develop a structure having enough room for flexibility for horizontal as well as vertical migration of students
- To design the curriculum with appropriate course labels.
- Preparation of content for each course
- Teacher training and capacity building
- Class room revamping
- Preparation of Question bank
- Creating centers for ODOLE which would facilitate E learning as well

Goals

The ultimate goal is to bring reforms in higher education so that students develop thinking as well as analytical ability, he/she gets equipped with necessary skills ultimately making him/her suitable for an employment and to integrate values of our culture with education.

CHECK YOUR PROGRESS

7. What is CBCS?

8. What is the goal of implementing CBCS?

5.6 SUMMARY

- Computers with their unimaginable working and functioning capacity coupled with tremendous progress in the field of electronics and communication technology have yielded much power, abilities and capacities to human beings.

- E-learning, or 'electronic learning', in general, may refer to all types of learning facilitated and supported through the use of information and communication technology; in real practical sense, its use is limited and associated nowadays with the field of advanced learning in learning using networking and/or multimedia technologies.

- Rosenberg (2001) tried to define the term e-learning as: 'E-learning refers to the use of the Internet technologies to deliver a broad array of solutions that enhance knowledge and performance'.

- Some of the characteristics of e-learning include: (a) It is a generic term used to refer computer enhanced learning. (b) Its use should be strictly limited to 'online learning' carried out through the Internet or Web-enabled technology. (c) It conveys broader meaning than the terms 'computer-based learning' and 'computer-aided instruction'.

- E-learning has enough potential to make the education, instruction and learning opportunities provided to the learners adaptable to their needs-mental and skill level-local needs and resources at their hands.

- The flexibility of e-learning in terms of delivery media (CD, DVD, laptops, and mobile phones), type of courses (modules or smaller learning objects) and access (real time or self-paced) may prove a big advantage and an attractive option.

- Internet is a 'network of networks' that links computers around the world. It allows communication across networks, i.e., one can communicate between one network and any other network. This allows people to have access to information from different websites, locations or machines. It literally puts a world of information and a potential worldwide audience at your fingertips.

- The Internet is an abbreviation for the Internet System. It is known as the largest WAN in the world. It may be defined as the world's largest inter-network system (the network of networks) that provides the fastest, easiest and cheapest means for the countless users to receive, provide and communicate information on a global basis.

- The World Wide Web (WWW) or simply the Web, is a service offered on the Internet to the users worldwide. Technically, it consists of a large system of servers (the computer providing resources) that offer all kinds of information to anyone on the net. The information can be in the form of text, pictures, sounds or other types of data.

- A Web page may be defined as a single unit of information, often called a document available through WWW. It can be larger requiring more than one piece of paper or smaller requiring a very small portion of it.

- ARPANET (Advanced Research Projects Agency Network) was designed to support military research - in particular and it was financed by the U S Defence Department.

- 1995 is often considered the first year the web became commercialized.

- The mid 90s saw the emergence of search engines, and the browser wars between Netscape and Microsoft began in earnest. In 1999 the first full service bank available only on the Internet came into being.

- Computer-Assisted Instruction (CAI) is helpful in such situations where students themselves interact with the machine and where instruction is presented.

- Grades in the realm of education are standardized measurements of varying levels of comprehension within a subject area. Most nations have individual grading systems unique to their own schools. However, several international standards for grading have arisen recently.

- The grading system focuses only on academics; it also provides opportunity to a child to explore his other abilities. For this, it gives stress on practical aspects of learning. This system provides a varied range of opportunities, so that the students can prove their talent and pursue their interests traditionally.

5.7 KEY TERMS

- **E-learning:** It is electronic learning, which is conducted via electronic media, typically on the Internet.

- **Internet:** A global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.

- **Web page:** It is a hypertext document connected to the World Wide Web.

5.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. E-learning, or 'electronic learning', in general, may refer to all types of learning facilitated and supported through the use of information and communication technology.

2. E-learning has a unique feature of providing access to the same quality of content that a full-time student has. The best of the world's educational content, treasury of knowledge and the opportunities are available through e-learning to an increasing number of learners, especially in the developing and underdeveloped countries.

3. Internet may be defined as the world's largest inter-network system (the network of networks) that provides the fastest, easiest and cheapest means for the countless users to receive, provide and communicate information on a global basis.

4. Servers are programs that provide resources and the clients are programs that you use to access these resources.

5. The grading system works as a common scale for comparing educational achievement of the students of various subjects of faculties.

6. Two characteristics of summative evaluation are as follows:
   - It is based on term end examination.
   - There will be two academic evaluations in the session.

7. Choice Based Credit System (CBCS) functions on a modular pattern based on module/units called 'credits'. Here, credit defines the quantum of contents/syllabus set for a course/paper and decides the minimum number of teaching-learning hours required.

8. The ultimate goal of implementing CBCS is to bring reforms in higher education so that students develop thinking as well as analytical ability, he/she gets equipped with necessary skills ultimately making him/her suitable for an employment and to integrate values of our culture with education.

5.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What are the various characteristics of e-learning?
2. How do you computers help in distance education?
3. What is the criteria for scholastic evaluation?

Long-Answer Questions

1. Discuss some of the advantages of e-learning.
2. How do computers help teachers in gaining new experiences in education?

3. Discuss the concept of grading system. How is it beneficial to students?

4. Describe the indicators of assessment of life skills.

5.10 FURTHER READING

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