

# FOUNDATION OF EDUCATION

**BA**

**First Semester**

**Major Course**

**IDE-EDU-001-CC-1110**



**INSTITUTE OF DISTANCE EDUCATION**

**RAJIV GANDHI UNIVERSITY**

Arunachal Pradesh, INDIA - 791 112

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## About the University

Rajiv Gandhi University (formerly Arunachal University) is a premier institution for higher education in the state of Arunachal Pradesh and has completed twenty-five years of its existence. Late Smt. Indira Gandhi, the then Prime Minister of India, laid the foundation stone of the university on 4th February, 1984 at Rono Hills, where the present campus is located.

Ever since its inception, the university has been trying to achieve excellence and fulfill the objectives envisaged in the University Act. The university received academic recognition under Section 2(f) from the University Grants Commission on 28th March, 1985 and started functioning from 1st April, 1985. It got financial recognition under section 12-B of the UGC on 25th March, 1994. Since then Rajiv Gandhi University, (then Arunachal University) has carved a niche for itself in the educational scenario of the country following its selection as a University with potential for excellence by a high-level expert committee of the University Grants Commission from among universities in India.

The University was converted into a Central University with effect from 9th April, 2007 as per notification of the Ministry of Human Resource Development, Government of India.

The University is located atop Rono Hills on a picturesque tableland of 302 acres overlooking the river Dikrong. It is 6.5 km from the National Highway 52-A and 25 km from Itanagar, the State capital. The campus is linked with the National Highway by the Dikrong bridge.

The teaching and research programmes of the University are designed with a view to play a positive role in the socio-economic and cultural development of the State. The University offers Undergraduate, Post-graduate, M.Phil and Ph.D. programmes. The Department of Education also offers the B.Ed. programme.

There are fifteen colleges affiliated to the University. The University has been extending educational facilities to students from the neighbouring states, particularly Assam. The strength of students in different departments of the University and in affiliated colleges has been steadily increasing.

The faculty members have been actively engaged in research activities with financial support from UGC and other funding agencies. Since inception, a number of proposals on research projects have been sanctioned by various funding agencies to the University. Various departments have organized numerous seminars, workshops and conferences. Many faculty members have participated in national and international conferences and seminars held within the country and abroad. Eminent scholars and distinguished personalities have visited the University and delivered lectures on various disciplines.

The academic year 2000-2001 was a year of consolidation for the University. The switch over from the annual to the semester system took off smoothly and the performance of the students registered a marked improvement. Various syllabi designed by Boards of Post-graduate Studies (BPGS) have been implemented. VSAT facility installed by the ERNET India, New Delhi under the UGC-Infonet program, provides Internet access.

In spite of infrastructural constraints, the University has been maintaining its academic excellence. The University has strictly adhered to the academic calendar, conducted the examinations and declared the results on time. The students from the University have found placements not only in State and Central Government Services, but also in various institutions, industries and organizations. Many students have emerged successful in the National Eligibility Test (NET).

Since inception, the University has made significant progress in teaching, research, innovations in curriculum development and developing infrastructure.

# SYLLABUS

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## **Unit-I: Concept and Aims of education**

- Concept, Nature and Scope of Education
- Individual aims of Education
- Social aims of Education
- Cultural aims of Education

### **Types of Education:**

- Formal Education: Meaning, Agencies and functions
- Non-Formal: Meaning, Agencies and functions
- Informal Education: Meaning, Agencies and functions

## **Unit –II: Introduction to Educational Philosophy**

- Concept and nature of Educational Philosophy
- Scope of Educational Philosophy
- Relationship between Education and Philosophy

### **Western Schools of Philosophy:**

- Idealism and its impact on educational thoughts and practice.
- Naturalism and its impact on educational thoughts and practice.
- Pragmatism and its impact on educational thoughts and practice

## **Unit-III: Educational Psychology**

- Concept of Psychology
- Meaning, Nature and Scope of Educational Psychology
- Implication of Psychology in Education.
- Concept of Growth and Development.

### **Stages of Human Development:**

- Infancy
- Childhood
- Adolescence

## **Unit –IV: Educational Sociology and Modernization**

- Concept and nature of Educational Sociology
- Socialization: Concept and Process
- Agents of Socialization.
- Social change and factors responsible for Social change
- Education as an instrument of Social change
- School as a sub social system
- Modernization : Concept and characteristics

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## UNIT – I CONCEPT AND AIMS OF EDUCATION

### Structure

- 1.1 Introduction
- 1.2 Unit Objectives
- 1.3 Nature and Scope of Education
- 1.4 Individual and Social Aims
- 1.5 Cultural Aims of Education
- 1.6 Types of Education
  - 1.6.1 Formal Education
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- 1.7 Key Terms
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- 1.9 Suggested Reading

### 1.1 Introduction

The word 'education' has a very wide connotation and is difficult to define. There is no single objective which can cover the entire life with its various manifestations. Philosophers and thinkers have defined education in accordance with their own philosophy of life due to which there are divergent concepts and definitions of education. The concept of education is like a diamond that appears to be of a different colour when seen from different angles.

In this unit, you will learn the concept of nature and scope of education. You will also study the meaning and importance of inclusive education.

### 1.2 Unit Objectives

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

- State the meaning and the need of education
- Explain the nature and scope of education
- State the different forms of education
- Discuss the importance of inclusive education

### 1.3 Meaning, Nature and Scope of Education

There are various schools of psychology which have influenced the interpretation of the educative process. Some psychologists think that a child's mind is a clean slate and a teacher could write anything on it. Others are of the view that a child is a clay and a teacher is a potter who could make anything out of it. All these different opinions have led to different interpretations and definitions of education.

Traditional education focuses on teaching, not learning. It assumes that for every ounce of teaching there is an ounce of learning by those who are taught. However, most of what we learn before, during and after attending schools is learned without it being taught to us. Children learn to walk, talk, eat and dress without being taught formally. Adults learn most of what they use at work or at leisure. Classroom learning is generally forgotten and what is remembered is mostly not so relevant.

#### *Definitions Laying Stress on Inner Potentialities*

Aurobindo, Gandhiji, Shankaracharya, Tagore and Vivekananda of India, and Aristotle, Nunn, Pestalozzi and Plato in the West come under this category.

Aurobindo defines education as 'helping the growing soul to draw out that is in itself.'

Gandhiji speaks of education as, 'By education, I mean an all-round drawing out of the best in the child and man—body, mind and spirit.'

Shankaracharya says, 'Education is realization of the self.'

Tagore thinks, 'Education means enabling the mind to find out that ultimate truth which emancipates us from the bondage of the dust and gives us the wealth, not of things but of inner light, not of power but of love, making the truth its own and giving expression to it.'

According to Vivekananda, 'Education is the manifestation of divine perfection already existing in man—Education means the exposition of man's complete individuality.'

Aristotle speaks of education as ‘the creation of a sound mind in a sound body.’ Education, according to him, should develop the body, i.e., the physical capacities of the child and the mind which means his intellectual, emotional, moral and spiritual capacities.

According to Percy Nunn, ‘Education is the complete development of the individuality so that he can make an original contribution to human life to his best capacity.’ The individual is a sum total of various constituents and all of these must be developed. Every individual is unique and as such the task of education is to cater to the individual needs. The development should take place to the maximum possible extent.

J. H. Pestalozzi defines education as ‘the natural, harmonious and progressive development of man’s innate powers.’ Man is endowed with certain inborn powers and capacities and the task of education is to bring about the development of these. Due regard should be paid in the process of education to the child’s nature and needs. Undue stress should not be laid on the development of some powers of the child at the cost of others. A proper balance should be struck in the development of the various innate powers of the child.

Plato said, ‘Education develops in the body and in the soul (of the pupil) all the beauty and all the perfection which he is capable of.’

### **Definitions Stressing the Social and Environmental Aspects**

In the words of John Dewey, ‘Education is the development of all those capacities in the individual which will enable him to control his environment and fulfil his responsibilities.’

According to Redden, ‘Education is the deliberate and systematic influence extended by the mature person upon the immature through instruction, discipline and harmonious development of physical, intellectual, aesthetic, social and spiritual powers of the human being according to their essential hierarchy by and for the individual and social uses and directed towards the union of the educand with the creator as the final end.’ The ultimate goal of life is the union of the individual with God. This union can take place only when the various capacities of the child are developed for the good of the individual as well as that of society



G. Thomson says, 'By education I mean the influence of the environment upon the individual to produce a permanent change in his habits of behaviour, of thought and of his attitude. Environment has various aspects—physical, social and cultural. Education should facilitate the task of adaptation of the child to his environment.'

A perusal of these definitions reveals that the definition given by Gandhiji is the best. Gandhiji had a scientific temper of mind. He observed facts, sorted them before accepting them and after weighing them well, he drew his conclusions. Gandhiji felt that while physical and intellectual development was necessary, the training of a child's heart and spirit was more important. He remarked: 'Literacy is not the end of education nor even the beginning. It is one of the means whereby man and woman can be educated. Literacy in itself is no education.' This aim is in conformity with the one accepted by the Board of Education in England: 'The aim of education should be to develop to the full potentialities of every child at school, in accord always with the general good of the community of which he is a member.'

Drawing out and not 'pouring in' has been stressed by Gandhiji. Gandhiji wrote, 'We have up to now concentrated on stuffing a child's mind with all kinds of information without even stimulating or developing it.'

Gandhiji fully realized that nature has endowed children and youth with tremendous vitality. They have within them the springs of youth, joy and vigour. They have the God-given curiosity to wish to know things for themselves. The task of education is to use these powers. It would be wrong to suppress them. This energy should be utilized and harnessed properly.

'True education,' says Gandhiji, 'is that which draws out and stimulates the spiritual, intellectual and physical faculties of the children.' Any programme of education that puts exclusive emphasis on one of these three aspects of the human personality is against the basic principle of education.

Meaning of the term 'best in child and man'. The best in child and man has three fields, i.e. body, mind and spirit. Education, therefore, must cater to the physical, mental and spiritual needs. No field should remain neglected. The best in man will include the harmonious development of the various faculties of man and child.

How can we draw out the best? The best can be drawn out by touching the hearts of the students. Gandhiji: 'If I was to be their real teacher and guardian I must touch their hearts. I

must share their joys and sorrows, I must help them to solve the problems faced by them, and I must take along the right channel and surging aspirations of their youth.'

### **Education as Continuous Reorganization and Integration of Activities and Experiences**

Education takes place when new ideas combine with the old. Something new is constructed by the synthesis of the two and this process goes on constantly through life. Education is growth and growth never stops. We learn in terms of the old. An intelligent order, sequence and continuity is to be maintained as the new thing can best be learnt in the context of the old one. Herbart's principle of 'apperception' points out the same fact.

Child is active by nature. He plays and does so many things but these undifferentiated experiences do not lead to education unless they are guided and properly directed. So the experiences of the child should be given coherence, unity and organization and education is to be consciously and deliberately planned by providing rich and creative activities and experiences to children. The experiences of the child should be well knit to give them meaning. Education entails bringing about the growth of the educand through experience and activity. Every experience and activity leads to some sort of learning and enrichment of the mind of the learner. These in turn enter into combinations and thus increase the ability of the new learner to direct further noble activities and experiences.

An activity passes through three stages. An example will make the three stages clear. A child sees a flame. He does not know what a flame is. In an impulsive reaction he tries to catch it.

In the second stage, he grasps the meaning of a flame. He gains the knowledge of heat and pain. His experience becomes purposeful.

In the third stage, the child begins to perceive new bearings and new connections. The mind at this stage combines old activities and experiences into new patterns to meet novel situations. Different experiences help us to meet new situations. It is generally observed that education must lead to experimentation, the discovery of new truths and the use of new

truths to further education for the fuller intellectual growth and development of man. After all, education has to, and should go beyond tradition, dogma and static conditions, in a dynamic society.

Education is both retrospective and prospective. It is both conservative and progressive. Education transmits the culture of one generation to another. The rising generation has not only to be conveyed the activities and experiences of the past generation and asked to carry on those activities but it also has to be asked to make necessary changes in these activities and experiences to meet the new situations which it will encounter. An integration of the old must take place with the new ones. It must be remembered that communities live in the present on the past and for the future. This means that activities and experiences in the present will guide the activities of the future. Thus, education is continuous reorganization and integration of activities and experiences. Education is a constructive agency for improving our society. Brown has stated, 'Education brings changes in behaviour, and if its main functions are to remain mere transmission or enrichment of culture, it will fall short of its role in a dynamic society. Education must also provide situations at all age levels but within the maturity and ability of the individual to stimulate a creativeness of mind which can explore new horizons and bring the vision of the future into a living reality.'

### **Education: A Process of Self-realization**

Education curbs the animal instincts in man and shows him the way to realize his latent powers. It thus makes the potential actual and makes explicit what is implicit in us. It is, therefore, development from within and not an accretion from without. It modifies the behaviour of the educand. Ross points out, 'Education thus consists in a modification of natural development which, as a result of education, is other than it would have been without it.' Education emancipates us from our oddities and infirmities. It is thus a process of sublimation of instincts. Education, therefore, may be visualized as a process of self-realization and emancipation.

The self-realization aspect of education is well emphasized by Gandhiji. To him, education is 'an all-round drawing of the best in the child and man—body, mind and spirit',

education is a 'pouring out' and not a 'pouring in' process. The word e means 'out of' and duco means 'I lead'. In other words, education means leading out the inborn powers and potentialities and enabling the child to become what he is capable of becoming. The word 'self-realization' implies development of individuality in the child. We do not want our educands to be dumb driven, credulous creatures. Nunn points this out by saying that 'the complete development of individuality is the essence of education'. It is through this that 'he (educand) can make an original contribution to human life according to his best capacity.' The emancipation aspect of education has also been put forth by Tagore. According to him, education aims at 'enabling the mind to find out that ultimate truth which emancipates us from the bondage of dust and gives the wealth not of things but of inner light, not of power, but of love, making thus its own and giving expression to it'.

### **Education—A Lifelong Process**

Education is a continuous and lifelong process. It is the process of development from infancy to maturity. It includes the effect of everything which influences human personality.

### **Education—A Bipolar Process**

Both the educator and the educand influence each other. The personality of the educator modifies the behaviour of the educand and in turn is affected by the personality of the educand.

### **Education—A Tripolar Process**

Education is also regarded as a tripolar process involving the influence of the personality of the educator on that of the educand in a social setting which affects the modification of the behaviour of the latter. The knowledge of the nature of the educand is at once very useful and essential. Similarly, the educator also must thoroughly understand himself—his assets and limitations and act accordingly in educating the educand. The social setting has to be presented by the educator to the educand in a simplified and purified manner. It must be remembered that the unconscious influence of the environment is subtle and pervasive.

### **Education—A Deliberate Process**

The process of education is not only conscious but also deliberate. The educator is fully aware of the fact that his aim is to develop the personality of the child along definite lines through the modification of his behaviour.

### **Education—A Psychological and Sociological Process**

According to the psychological aspect of the process, the educator must understand the nature, interests, capacities and limitations of the child. The sociological aspect implies that the educator must also interpret the endowments of the child in a social setting.

### **Etymological Meaning of Education**

Etymologically, the word 'education' is derived from the following Latin words which are briefly explained here:

- (i) 'Educare': This means 'to raise', 'to nourish', 'to bring up'.
- (ii) 'Educere': This implies 'to draw out', 'to lead out'.
- (iii) 'Educatum': This denotes 'to train'.
- (iv) 'Educo': 'e' meaning 'out of', and 'duco' meaning 'to lead', 'to lead out'. Thus

education means:

- (i) to bring up
- (ii) to draw out
- (iii) to lead out
- (iv) to nourish
- (v) to raise
- (vi) to train

A synthesis of the meaning of these terms implies that education is drawing out and leading out something from within the individual by bringing up, nourishing, raising and training.

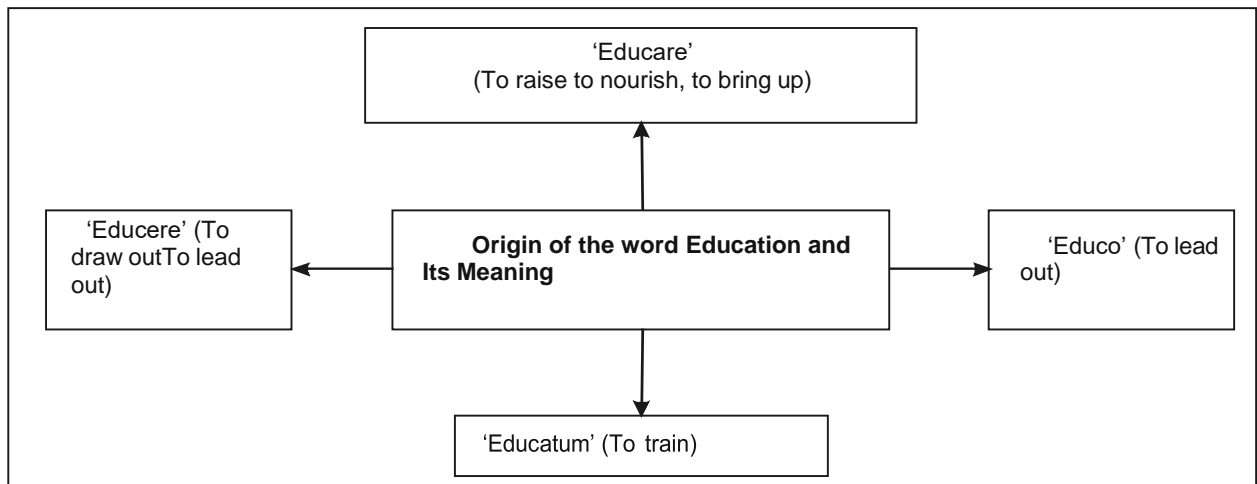


Fig. 1.1 Origin of the Term Education (Derivation or Etymology of Education)

### Brief Analysis of Some Definitions of Education

- One of the oldest treatises on education titled The Great Learning, written around 2,500 years ago and attributed to Confucious, a great Chinese scholar and thinker, sets out the meaning, the aim and the process of education in these words:

‘The great learning consists in manifesting the clear character, loving the people and abiding in the highest grid. Those who wish to make their wills sincere would first extend their knowledge. The extension of knowledge consists in the investigation of things; when things are investigated, knowledge is extended; when knowledge is extended, the will becomes sincere; when the will is sincere, the mind is rectified; when the mind is rectified, the personal life is cultivated; when the personal life is cultivated, the family will be regulated; when the family is regulated, the state will be in order; and when the state is in order, there will be peace in the universe’

Although this definition does not make clear the meaning of terms like ‘will’, ‘knowledge’ and ‘cultivated’, yet it seems to be an operational one.

- According to Nunn, ‘Education is the complete development of the individuality so that he can make an original contriution to human life to his best capacity’. The individual is a sum total of various constituents and all these must be developed. Every individual is a unique one and as such the task of education is to cater to the individual

needs. The development should take place to the maximum possible extent. This definition takes note of the needs of other human beings also.

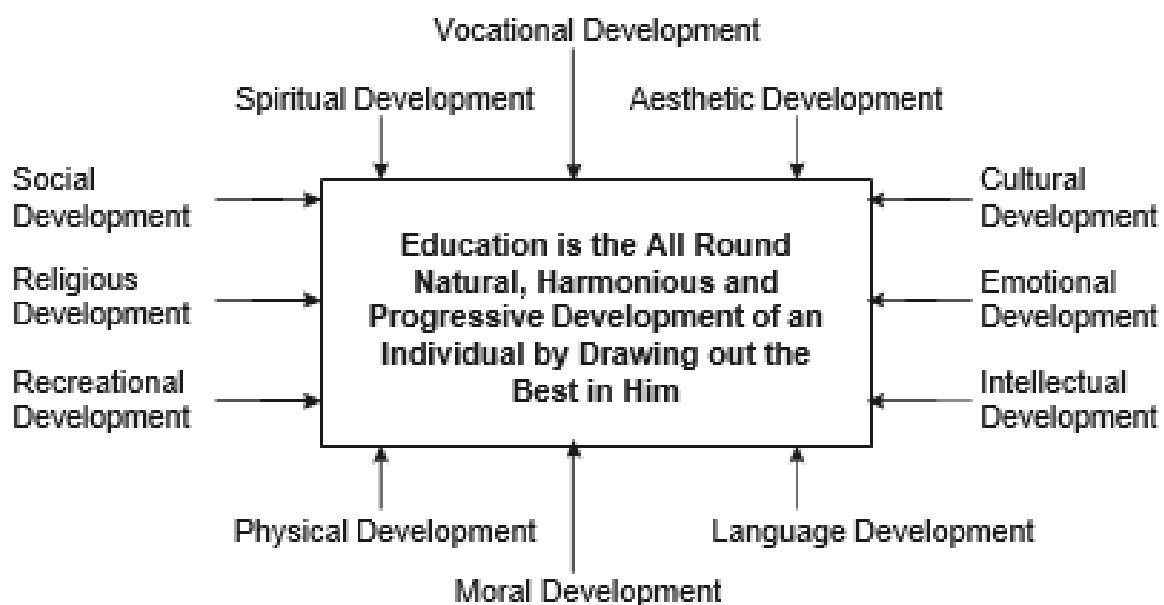
- Thomson says: 'By education I mean the influence of the environment upon the individual to produce a permanent change in his habits of behaviour, of thought and of his attitude. Environment has various aspects—physical, social and cultural. Education should facilitate the task of adaptation of the child to his environment'. The definition highlights the need for providing a suitable environment.
- According to Redden, 'Education is the deliberate and systematic influence extended by the mature person upon the immature through instruction, discipline and harmonious development of the physical, intellectual, aesthetic, social and spiritual powers of the human being according to their essential hierarchy by and for the individual and social uses, and directed towards the union of the educand with the creator as the final end'. The ultimate goal of life is the union of the individual with God. This union can take place only when the various capacities of the child are developed for the good of the individual as well as that of society.

This definition points out the three-fold function of the educator. One, for the development of powers of the individual. Two, for enabling the individual to become a useful member of the society. Three, for assisting the individual to be one with the Creator. In other words, education should liberate the individual. The objective of life as attainment of 'Moksha' as advocated by ancient Indian seers is emphasized in this definition.

- Aristotle's definition neglects the spirit and explains education only in terms of creation of 'a sound mind in a sound body'.
- Gandhiji's definition of education has already been analysed.

## Functional and Operational Definitions and Meanings of Education

By education we mean the natural, harmonious and progressive development of man's innate powers by drawing out the best in his body, mind and spirit so as to produce an individual who is culturally refined, emotionally stable, ethically sound, mentally alert, morally upright, physically strong, socially efficient, spiritually enlightened, vocationally self-sufficient and internationally liberal. This should be the end product of education. Any programme of education which puts exclusive emphasis on one of these aspects of the human personality will be considered as lop-sided and narrow. Broadly speaking, this functional and operational definition and meaning should guide us in planning and implementing our educational programmes.



*Fig. 1.2 Meaning of Education*

### Chief Characteristics of the Nature of Education

Following are the chief characteristics of the nature of education:

- Education is purposive, i.e., there is a definite purpose underlying all educational activities.
- Education is deliberate, i.e., education involves care and guidance.
- Education is planned, i.e., education is not haphazard. It is systematic.
- Education is life-long, i.e., education starts from the time of conception and goes on till death—education from cradle to grave as is sometimes said.



- Education is influence exerted, i.e., the mature persons (parents, elders and teachers) influence the learners.
- Education is balanced development, i.e., education is concerned with the development of all faculties of the child.
- Education is bi-polar, i.e., both the teacher and the pupil influence each other. Of course, the influence of the teacher is more prominent.
- Education is tri-polar, i.e., education involves the teacher, the taught and the environment or the subject-matter.
- Education is psychological as well as social, i.e., the endowments or the capacities of the child—his needs, interests, etc. must be interpreted and developed in a social setting.
- Education is growth, i.e., education modifies the behaviour of the child.

#### **1.4 Individual and Social Aims**

Education fulfils the needs of the individual as well as the society. Hence it has both individual as well as social aims. For instance: education not only enables an individual to earn living but also teach him/her to preserve and develop the culture. Therefore, brief detail of both the aims i.e. individual and social aims are as follows:

##### **Individual aims**

According to individual aims of education goodness of the society depends on goodness of the individual. Therefore, individual not the society should be given priority. Interest of the individual is supreme and superior to state or society. Hence, this aim emphasizes that education should train and develops the individual's interest, aptitude, intelligence and other attributes or traits. Further, existence of various social institutions like school, church, state and family is for betterment of the individual. A good individual will become good citizen and benefits the society is the chief belief of this aims. As such "Develop the individuality" is the slogan raised by them. According to T.P. Nunn, "Education must secure for everyone the conditions under which individuality is most completely developed." A harmonious

development should be the aim of education. Russell has observed, “If individuality is not developed properly, none can achieve distinction in life.”

Individual aims of education mean free and full development of the individual. To Rousseau, “Everything is good as it comes from the hand of Author of Nature, but everything degenerates in the hand of man. God makes all things good. Man meddles with them and they become evil”. Echoing the same view, T.P. Nunn writes: “nothing good enters into the human world except in and through the free activities of individual men and women, and that educational practice must be shaped to accord with that truth”. The aim of education therefore, should be to develop natural human with all his/her inherent goodness. Individual aims, by all means, in any form try to satisfy the personal needs of the individual. They aim at making him/her physically, mentally and spiritually strong, competent and successful individual. The advocate of such aims like Sir Percy Nunn, thus tries to conclude, “Individuality is the ideal of life” and, therefore, a “scheme of education is ultimately to be valued by its success in fostering the highest degree of individual excellence.” The state cannot dictate in matters of education. It has no right to suppress individual’s talent.

The aim of education therefore, should be to develop natural human with all his/her inherent goodness. However, the earth will indeed turn to heaven when all her human beings are self-less, noble, self-disciplined, have all their abilities engaged in making life colourful and pleasant.

In support of individual aim of education various groups have justified the goodness of this aim of education in its own way. The spiritualists are of opinion that spiritual progress and self-realization is an individual process. They believe in the doctrine of ‘karma’, according to which an individual can-not escape from the effect of good or bad deeds. “Man is potentially divine”. Therefore, education should develop the capacity in every individual to realize the self. Goethe therefore says, “No one can be like another but everyone can be like the Highest. How is that to be? Let everyone be perfect himself.” Thus from spiritual point of view, education is an individual process. According to **William H. Kilpatrick** – a democrat, “Democracy believes in the essential dignity of all persons”. It emphasises that every person be treated always as an end. An individual, therefore, should be educated as a human,

because his/her nature is human. If we fail to realize his/her peculiar potentialities, we will do harm to him/her and also to the entire society of which s/he is a member. Hence the aim of education should be the -development innate potentialities and qualities of initiative, enterprise and self-reliance in the individuals. Naturalists advocate that true education comes from within the individual, thus, education must work towards unfoldments of his innate potentialities. The biologists believe that every individual is unique and constantly trying to reach the perfection. Therefore, education should provide all sorts of assistance to enable him develop his individual-self and other abilities. The psychologists are of the opinion that no two children are identical in intellectual capacity and in other abilities. Therefore, a rigid and uniform curriculum for all the children is unjust. Education should be an individual process. The spiritualists or moralists view that man is potentially divine and divinity in him is to be unfolded through education. Thus, according to them spiritual development and self – realisation is an individual process. To existentialists, all values are man-made and as such pupils should be given full freedom to choose the values of their own choice.

- **Drawbacks of individual aims of education:**

The following arguments are generally considered against individual aims of education:

- **Social crisis:** Individual aims of education emphasises liberty of the individuals. The concept of full liberty may encourage individuals to use it as licence to do their own unmindfully, which may result in indiscipline, conflicts, disorder and lead to social crisis.
- **Self-centred:** Too much emphasis on individual self-expression (interest, intelligence and other traits) will leads to degradation of moral and spiritual values like love, sympathy, kindness, mercy, co-operation etc. among children and they will turn into selfish and self-centred individuals.
- **Impractical:** This aim of education puts emphasis on the inherent tendencies of the child which are to be developed by the individual in his own way and according to his own interests. To realise this curriculum should be constructed differently catering the individual difference, which is very difficult in the context of resources and capacity of any country. **Second**, a child when takes birth is mere a biological animal, it s through interaction with society gradually he becomes social animal. Thus, individual development is unimaginable without society. Rusk says, “The aim of education should not be the development of individuality but the enrichment and exaltation of

personality". This statement emphasises that the proper development of personality will be possible only in a social environment.

- **Social Aims**

Human being is social in nature. A man without social contact may be a divine or a devil. For a man to live without social contact is unimaginable and unthinkable. In the words of Raymont, "The isolated individual is figment of the imagination." The supporters of this *viewpoint* are of the opinion that society or the state alone is real and the individual is only a means. Therefore education should train every individual to work for the welfare and progress of the society or state, to sacrifice and surrender his own needs and individuality for the social requirements, demands and welfare. This aims emphasize that the interest of the state is always greater than the interest of the individual, hence, an individual must learn through education to subordinate his will and rights to the society. Social efficiency in an individual and socialist state is the result of social aims of education.

- **Drawbacks of social aims of education:**

Some people have reservations against social aims in education. Some of them are as follows:

- **Individuality is neglected:** Social aims of education consider state as all in all and individual as nothing. Too much focus on state than individual in the field of education hinders the flourishing of the personality of an individual. It attempts to develop the personality of the individual membership of his/her society. It means it aims at educating citizen, not individual. Thus education becomes one sided.
- **Curtail individual freedom:** An analysis of history proves that the social aim of education in its extreme is dangerous to a democratic country like India. Because this aim of education put emphasis on individual to make sacrifices for the good of the society or the nation ignoring her/his needs, interest and other traits. Even if an individual is reluctant, s/he is compelled to surrender him/herself to the State authority and dance according to the tune set by the concert of the Government. Thus, it restrict individual freedom or rights. The most unfortunate event in history is the rule by the autocrats like Hitler and Mussolini, who curtailed individual liberty. Being

intoxicated with power and authority, they destroyed themselves and their countries altogether.

- **Encourages narrow nationalism:** Social aim emphasizes superiority of the state over the individuals. Education in such a state teaches people to sacrifice the self for the interest of the state. Literary education is confined to the praise of the nation. Musicians sing patriotic songs to raise the souls and impel people to become loyal to the state. Thus education develops narrow nationalism or chauvinism in the individuals. As a result of which education for international understanding becomes a failure.
- **Scientific inventions are misused:** When education becomes the responsibility of the state authority, the blessings of scientific inventions are used only to meet the ends of the state. They consider the ends of the state to be superior to the individuals. If any individual go against the state, her/his fate is decided by the bullets. They use the power of science to suppress the individuals to make them the slaves of the society.
- **Purpose of education becomes indoctrination:** Education, in such a state is used for the purpose of teaching students what to believe. They do not have freedom to believe according to their own way. They are instilled with ideas that are beneficial to the state. Thus, education is nothing but an authoritarian indoctrination.
- **Synthesis between - 'social' and 'individual' aims**

We have already discussed the social and individual aims of education. In their most extreme forms, both the aims are one sided, undesirable and are not conducive either to the individual development or to the development of society. Therefore, a question comes to our mind that can we strike a balance between the two aims? Some are of opinion that synthesis of education for individuality and education for the enhancement of a totalitarian state is not possible. They are poles apart and may remain the same for all times to come. But this argument is vague. But, generally it is seen that human beings are dependent of society. S/he is directly or indirectly depends upon other members of society. Apart from society, s/he has no entity of his own. Ross summed up the whole situation, "Thus individuality is of no value and personality is a meaningless term apart from the social environment in which they are

developed and made manifest. Self-realization can be achieved only through social service, and social ideals of real value can come into being only through individuals who have developed valuable individuality. There is always an interaction between the society and the individual. No individual can develop in a social vacuum. Individuals can only develop in a progressive society and society can only make progress with developed individuals. This circle cannot be broken.” This view of Ross is also supported by Sir T.P. Nunn who says, “Individuality develops in a social atmosphere where it can feed on common interests and common activities.” Therefore, both the individual and the social aims of education are not opposed to each other; rather they present a healthy integration. In fact, in spite of the debate, both the individual and social aims of education are complementary. If we go deep into the matter, we find that there is nothing novel in a synthesis of the ideals of social service and individual development. Events in history prove that the age of Pericles in Greece and the Gupta era in India were an era of unparalleled individual achievements in the domain of art, architecture, literature, science, philosophy and mathematics and also in life of the society. Thus under the rule by the one synthesis of both the aims was possible. The interests of the state were enhanced by individual development. The self-development of the individuals was possible only in social service. Therefore, both the individual and the social aims of education are not opposed to each other; rather they present a healthy integration. The challenge before the educational process is to strike such a healthy integration that the individual gets the nurturing care of a good society for development and the society gets good and competent citizens for its own continuation and progress.

### **1.5 Cultural Aims of Education**

Detail discussion of both the aims of education i.e. cultural aims of are as follows:

#### **Cultural Aims**

According to Taylor “culture is that complex whole which includes knowledge, beliefs, art, morals, laws, customs and any other capabilities and habits acquired by man as a member of society”. This shows, culture refers to the sum total of the way of human life. However, our culture has come a long way. It did not develop in a day or in a month or a year, rather since ages back it was conceived and transmitted from generation to generation. Every society is distinct from each other in many aspects such as language, tradition, customs, food habits, dressing etc. It means each society has its unique culture. Our culture is our identity. Therefore, cultural aims of education seeks that education should play a vital role not only in preservation and enrichment of one’s culture but also transmit or pass it down to the next generation. According to this aim education must help in maintaining cultural heritage of our society.

### **Check Your Progress-I**

1. Why are aims of education necessary?
2. Name the aims of education?
3. List out the factors that determine the aims of education.

- **Arguments against the cultural aims**

Some of the arguments against the cultural aims of education are:

- **Impractical:** Culture is a very wide term in sense and meaning and culture varies from society to society. If the children are taught culture they shall not be able to cultivate life values which are certain and specific in proceedings. Culture has such a wide scope that the children shall not be able to conclude as to what to accept and what to avoid.
- **One sided development:** No doubt cultural aims of education will lead a person to learn her/his culture and also helps to maintain cultural heritage but development of other aspects of individual personality will remain distant dream, which further will cause only one sided development.
- **Tedious:** Many cultural elements like dowry system, traditional healing practices etc. are injurious to the existence of human society. Therefore, this aims of education has to make effort to identify those hazardous element exists in the culture of various communities and emphasis education to fulfil it cultural aims. But, this is a tedious task which is very difficult to accomplish.

### Check Your Progress-II

1. Vocational aim of education is \_\_\_\_\_ aim of education.  
a) Idealistic, b) naturalistic, c) individualistic, d) social
2. Democratic aim of education is \_\_\_\_\_ aim of education.  
a) Naturalistic, b) individualistic, c) scientific, d) idealistic
3. Write 3 important objectives of Democratic aim of education.
4. Identify three reasons for Vocational aim of education.
5. Moral aim of education is \_\_\_\_\_ aim of education.  
a) Naturalistic, b) idealistic, c) scientific, d) individualistic,
6. Cultural aim of education is \_\_\_\_\_ aim of education.  
a) idealistic, b) naturalistic, c) individualistic, d) social
7. List out some arguments for the Moral Aim of Education.

## 1.6 Types of Education

### Formal, Informal and Non-Formal

Education, in its widest sense, indicates ways in which people learn skills and gain knowledge, information and understanding. It can be divided into various ways of learning, namely formal, informal and non-formal or quasi formal.

#### 1.6.1 Formal Education

Formal education is imparted in an educational institution—a school or college. In ancient times in India, it was mostly imparted at the residence of the teacher. It is consciously and deliberately planned to bring about specific changes in the educand or the learner. As such it is synonymous with educational institutions. School is the most important agency of formal education.

Important characteristics of formal education are as follows:

- Planned education keeping in view some definite aim
- Education imparted through well planned means or formal lessons
- Education having a definite course to be covered during a definite period
- A teaching–learning process with which the teacher and the learner are acquainted
- Education organized by some agency, say the government or a private enterprise
- Education imparted in an institution having building/premises
- Education starting and ending at a particular age



- Education associated with a degree or certificate
- Education usually associated with some sort of mental strain on the teacher and the taught

### 1.6.2 Informal Education

Informal education takes into its orbit all indirect influences of the home and the society. The press, the libraries, the films and other such agencies are included as agencies of informal education. Their influence is subtle and imperceptible but at the same time very important and significant.

Important characteristics of informal education are as follows:

- Unconscious learning
- No fixed aim
- No fixed curriculum, methods of teaching, etc.
- No organized body or institution behind this process
- Lifelong learning
- Natural outcome

### 1.6.3 Non-formal Education

This is an arrangement wherein flexibility is the key word. The system is an open one with regards to various aspects of education, i.e., admissions, curriculum, place of instruction, mode of instruction and the time and duration of instruction. Open university, open learning, correspondence courses and distant education are the various examples of such a system.

Some of the important definitions of non-formal education are:

- **Bremwork:** 'Non-formal education differs from formal education from the point of proximity to immediate action, work and the opportunity to put learning to use.'
- **Coombs:** 'Non-formal education is one which is imparted through organizations and institutions outside the formal education institutions.'
- **Harbison:** 'Non-formal education is the only means of filling the gap between the "Schooled" and "Unschooling population".'
- **Henderson:** 'Non-formal education is far wider and more inclusive than schooling which

imparts wider experience out of school.'

- **Mc-Call:** 'Non-formal education is the entire range of learning experience outside the regular graded school system.'
- **Paulson:** 'Non-formal education includes any structured, systematic, non-school educational and training activities of relatively short duration in which sponsoring agencies seek concrete behavioural changes in fairly distinct target population.'

Main characteristics of non-formal education are as follows:

- *Learner-centred education:* It is based on the needs of the learners.
- *Lifelong process:* It continues throughout life.
- *Self education:* There is more emphasis on self-education.
- *Boom for drop-outs:* It provides suitable opportunities to those who on account of one or the other reason are unable to continue their formal education.
- *Motivational:* It is motivated by individual growth.
- *Community need based:* It takes note of the needs of the community and accordingly includes a variety of learning programmes.
- *No formal qualifications needed:* A large number of non-formal educational courses do not need minimum qualifications for entry.
- *Multi-dimensional:* It provides a variety of opportunities to update one's knowledge and skills.
- *Supplementary to formal education:* It supplements the system of formal education which is rather expensive.
- *Multi-agencies:* It is provided by part-time schools, open schools, adult education centres and voluntary agencies.
- *Flexible system:* It is flexible in terms of hours of study, courses, examinations, duration, etc.

A comparative study of three types of education has been done in Table 1.1

Area	Formal Education	Informal Education	Non-formal Education
1. Aim	It has definite aims.	It has no definite aim.	It has by and large clearcut aims.
2. Scope	Its scope is definite.	Its scope is not definite.	Its scope is generally definite
3. Duration	It begins from	It is life long	It can be lifelong. school goes upto University
4. Entry Points	It has fixed entry	It has no entry point.	Entry points are flexible points.
5. Agencies	It is provided time educational institutions	It has no definite agencies	It is normally available usually in full through part time institutions
6. Organization	It is an organized effort. There is usually a recognized organization which is more or less permanent	There is no organization for it	Organization may not and planned be a permanent one. Ad-hoc organizations usually take up this work.
7. Time Schedule	Its schedule is fixed.	It has no fixed schedule.	Schedule fixed as well as not fixed.
8. Level of Consciousness	The teacher and the learners are aware of the process.	Unconscious process.	It is partly conscious.
9. Methodology	Formal, fixed and a variety of methods	There is no set methodology.	Flexible approach is followed.
10. Teachers	Trained teachers impart education.	It can be obtained from any source.	Trained teachers/instructors impart non-formal education.
11. Place	It is confined to the four walls of educational institutions.	It can be acquired at any place.	It mostly takes place outside the four walls of educational institutes.
12. Environment	Environment is more or less artificial.	Environment is natural.	Environment is artificial as well as natural.
13. Curriculum	Curriculum is fixed.	There is no curriculum.	Curriculum is veryflexible.

14. <i>Discipline</i>	Discipline is normally strict.	Issue of discipline does not exist.	Discipline is rather flexible.
15. <i>Resources Required</i>	Relatively higher resources are needed.	Resources are not needed.	Comparatively less resources are required.
16. <i>Evaluation and Examination</i>	Examinations are regularly held.	There is no examination.	Examinations are not frequent.
17. <i>Award of Certificates and Degrees</i>	Certificate and degrees form an integral part.	Certificate/degree is not given or received.	Certificate or degree may or may not be awarded.
18. <i>Mental Stress</i>	It involves a lot of mental stress.	No mental strain is involved.	Usually no mental strain is involved.
19. <i>Motivation</i>	The teachers and learners are motivated.	Motivation is not involved.	Normally motivation on the part of the learners is quite high.
20. <i>Interaction</i>	There is face to face interaction which is quite visible.	Interaction is incidental.	Interaction depends upon the situation.
21. <i>Pass/Failure</i>	Students are labelled as having 'passed' or 'failed'.	Pass/Failure does not exist.	Normally it does not work on the principle of weeding out failures.
22. <i>Planning</i>	It is a planned system.	No planning required.	Planning is flexible.

Examples of different types of education are given in Table 1.2

**Table 1.2 Examples of Different Types of Education**

<i>Sl.</i>	<i>Types of Education</i>	<i>Examples</i>
1	Formal Education	<i>School, college</i>
2	Non-formal	<i>Radio, TV, Press etc.</i>
3	Informal	<i>Social gatherings, Entire environment Unconscious learning, Through imitation. Sitting on the table within a group, street and marketplace</i>

## **Narrowing the Gap between Different Types of Education**

The revolution in information and communication technology (ICT) and its use in the teaching–learning process has narrowed down the difference. The use of computers, radio and TV has introduced several elements of formal education into informal and non-formal education and vice versa. At one time radio and TV were used only for the purpose of non-formal education. Now they are being used in a planned way for formal education. In fact, there is a special TV channel for this purpose. It is estimated that at the higher education level, nearly 10 percent enrolment is through Distance Education/Open Education. New slogans like ‘Open Learning’, ‘University Without Walls’ and ‘Virtual University’ are taking the place of formal education which at one time was confined to the ‘four walls’ of the school/college. Use of Internet for educational purposes has become very popular. Content on different subjects is now available in CDs. Students have the opportunities of pursuing their studies in their bedrooms. They can get university degrees without attending any institution.

## **Agencies of Education**

It is rightly observed by Counts that ‘The school is but one among many educational agencies.’ The common belief that education is confined to schools and colleges is not entirely true. No doubt schools and colleges do occupy the most predominant place in the society as educational institutions. But when we use the word ‘education’ to denote the idea of the all-round development of the personality of an individual, we must recognize the role of other agencies of the society besides the schools and the colleges. Schools function for a short time daily. They function for only seven months during the year. The rest of the time the students spend outside the school premises—in the family, in the neighbourhood and with the peer groups. They are influenced by mass communication, media and other agencies like social education centres and libraries.

According to some educators, of all the education we receive, we learn one-fourth from our teachers, one-fourth from books, one-fourth from our colleagues and one-fourth from the overall environment. This indicates the type of education and the multitude of agencies of education.

Education in a wider sense takes place from the womb to the tomb, i.e., from conception to cremation. Education is a lifelong process. Education goes on whether we are aware of it or

unaware of it. Thus there are several types of social institutions that impart education. There are active as well as passive agencies of education. Likewise there are formal, non-formal and informal agencies of education run and managed by government and private agencies.

Education imparted in formal agencies is called formal education. Education given in non-formal agencies is called non-formal education. Education received in informal ways is called informal education.

While discussing different types of agencies, it may be borne in mind that teachers are not the only educators. As observed by T. Ramount, 'Let us agree to recognize explicitly that in a real sense teachers are not the only educators. In other words, it is life that educates, the school provides a part of life's experience'.

By the agencies of education we mean various sources, i.e., the institutions and organizations that play their role in varying degrees in the process of education.

Agencies of education have been classified in various ways, as shown in Tables 1.3–1.5.

**Table 1.3** Classification of Agencies into Formal, Informal and Non-formal Types

<i>Formal Agencies of Education</i>	<i>Informal Agencies of Education</i>	<i>Non-formal Agencies of Education</i>
1. School	1. Art Gallery	1. Adult and Social Education Centres
2. College	2. Cinema	2. Playground (when regular physical education is organized)
3. Home or Family (in the Past)	3. Home/Family	3. Radio (Educational Programmes)
4. Church (in the past)	4. Library	4. T.V. (Educational Programmes)
5. Adult school (on regular bases)	5. Museum	5. Professional Organizations like Teachers' Association when they organize seminars, workshops, etc.
6. Open school (when contact classes are also)	6. Peer group	6. Clubs when educational talks etc. are organized.

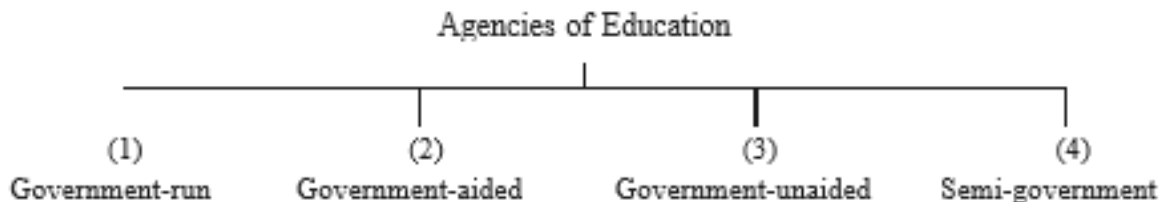
arranged)

7. T.V. (When used as an integral part of the curriculum and pre-telecast and post-telecast lessons are organized)	7. Playground (when not supervised by the teacher)	7. Cinema (When educational pictures are organized)
8. Radio (When used as an integral part of the curriculum and pre-broadcast and post-broadcast lessons are organized)	8. Press	8. Internet (When some educational course is organized)
	9. Reading Room	9. Correspondence Institutions
	10. Radio (Normal Programme)	10. Open Learning Institutions
	11. Television (Normal)	11. Distance Learning Institutions
	12. Voluntary Organizations like Bharat Sewak Samaj, Boy Scouts	
	13. Internet	
	14. State	

**Table 1.4** Classification of Agencies into Active and Passive Types

<i>Active Agencies of Education</i>	<i>Passive Agencies of Education</i>
1. The Family	1. Cinema
2. The School	2. Radio
3. The Community	3. T.V.
4. The Religion	4. Internet

- |                  |                 |
|------------------|-----------------|
| 5. The State     | 5. Library      |
| 6. Social Clubs  | 6. Magazines    |
| 7. Peers         | 7. Newspapers   |
| 8. Neighbourhood | 8. Marketplaces |
|                  | 9. Reading Room |



**Table 1.5** Classification of Agencies into Formal, Informal, Commercial and Non-commercial Types

<i>Formal</i>	<i>Informal</i>	<i>Commercial</i>	<i>Non-commercial</i>
1. School	1. The Family	1. Cinema	1. Dramatic Clubs
2. Religious Institution	2. General Games	2. Radio	2. Social Welfare Centre
3. Library	3. The State	3. T.V.	3. Sports Club
4. Art Galleries	4. The Peer Group	4. Clubs	4. Scouting and guiding
5. Museum	5. The Community	5. Newspapers	5. Youth Welfare Clubs
6. Zoo	6. The Society	6. The Press	6. Adult Education Centres
7. Organised Games			

Besides the above three broad categories, agencies of education are also classified into government-run, government-aided, government-unaided and semi-government types, as shown in the following chart.

**Formal Agencies of Education for Formal Education**

Formal agencies of education like schools and colleges impart formal education. These agencies are consciously and deliberately planned to bring about specific influences on the educand. They have regular working hours. They prepare students for taking public examinations on a regular basis. Usually they employ full time staff. They follow prescribed curriculum and textbooks. They have to conform to rigid departmental rules and regulations.

**Informal Agencies of Education for Informal Education**

The informal agencies do not follow any set pattern of instruction or education. In fact they



impart education incidentally. Education is not organized deliberately in these institutions. These are informal groups. Education is indirect. One may learn without being conscious of it. Nevertheless influence of informal agencies of education is quite significant.

### ***Non-formal Agencies of Education***

'Flexibility' is the key-word in the case of non-formal agencies of education. The system is an 'open one' with regard to: (i) Admission, (ii) Curricular work, (iii) Place of instruction, (iv) Mode of instruction, (v) Time and duration of instruction, and (vi) Regular/temporary/part time staff. Open School, Open University, Open Learning Institutions and agencies imparting correspondence education come under non-formal agencies of education. Adult education agencies are usually placed under this category.

### **Summary**

- Aurobindo defines education as 'helping the growing soul to draw out that is in itself.'
- Gandhiji speaks of education as, 'By education, I mean an all-round drawing out of the best in the child and man—body, mind and spirit.'
- According to Vivekananda, 'Education is the manifestation of divine perfection already existing in man—Education means the exposition of man's complete individuality.'
- Pestalozzi defines education as 'the natural, harmonious and progressive development of man's innate powers.' Man is endowed with certain inborn powers and capacities and the task of education is to bring about the development of these. Due regard should be paid in the process of education to the child's nature and needs.
- Education takes place when new ideas combine with the old ones. Something new is constructed by the synthesis of the two and this process goes on constantly through life. Education is growth and growth never stops.
- Education is both retrospective and prospective. It is both conservative and progressive. Education transmits the culture of one generation to another. The rising generation has not only to be conveyed the activities and experiences of the past generation and asked to carry on those activities but it also has to be asked to make necessary changes in these activities and experiences to meet the new situations which it will encounter.
- Education curbs the animal instincts in man and shows him the way to realize his latent

powers. It thus makes the potential actual. It makes explicit what is implicit in us. It is, therefore, development from within and not an accretion from without. It modifies the behaviour of the educand.

- By education we mean the natural, harmonious and progressive development of man's innate powers by drawing out the best in his body, mind and spirit so as to produce an individual who is culturally refined, emotionally stable, ethically sound, mentally alert, morally upright, physically strong, socially efficient, spiritually enlightened, vocationally self-sufficient and internationally liberal. This should be the end product of education.
- Formal education is imparted in an educational institution—a school or college. It is consciously and deliberately planned to bring about specific changes in the educand or the learner.
- Informal education takes into its orbit all indirect influences of the home and the society. The press, the libraries, the films and other such agencies are included as agencies of informal education. Their influence is subtle and imperceptible but at the same time very important and significant.
- Non-formal education is an arrangement wherein flexibility is the key word. The system is an open one with regards to various aspects of education, i.e., admissions, curriculum, place of instruction, mode of instruction and the time and duration of instruction. Open university, open learning, correspondence courses and distance education are the various examples of such a system.
- Inclusion in education was once described as an approach wherein students with special educational needs spend most or all their time with non-disabled students. For a school to be inclusive, the attitudes of everyone in the school, including administrators, teachers and other students should be positive towards students with disabilities.
- Inclusive education means that all children, regardless of their ability level, are included in a mainstream classroom, or in the most appropriate or least restrictive environment (LRE), that students of all ability levels are taught as equals, and that teachers must adjust their curriculum and teaching methodologies so that all students benefit.

## 1.7 Key Terms

- **Non-formal education:** This is any organized educational activity that takes place outside the formal educational system.
- **Informal education:** This type of education takes into its orbit all indirect influences of the home and the society.
- **Education:** It helps in the natural, harmonious and progressive development of man's innate powers by drawing out the best in his body, mind and spirit.
- **Inclusive education:** It means that all children, regardless of their ability level, are included in a mainstream classroom, or in the most appropriate or least restrictive environment.

## 1.8 Questions and Exercises

### *Short-Answer Questions*

1. Write any two definitions of education.
2. How can you say that education is a process of self-realization?
3. What are the different agencies of education?
4. Differentiate between formal and informal education.

### *Long-Answer Questions*

1. Discuss the chief characteristics of the nature of education.
2. What are the various ways in which agencies of education have been classified? Discuss.
3. Discuss the benefits of inclusive education. What should the curriculum of inclusive education be based on?

## 1.9 Suggested Reading

Aggarwal, J. C. 2010. Theory and Principles of Education, thirteenth edition. New Delhi: Vikas Publishing House.

Chauhan, S. S. 2007. Advanced Educational Psychology, seventh edition. New Delhi: Vikas Publishing House.

Kundu, C. L. and D. N. Tutoo. 1998. Educational

## UNIT II INTRODUCTION TO EDUCATIONAL PHILOSOPHY

### Structure

- 2.1 Introduction
- 2.2 Unit Objectives
- 2.3 Concept of Educational Philosophy
- 2.4 Relationship between Education and Philosophy
- 2.5 Western Schools of Philosophy
  - 2.5.1 Idealism
  - 2.5.2 Naturalism
  - 2.5.3 Pragmatism
- 2.6 Key Terms
- 2.7 Questions and Exercises
- 2.8 Suggested Reading

### 2.1 Introduction

Education is a very important factor in the growth and development of human beings. It is a never ending process. It is therefore of great significance that the concept of education is understood in great detail, so that it can be used for the betterment of people existing in different societies. Philosophy is a subject which takes great interest in examining varied subjects. It is through philosophy that we come across various methods of approaching a concept to choose the best fit in a given circumstance. Educational philosophy will then help all the stakeholders involved in the field of education to understand the subject in a much better way.

In this unit, you will learn about the concept of educational philosophy, the contributions of philosophy to the field of education, the relationship between education and philosophy and the aims of educational philosophy.

### 2.2 Unit Objectives

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

- Discuss the concept of educational philosophy

- Explain the relationship between education and philosophy
- Describe the aims of educational philosophy
- Discuss the various agencies of education

### 2.3 Concept of Educational Philosophy

Education and philosophy are two sides of the same coin—life. Sir John Adams said that education is the dynamic side of philosophy. Ross put it thus, 'Education is the active aspect of philosophical belief, the practical means of realizing ideals of life.' T.P. Nunn has said, 'educational aims are correlative to ideals of life'. Henderson has expressed similar views, 'Educational aims cannot be determined apart from the ends and aims of life itself for educational aims grow out of life's aims. To determine what constitutes worth living has been one of the chief tasks of philosophy.'

#### All Great Philosophers as Great Educators

A close analysis of the concept of education as given by various philosophers and educators will make clear that their views on education are based on their varying concepts of reality of knowledge and of values. The great philosophers of all times have also been great educators. Most of the educational movements were the expressions of their philosophical beliefs. Views of great thinkers like Socrates, Plato, Aristotle, Comenius, John Locke, Rousseau, Froebel, Dewey, H.G. Wells, Bertrand Russell, A.N. Whitehead and Aldous Huxley, offer an interesting example of the intimate connection between philosophy and education. The ancient sages in India were all educational philosophers. In recent times, this is fully illustrated in the case of Swami Dayananda, Swami Vivekananda, Sri Aurobindo, Tagore, Dr. Radhakrishnan and Mahatma Gandhi, etc.

Education is a growing science and its foundations are to be explored for a study of the subject as an interdisciplinary approach. Philosophy is the cornerstone of the foundation of education. But this does not mean that education should be enslaved to philosophy or some set of values created by human society. Philosophy should be interpreted as a vision in a wider perspective. This being so, education should be wedded to some philosophy in general. We need some frames of reference in which education has to fit. There have been various schools of philosophy presenting their views with much optimism. Education is the process of enabling people not merely to live but to live adequately. There are various types of education: academic,

aesthetic, moral, physical, social and spiritual. Theories of education have been formulated and different values emphasized.

### **Philosophy and Education**

While the goal of philosophy is to explain the baffling mysteries of universe, the place of man in the universe and the various problems created out of his wisdom and folly; the chief means of philosophy is 'education', which has been correctly described as the 'dynamic side of philosophy'. Education is a practical activity of philosophical thought. Every educational practice is supported with the backdrop of philosophy. The speculative, normative and critical function of philosophy affects not only the direction of moral guidance that the teacher gives but also affects the direction and the emphasis of the curriculum, the colour of the teacher's attitudes from day to day, even from hour to hour. No practice is good and scientific unless rooted in the philosophical thought which gives logic, rationale, sequence and system to education. Since philosophy speaks the language of analysis and reason, there is hardly any problem of education which is not solved by the calm lights of philosophy.

Fichte, therefore, very rightly observed, 'the art of education will never attain complete clearness without philosophy.' Gentile stated, 'Education without philosophy would mean a failure to understand the precise nature of education.' Dewey said, 'Philosophy is the theory of education in its most general phases.' If education is a set of techniques for imparting knowledge, skills and attitudes, philosophy is the foundation to vitalize these. Philosophy is the foundation and education is the superstructure. Without philosophy, education would be a blind effort and without education, philosophy would be a cripple.

### ***Contribution of Philosophy to Education***

1. Philosophy assists education in understanding man, his life, his actions, ideals and problems.
2. Philosophy assists the educator in formulating beliefs, arguments, assumptions and judgements concerning learning and teaching, character and intellect, subject matter and skill, desirable ends and appropriate means of schooling.
3. Philosophy assists education in the determined effort to find out what education should do

in the face of contradictory demands of life and factors arising out of experience which brings meaning and direction to thinking.

4. Philosophy assists education in giving unity of outlook to the diverse interests of the individual, his family, community and the state.
5. Philosophy provides logical vigour that is essentially connected with transcendence and disciplined imagination which when taken out from the person will find him a barren mass of flesh.
6. Philosophy provides reasons with faith.

With these endowments, philosophy creates responsibility, effort and faith in a teacher. It creates that sense of 'commitment' which builds in him the value-system to respond to the challenges which face him in the discharge of his duties.

### **Philosophy and the Curriculum**

The need of philosophy of education is felt very seriously in the area of curriculum planning. The philosophical approach to life is the guiding factor in the choice of studies to be included in the curriculum. Mahatma Gandhi's scheme of Basic Education was an expression of his philosophy. The scheme of studies, therefore, is related to the interests of the rural population: spinning, weaving, village-art and crafts.

To fulfil the needs of a technological society, the high schools of the USA stressed the study of automobile repair, electronics and aeronautics in the school curriculum. Similarly, the use of calculators and computers forms an important part of the school curriculum from the ninth grade in many schools in the USA. In India, the recent Review Committees on Education i.e. Ishwar Bhai Patel Committee (1977) and the Adiseshiah Committee (1978) have laid great stress on the inclusion of socially useful productive work as an integral part of the school curriculum.

### **Philosophy and the Teachers**

It is felt that the basic understanding of the philosophical themes on the part of all teachers regarding ancient and contemporary philosophical systems of thought will enable them to formulate their own philosophy and beliefs, help them to understand the problematic

situations in the class-room discipline, under-achievement of students and many other such problems and ultimately enable them to determine the manner in which they will handle these problems.

### **Philosophy and Discipline**

In a democratic set up, discipline is viewed as inner discipline as well as social discipline based on group work. In the totalitarian state, discipline is strictly controlled and assumes the form of a military discipline, and is based on the fear of the teacher. There is little concern for the individuality of the child in a totalitarian type of discipline. The idealists emphasize the impact of impression of the teacher on his students. 'Free discipline' is the slogan of the naturalist.

***Philosophy and Educational Organisation, Administration and Supervision:*** Democratic philosophy lays emphasis on the participation of the staff and the students in running some programmes of the educational institutions. Philosophy of communism provides little scope for such involvement and the head decides everything.

## **2.4 Relationship between Education and Philosophy**

Education is the most important human activity. It is the process of observing, thinking, learning and understanding the laws of nature. Once the knowledge is accumulated, it can be stored in the form of facts, rules and principles. This process is continuing since the time unknown and has contributed to the growth and development of human kind on the earth. In the Indian tradition, the process of education is believed to have started with the grant of Vedic scriptures by the God himself to the four pious hearted hermits named Agni, Vayu, Aditya and Angira. This wealth of Vedic texts was later expended into Brahmins, Aranyakas, Upanishads, Sutras, Smrities and other Vedic literature.

'Education is the most powerful weapon you can use to change the world'—these words of Nelson Mandela, the first black president of South Africa and the winner of Nobel Peace Prize in 1993, are apparent testimony of the importance of education in the life of individuals, societies and nations. The process of education helps to flourish the innate capabilities and environmental inclinations of man to make him a valuable asset for the humanity. Trilling and Hood (2000) specify that



‘Education has ever been an agent that contributes to upgrade human society, flourish personal talents, fulfill civic responsibilities and carry tradition forward.’ Education as a touch-stone, bears the quality of changing the destiny of man and takes him to the heights of knowledge, wisdom, wealth, position and prosperity.

Etymologically, the word ‘education’ is made of three Latin words viz. ‘Educare’ — to bring up or to nourish, ‘Educere’ — to lead out or to draw out (Wherein ‘E’ stands for ‘Out’ and ‘Ducere’ means ‘to lead’) and ‘Educatum’ — to train, act of teaching or training. Hence, education means both the acquisition of knowledge and experiences and the development of skills, habits and attitudes. It is a process of training the individual through various experiences of life. In Indian terms, there are three words used to indicate the process of learning. These are as follows:

1. **Knowledge**—to know through the senses and application of mind, brain and intellect, such as identifying people, things and places or feeling of own or others emotions.
2. **Skill**—the art of doing an activity with perfection, such as archery, pottery and story writing.
3. **Learning**—the activity of knowing, understanding and concluding the observation.

### **Definition of Education**

We cannot give a complete definition of education, since it is associated with many dimensions of human life. Education is an abstract and dynamic entity. It is a continuous process. Education has passed through many ages and stages in the process of its evolution. At different times, it had different meanings, aims and objectives according to the conditions that prevailed there and then. The concept of education is still in the process of evolution and this process will never come to an end. It must continuously grow and change to be able to cope with the changing demands. Education is consciously and deliberately planned for the modification of behaviour. Education is pursued with a set of time-bound goals through the institutions specially established and maintained for this purpose. Yet, a number of philosophers and educationists have given their definitions to elucidate the meaning of education. Some of them are mentioned

hereunder:

- 'Education develops in the body and in the soul of the pupil, all the beauty and all the perfection of which he is capable.'—Plato.
- 'Education is the creation of a sound mind in a sound body. Education develops man's faculty, especially his mind so that he may be able to enjoy the contemplation of supreme truth, goodness and beauty.'—Aristotle.
- 'Education is the natural, harmonious, and progressive development of man's innate powers.'—Pestalozzi.
- 'Education is the manifestation of what is already enfolded in the germ. It is the process through which child makes internal external.'—Froebel.
- 'What nutrition and reproduction are to the physiological life; education is to social life.'—John Dewey.
- 'Education is the complete development of the individuality of the child so that he can make an original contribution to human life according to the best of his capacity'—T.P. Nunn.
- 'Education is the deliberate and systematic influence by the mature person upon the immature; through instruction, discipline and harmonious development of physical, intellectual, aesthetic, social and spiritual powers of the human beings according to individual and social needs and directed towards the union of educant with his creator as the final end.'—Redden.
- 'We need the education by which character is formed, strength of mind is increased, intellect is expounded and by which one can stand on his own feet.'—Swami Vivekananda.
- 'Education means enabling the mind to find out the ultimate truth which emancipates us from the bondage of the dust and gives us the wealth, not of things but of inner light, not to empower but to love.'—R.N. Tagore.
- 'By education, I mean an all-round drawing out of the best in child....is mind, body and spirit.'—Mahatma Gandhi.
- 'Education is the process of the individual mind getting to its full possible development.'—Dr. Zakir Hussain.
- 'Education ought to be related to the life, needs and aspirations of the people so as to be

a powerful instrument of social, economic and cultural transmission.’—Indian Education Commission 1964-66.

### **Basic Characteristics of Education**

Having known the nature and definitions of education, it is clear that it is an important activity which develops human society in all aspects of individual, social and national life. It is the instrument of modernity and globalization in the current era. Education is a path-breaking activity ensuring emancipation from age old misbeliefs and superstitions. It inculcates an advanced thought and outlook to the people. To understand the real face of this activity, a list of basic characteristics of education is laid hereunder:

- Education is a dynamic and life long procedure
- It is the process for the realization of various inner capabilities
- Education is a psychological and physiological process
- Education is a deliberately planned activity
- It is a child centered process of socialization
- Education is important for value inculcation and enculturization
- It is considered as a bipolar and tri-polar process
- Education is not teaching, instructing or certificate awarding

## **2.5 Western Schools of Philosophy**

### **2.5.1 Idealism**

In the realm of philosophy, one finds various schools of thought or ‘ism’. These schools of thought emerged due to their differences in the ways they perceive reality, knowledge, and values. Hence, a school of thought is understood as a set of ideas regarding reality, knowledge and values. These three aspects of a school of thought are very important in influencing the aims and practices of education. There are three branches of philosophy, which deal with these aspects. These are meta-physics, epistemology and axiology. Meta-physics helps a person to understand the nature of reality. Epistemology deals with nature

of knowledge and its conditions, and means. Axiology deals with ethics and aesthetics. Ethics is concerned with the problems of values, morality, and good and bad, whereas aesthetics explains the beauty.

Aims and goals of education of western thoughts: While discussing the aims of education according to various schools of thought or 'ism', we will explain the meta-physics, epistemology and axiology as propounded by different schools of thought.

### Idealism

'Idea' is a category of philosophical emphasis, under which idealists and phenomenologists have been grouped because both share a somewhat similar kind of thinking. Plato and Descartes, who are called 'idealists,' believe that only ideas are permanent and the reality consists of ideas. There is a universal idea of 'Table', for example, which is imperfect. These ideas are prior to man's world. Similarly, phenomenologists like Husserl, Alfred Schutze and Mannheim have not recognized the existence of a physical world but have given a great notice to a symbolically endowed world of meaning.

In the Western world, a wave of philosophical thinking developed which was sponsored by Plato, Socrates, Descartes, Berkeley, Fichte, Hegel, Hume, Kant, Schelling, Schopenhauer, Spinoza and Gentile. They are known as idealists because they stressed more on mind and the self—leading to the belief that the creation of the universe is a reflection of the mind. As a result of this, a philosophical school of thought gained prominence as idealism.

Idealism is the oldest system of philosophy known to man. Its origin goes back to Plato in the West. Its basic viewpoint holds the human spirit as the most important element in life. The universe is viewed as essentially nonmaterial in its ultimate nature. All the idealist philosophers agree on the fact that (i) the human mind is the most important element in life; (ii) the universe is not composed of material in its ultimate nature. In the philosophic sense, idealism is a system that emphasizes the pre-eminent importance of mind, soul or spirit.

### **Metaphysics of idealism**

For idealists, only the mental or the spiritual power is ultimately real and hence, the universe is taken as an expression of a highly generalized intelligence and will—a universal mind. Reality is reducible to one fundamental substance—spirit. Matter is not real; rather it is a notion, an

abstraction of mind. It is only the mind that is real. Therefore, all material things that seem to be real are reducible to mind. The chair you are sitting on is not material; it only seems material. Its essential nature is the reflection of the mind.

Idealists such as the transcendentalists have used the concepts of macrocosm and microcosm to explain their version of reality. Macrocosm refers to the universal mind, the first cause, creator or God. The macrocosmic mind is continually thinking and valuing. The microcosmic is a limited part of the whole—an individual and lesser self.

In educational terms, the student can be conceived of as a spiritual entity that is also part of a larger spiritual universe.

### **Epistemology of idealism**

Idealists believe that all knowledge is independent of some experience. The act of knowing takes place within the mind. Idealist knowledge is based on the recognition or reminiscence of talent and ideas that are already present in the mind. Such ideas are a priori, that is, they concern knowledge or concepts that exist prior to, and independent of, human experience about them. Man can know intrinsically, that is to say, they can apprehend some truths without utilizing any of their senses. Man can also know truth through the act of reason by which an individual examines the logical consistency of his ideas. Plato was one who held that knowledge is a matter of recall. Objective idealists such as Plato think that ideas are essences, which have an independent existence. Subjective idealists such as Berkeley reason that man is able to know only what he perceives. His only knowledge is of mental states. Existence depends on the mind that is derived ultimately from God and God is the infinite spirit.

### **Axiology of idealism**

According to the basic theory of idealists, as has been explained above, the purpose of education is to contribute to the development of the mind and self of the pupil. The school should emphasize intellectual activities, moral judgment, aesthetic judgment, self-realization, individual freedom, individual responsibility and self-control in order to achieve this development.

### **Idealism and Aims of Education**

Let us analyse the aims of education according to the philosophy of idealism.

- **Self-realization:** According to idealism, the aim of education should be to make the individual aware of his 'self' i.e. full knowledge of the self or total development of the inherent powers of man. There are four stages of this aim of self-realization—first is the physical and the biological self, second is the social self which determines the social relations and self-acceptance of social values, third is the mental self, i.e., the self-directed reasoning and fourth is the spiritual self. At the level of the spiritual self, the total transformation of personality takes place.

- Attainment of the attributes like Satyam, Shivam and Sundaram or truth, goodness and beauty
- Development of rational knowledge intended to understand the universe
- Appreciation of beauty, which includes artistic activity through which the ultimate unity is expressed
- The development of personal moral character and social justice
- Establishing a conscious relation of man with the universal self

Thus, the aims of education according to idealists should be the development of the mind and self, intellectual capability, moral judgment, aesthetic judgment, self-realization, individual freedom, individual responsibility and self-control. Thus, the inborn nature of a person is converted into a spiritual nature and prepared for a holy life. Idealists have contributed immensely in suggesting the aims of education.

☞ **Development of spiritual values:** Idealists give greater importance to spiritual values as compared to material gains. Besides developing mental and moral characteristics in children, spiritual characteristics must also be developed.

☞ **Cultivation of truth, beauty and goodness:** Idealists assert that to develop spiritual values in the individuals, pursuits of highest ideals namely truth, beauty and goodness should be encouraged more. The more an individual realizes these ideals, the more spiritually developed he will become. Hence, education must strive its utmost in developing the child morally and spiritually so that he achieves self-realization.

☞ **Conservation, promotion and transmission of cultural heritage:** God has endowed man with a keen and penetrating intellect, intelligence and an enormous capacity of assimilating knowledge of the world. Therefore, his mental and intellectual capacities must help him

in assimilating cultural values and characteristics. Culture treasures all the peculiarities of human life in all its aspects. The purpose of education must be to preserve, transmit and develop the cultural heritage. A child is expected to be acquainted with his cultural heritage so that he conserves, promotes and transmits it to the younger generation.

☒ **Conversion of inborn nature into spiritual nature:** According to idealists, the inborn instincts and inherent tendencies of the child should be sublimated into spiritual qualities and values. This is the real development of the individuality. The purpose of education, hence, is to attain the fullest and highest development of the personality of a child.

☒ **Preparation for a holy life:** Idealists are of the view that education must provide an environment, which is conducive to the development of spiritual values in a child. If a person has a life full of piety and good ideals, he will naturally emerge as a fully developed personality with a sense of self-realization.

**Development of rationality:** Idealists advocate the development of intelligence and rationality in children so that dialectically they may discover the absolute truth. Only highly developed minds can perceive and understand the all-pervading force.

## **Idealism and the Method**

Idealists suggest that the method of education must be oriented towards achieving the complete development of all the innate abilities of the child and to train him for self-realization. Specific methods suggested are:

- **Instruction:** It is the most important tool to impart information. But, it does not mean, as held by idealists, a tool for stuffing the child's mind with junk material. It implies modification and refinement of child's mind. It has to be, therefore, supplemented by sympathetic guidance. Idealists stress that training of all kinds must be provided in the school.
- **Activity:** Like naturalists and the pragmatists, idealists also recommend activity-based teaching and learning. The child must learn through doing. Lectures must be followed by questioning by students. But, more important than this is the creative activity. The creative activity has to be natural, continuous and progressive. This helps in child's approaching

nearer to self-realization as through this child's innate tendencies are manifested. The instruction has to be active.

- **Experience:** The child's own experience should be, as far as possible, the basis of his education. The task of the teacher is not to stuff his own experience in the educand's mind but to provide the child some insight through his own experience. Teacher's guidance must help the child to get rid of his frustrated and repressed tendencies. Independence and freedom is an essential pre-requisite for experience.

### **Idealism and Curriculum**

The determinants of what should be taught in the schools, according to idealists, are the spiritual development of the child and the preservation and creation of cultural heritage of the human race. Hence, they said that curriculum has to be man-centred not child-centred, ideals and values-centred not freedom-centred, character and morality-centred not expediency centred. Ideals for children should be the objective of curriculum transition. As asserted by Socrates, 'Not man but reasons are the measure of all things; not individuality but universality, not percepts but concepts and ideals are the norms for all human experience including these of children.'

Idealism approaches the problem of curriculum from the domain of ideas rather than from the child and his present or future activities. To them, present experience of the child is not very important. What is more important is the experience of the human race as a whole. Hence, the curriculum must reflect its broad divisions: (a) science, and (b) humanities. T.P. Nunn (1923) said that a nation's schools should consolidate its spiritual strength, maintain its historic continuity, secure its past achievement, and guarantee its future. To achieve this, the idealists stress that the curriculum must reflect those activities that are of greatest and most permanent significance in the wider world, and grand expressions of the human spirit. These activities are of two kinds (a) those that safeguard the conditions and maintain the standards of individual and social life such as the care of health and body, manner, social life, morals and religion, and (b) creative activities. Hence, the curriculum must comprise: (i) literature, (ii) art (including music), (iii) handicrafts, (iv) science, (including mathematics), and (v) history.

From psychological point of view, the idealists held a belief that the curriculum should reflect: (a)



what man knows, and (b) what man does or strives to do. Looking from this point of view, the idealists' curriculum should represent the major modes of man's thinking enshrined in language and literature, science, mathematics, history and geography which constitute the traditional intellectual studies. In addition to this art, poetry and music which represent man's modes of feelings should also be included in the scheme of studies. Representatives of what man does or strives to do, such as major crafts, should also form part of the curriculum.

### **Role of teacher**

The idealists attach greater importance to the role of the teacher in organizing education for the pupils. They consider educator and the educand as two essential parts of an organic plan. They assign to the teacher the most important responsibility of creating a specific kind of environment for the desired development of the pupils. The teacher, as they say, must provide appropriate guidance to pupils, so that they may progress towards perfection and a well-rounded ideal personality. The teacher in the scheme of the idealists is like a gardener who by his art sees to it that both his cabbages and his roses achieve the finest form possible. The teacher by his efforts must help the pupils, who are developing according to the laws of their respective natures, to attain levels that would otherwise be denied to them. Ross says that the relation between the educator and the educand is such that both of them work out in the process of education through self-realization and interaction with one another. Eucken Ross says that the educator can help the pupil towards true self-realization by regarding him not as 'a particular and exclusive individual being; but as a being in whom a new and universal life seems to emerge'.

### **Idealism and the discipline**

Just contrary to naturalism and pragmatism, idealists stress the value of discipline as a part of the educative process. However, this does not mean that pupils' freedom and liberty are not important to them. Freedom to follow any and every inclination of action is, certainly, not acceptable to them. Such freedom to the idealists is license, not true freedom. On the other hand, true freedom is 'discipline' or denying himself this freedom one 'becomes master in his own house achieving the higher freedom to follow the light that is in him, unhampered by the chains of his lower nature. Self-realization is the only freedom worthy of the name. That man is free who is conscious of himself as the author of the law which he obeys. Thus, discipline not the freedom is the cry of the idealists.' Ross further says, 'if the educand is to succeed in realizing his spiritual

possibilities, he must submit to a process of discarding which will enable him to apprehend the great values of life that are stressed by idealists.' Almost all idealists emphasize that the child should be taught to discipline himself and to contribute to the disciplined behaviour of others. Pupils' learning to be self-disciplined is an important educational value for the idealists. Punishment and strict external control to enforce discipline are not advocated. Idealists, on the other hand, recommend influence and impressions left on pupils by the teachers, parents and members of society, to be the most practical methods for this purpose. They emphasize that, for achieving this purpose, the educators themselves should be disciplined; in their own behaviour they must present the highest ideal of self-discipline. They stress that the entire natural, social and spiritual environment in which the child lives should be so fashioned that it should encourage the desire for self-discipline in the child.

### **Implications in education**

Comenius is believed to be the originator of idealism in the sphere of education. According to idealism, man is born with the spiritual self. It is through education that we can realize its spirituality. Rusk says, 'Education is stated to enlarge the boundaries of the spiritual realm.' Home says, 'Education awakening to the life of God in the soul of man, involving praise, prayer and worship. Idealism has talked more of objectives and aims of education and less of its devices, methods and organization.

### **2.5.2 Naturalism**

Ward described naturalism as 'a doctrine which separates nature from God, subordinates spirit to matter and, sets up laws as supreme'. By robbing God of nature, it does away with the supernatural, and restricts itself only to what is natural; by marginalizing mind, it consolidates what is material, and is often called as materialism; and by setting up unchangeable laws of nature and matter, builds up a world-view rooted in scientific attitude, approach and method. The revolutionary changes in physical sciences in the 18th century were instrumental in developing naturalism.

## **Metaphysics of naturalism**

Naturalists believe that nature is the whole reality. They are not prepared to accept that there is any superpower. They endorse an attitude of mind that denies the existence of an order transcendent nature and sense experience. It regards human life as a part of the scheme of nature. Naturalism has two-fold importance for education: one is as a philosophy and the second is the attitude towards education in the form of aims and methodology of education.

It is an entirely distinct concept which seeks to base education on the experience of the child. Its motto is 'follow nature'. Jean Jacques Rousseau (1712–1778) was the most important naturalistic philosopher of education who cried, 'What is this? Man is born free and I find him everywhere in chains'. This cry transformed the face of Europe and its echoes were heard far and wide throughout the world. Man is the supreme creation of nature. Naturalists believe that there is no other world that is real other than the world of nature that exists in the form of matter. Therefore, the reality cannot only be understood in terms of physical sciences.

## **Epistemology of naturalism**

Rousseau and Herbert Spencer (1820–1903) were the philosophers who criticized the aims and methods of the various schools of their time. Rousseau's concept of negative education is the real method of gaining knowledge. He said that the first education of the child ought to be purely negative. This he described as not teaching any virtue, value or truth by shielding the heart of the child from vices and mind from errors. In other words, it would mean providing no education, no information of any kind to the child, but rather the sense organs and the power of reasoning strengthening. Rousseau said 'Nature wants that child should remain a child till he becomes an adult'. He called this education of his times a positive education. By negative education, he would mean changing the old sequence of positive education by allowing the child to grow his own way of seeing, thinking and experiencing and thereby saving the child from groaning under the dead weight of the old imposed meaningless education.

Thus, negative education is self-education. It is the education of the sense organs and the body. Thus, the self-experiences, which are acquired through the senses are the real sources of gaining or determining knowledge.

## **Axiology of naturalism**

Since the realists converge on the point that reality is matter, and that God, soul, mind, heaven and hell, as well as freedom of will, moral values, prayers and superhuman wonders are all illusions, therefore, there is no existence of eternal or universal values — rather, a child develops his own value system from his interaction with the external world of matter and the environment around. All concepts of goodness and morality cannot be taught if they are left to the individual to be learnt by him. For these values are transitory not permanent. They may change with the changing interaction of the individual with the outer world.

As a result of the theoretical conception of reality, knowledge and values of realists, three shades or forms of naturalism became more important which are:

### **Physical naturalism**

It lays emphasis on studying the processes of matter and phenomena of the external world. It explains human activities and experiences in terms of material objects and natural law.

#### **Mechanical naturalism**

Naturalists feel that that the universe is a lifeless huge machine, which gets its form through matter and motion. In its movement, no spiritual power is needed.

### **Biological naturalism**

It is based on Darwin's theory of evolution. According to this theory, man has evolved from lower animals by the gradual process of development. It emphasizes the development of man's natural impulses, natural propensities and inborn tendencies, which have developed, with the principles of adaptation to the environment, struggle for existence and survival of the fittest.

### **Naturalism and education**

As a philosophy, naturalism has influenced the aims and objective of education apart from discussing and describing its methods, curriculum and a few other aspects of education. In the field of education, naturalism is neither the positivism of the physical world, nor mechanical positivism or even biological naturalism. It is entirely a different concept which seeks to base

education on the experience of the child; and thus is a negation of all textbooks teaching. It adopts a scientific posture and seeks to base all education on psychology. Its motto is 'follow nature'. Jean Jacques Rousseau (1712–1778) was the most important naturalistic philosopher of education. Another such widely known philosopher was Herbert Spencer (1820–1903), who published his naturalism in education. Like Rousseau, he also criticized the methods and curriculum of schools of his times. Rousseau's negative education is one concept which is sometimes very misunderstood. Hence, before discussing other aspects of education, this concept is discussed in the following section:

### **Negative education**

Rousseau believed in the concept of negative education and deemed it to be absolutely necessary for small kids as their first education. It would mean imparting no deduction, no information of any kind to the child in the very early years of life. He said, 'In childhood, the aim of education is not to utilize time but to lose it'. Elsewhere he said, 'A 12-year old child should know nothing. Attention should be paid to the child only, not to knowledge.'

The emphasis in negative education of Rousseau was on nourishing and honing the sense organs and the power of reasoning. Rousseau criticized the system of education of his times saying that it was barbarous as it sacrificed child's present in favor of his uncertain future: It was trying to make the child an adult. He called this education of his times positive education. Explaining his new system of education Rousseau said, 'Give me a student of 12-years of age I will teach him so much as other children read in 15 years of early life'.

The concept of negative education is negative in the sense that it was a negation of the old system of teaching-learning, negation of classroom learning, negation of teacher's teaching in formal ways negation of teaching morals and values. Rousseau said that if all the time you are teaching morals to the child you will make him a fool; if you are all the time giving instruction, then child's mind will become useless. Whatever the child learns in the playground is more useful than what he learns in the classroom.

### **Naturalism and Aims of Education**

Different philosophers have expressed and emphasized different aims and objectives of education. Even among the different forms of naturalism, variations are found with regard to educational goals. Mechanical naturalism suggests that education should aim at the efficiency and perfection of the human being. This, however, is not the representative view of naturalism as a whole. Biological naturalism stresses proper adaptation or adjustment of the child to environment. Herbert Spencer described education to be a preparation and training for complete life. As described by Ross, the aim of education according to naturalism seems to be the present and future happiness, pleasure and happiness that are lasting and permanent are more worthwhile in the long run. But McDougall denied the truth of this hedonistic view of aims of education. According to McDougall, the aim of education is the transition of the energies of the inclinations, the redirection, coordination and harmonious working of the native impulses. As described by McDougall, education should enable the individual to attain the goals set for him by nature in ways that have individual and social value.

Naturalists also believe that education should prepare the pupils, equip them and through them the nation for the struggle for existence and survival. From another point of view, education is seen as the process of adjustment to environment, enabling the individual to be in harmony with and well adapted to his surrounding. Health of body and mind is stressed and the ideal is a well adjusted happy being with no discontent. Bernard Shaw, another naturalist, saw education as man's deliberate effort on accelerating the pace of evolution itself. To him, the aim of education is the preservation, the handing on and the enhancement of racial gains from one generation to another.

**Statewide aims of education, as stressed by Rousseau, are:**

- During the first five years, the aim of education should be child's bodily development, and the development and strengthening of every part of the body. The child should grow up healthy and strong through complete liberty.
- During childhood from 5th to 12th year, the education should aim at developing child's sense organs through experience and observation.

During adolescence from 12th to 15th year, the child is ready for systematic education. At this stage, education should aim at the development of adolescent's personality through hard work, guidance and study. The adolescent should be given knowledge of various kinds.

- The youth (15–20 yrs) as pointed out by Rousseau, should be taught moral and social qualities. The aim of education of the youth should be bodily, sensory, mental, social and moral envelopment of the individual.

The aims of education, according to Herbert Spencer were as follows:

- Self-preservation, i.e., preservation of body and mind
- Earning a living, i.e., education in all the sciences
- Establishing family and upbringing of children
- Citizenship development
- Use of leisure time devoted to study and practice of painting, music, sculpture, poetry and also recreation
- Moral development

The naturalists of 19th and 20th century, however, believed that education should achieve a synthesis and adjustment between the individual and the society, between man and nature.

### **Naturalism and Curriculum**

What should be taught in the school is the matter to which not all naturalists have the same answer. To have an all-embracing glimpse, one has to extract a common factor from various views presented by several naturalists. The extreme form of naturalism emphasizes the present experience, activities and interests of the child himself. So, they say, it is these which should determine the content of the curriculum. Their motto is 'knowledge for the sake of knowledge'.

The latest naturalistic movement in educational theory and practice had been expounded by A.S. Neill in a series of books. He tried to make Summer Hill, a residential school, the happiest school in the world; a place where the child's curriculum is dominated by play to the extent that if the child wishes he can play all the day, where teaching–learning matters little. Books are of little value and examinations are hated. The school's curriculum consists of creative arts and activities having pottery room, wood and metal shop where children make whatever they want.

As a system of philosophy, naturalism has been exceptionally susceptible to the development of science. The naturalists attach greater importance to evolutionary theory, empirical

teaching and scientific analysis. They recommended physical and social sciences to be taught at every level of education. They also said that language and mathematics being the tools for the learning of science should also be taught.

Yet, there are found differences and contradictions among the views of the naturalists with regard to the curriculum theory. For example, Comenius wanted the educand to study every subject without making selection, while Locke said every educand should not be required to learn every subject for reasons of individual differences. He emphasized that the curriculum should be modified to suit the needs of the individuals. Similarly, Herbert Spencer wanted science to be the nucleus of the curriculum. He gave the arts subjects, a secondary place in the curriculum. T.H. Huxley, another naturalist attached greater importance to cultural aspects of life in comparison to science.

Thus, it is very difficult to say what exactly the curriculum of the naturalism was. In fact, all eyes of the naturalists were fixed on the child and his freedom. About other aspects of education they were only cursorily glanced.

### ***Naturalism and Methods of Education***

The naturalists' conception of education was that it is the child himself rather than the educator, the school, the book or the curriculum that occupies the central position. Stanley Hall calls this the andocentric attitude which is said to be the keynote of 20th century movement and is essentially naturalistic. Naturalistic conception of education is based on psychology.

As regard the method of teaching, the naturalists stressed the direct experience of things. As Rousseau said, 'give your scholar no verbal lessons; he should be taught by experience alone.' Things rather than words was the slogan of the naturalists. They said that science should not be taught from readers or by 'chalk and talk' lessons; it should rather be learnt by the pupil through his own work in the laboratory or wherever possible through a direct study of the natural phenomena. Similarly, geometry should be taught not by arguments and problems in the textbooks, but by means of actual survey of the school field, playground, etc. In the same way, geography should be taught through school journeys and actual excursions rather than taught from books and maps. Rights and duties of citizens should be taught not through talks but through



the organization of the school as a free natural society where every pupil is encouraged to participate. Students' self-governments should be the methods for teaching these qualities. Thus, the most important method of teaching, according to naturalists, is to leave the child free to learn from nature.

Authoritarianism in teaching, rote learning, book-learning, classroom learning, and theoretical teaching were denounced by the naturalists. Child's own experience was considered the most comprehensive book from which the child should learn, according to naturalists.

Play way method of learning was very much emphasized by all naturalist philosophers. Artificiality of any kind was very much condemned by them, in formal atmosphere in the class and the school was considered important. Participation of children in extracurricular activities was emphasized. The naturalists had a conviction that, left to him the child will himself evolve the method which suits him best.

### **Naturalism and Discipline**

Almost all naturalist philosophers discarded the traditional concept of discipline, which was imposed on the child from outside. Particularly, they opposed the method of physical punishment for they believed that this generated undesirable conflicts and strain in the mind of the child. Rousseau said, 'Freedom and not the power is the greatest good'.

If the child makes a mistake, he will get his reward from nature itself and thus he will learn to distinguish between right and wrong through the consequences of his own actions. Thus, discipline through consequences of behaviour was emphasized. This, however, should not be understood to mean giving license of doing anything and everything to the child. As hinted by Dewey, it becomes necessary sometimes to scold the child, to caution him or even to punish him.

### **Naturalism and the Teacher**

Least important is the position of the teacher in the scheme of Naturalistic education. He is barely tolerated. His interference with child's education is considered unfavourable. He is forbidden to resort to any forceful or patronizing method. He may not even seek to influence the child. As said by Ross, 'Teacher's place, if any, is behind the scene, he is an observer of the child's development

rather than a giver of information, ideas, ideals and will power or a molder of character. These, the child will forge for himself.' The teacher's role according to naturalists is that of the setter of the stage, the supplier of materials and opportunities, the provider of an ideal environment, the creator of conditions under which the natural development of the child may take place. Influenced by naturalism, several systems such as Montessori System, Dalton Plan, Project Method, etc. developed and they all assigned to the teacher a similar status. In Froebel's Kindergarten system, the teacher is considered to have the same position which a gardener has in the garden. His only function is to make sure that the plants grow according to their own nature and that their development is not hindered.

### **Educational Implications**

- **Paidocentric movement:** This tendency, as highlighted by John Adams means that it is the child himself rather than the educator, the school, and the book on the subjects of study that is in the foreground of the educational picture.
- **Emphasis upon psychology:** Naturalists' emphasis on child's natural development resulted into psychological studies of the child's nature. Concepts like child's nature, his adjustment to the environment, individual differences with regard to their nature etc. brought psychology into prominence.
- **Freedom of the child:** Learning through one's own experience, an important principle of teaching-learning in education, was an outgrowth of naturalistic philosophy. Rousseau considered experience as the best way of teaching as against verbal lessons.
- **Play way method:** This is an important contribution of the naturalists towards children's growth and learning. The principle emphasizes that young children be given enough opportunity to play. Through play activities, children develop their creative and constructive powers.

### **2.5.3` Pragmatism**

Pragmatists like Charles S. Pierce, William James, George Herbert Mead (1863–1931), John Dewey (1859–1952) and Bertrand Russell (1872–1970) believe in the doctrine which evaluates any assertion solely by its practical consequences and its impact on human

interests. Pierce stressed the use of scientific method in validating ideas; James applied pragmatic interpretations to psychology, religion and education; Mead emphasized the development of a child as learning and experiencing human being; Dewey in particular wrote extensively on education. Because of their thinking a kind of philosophical speculation called pragmatism emerged. The theory which was propounded by these thinkers is called the pragmatic theory of philosophy. According to the emphasis laid by these eminent philosophers, there are four important forms of pragmatism: (i) Humanistic pragmatism, (ii) Experimental pragmatism, (iii) Nominalistic pragmatism, and (iv) Biological pragmatism. Humanistic pragmatism asserts that all truths are human truths to be verified on the criterion of reality. Experimental pragmatism holds that truth is that which may be experimentally proved. According to Nominalistic pragmatism, the results of an experiment are always particular and concrete, never general and abstract. Biological pragmatism extends that the ultimate aim of all knowledge is harmony of man with his environment. It further asserts that the school is a miniature society which prepares the child for future life.

### **Metaphysics of pragmatism**

Pragmatists reject metaphysics as a legitimate area of philosophical inquiry. Reality, they argue, is determined by an individual sense experience. Man cannot know anything beyond experience. Therefore, questions pertaining to the ultimate nature of man and universe simply cannot be answered because these problems transcend one's experience. For example, there is no way for any living being to determine whether there is life after death because he cannot experience life after death while living. Thus, unless we can experience the phenomena in question, it is impossible to verify any solution suggested for such problems. Attempts to answer metaphysical questions are little more than guessing games, in their opinion.

### **Epistemology of pragmatism**

Pragmatists do not accept the dualism that separates the perceiver from the object that is perceived. Man is both in the world of perception and of the world of his perception. All that can be known is dependent on experience. This experiencing of phenomena determines knowledge. Because the phenomena are constantly changing, it follows that knowledge and truth must similarly be dynamic. Truth is something that happens to an idea. Whatever is considered true today must also be considered as possibly changing tomorrow. Circumstances do alter cases.

Thus, the person is constantly changing, the environment is constantly changing and the experiences or transactions are also changing. Each time a human experience is reconstructed to solve the problem; a new contribution is added to humanity's fund of experiences.

### **Values of pragmatism**

According to pragmatists, values are relative to time, place and circumstances. What contributes to human and social growth and development is regarded as valuable, what restricts or contracts experience, is unworthy. It is necessary then, to test and examine value assumptions in the same way that scientific claims are subjected to verification. According to pragmatists, education is inductive and based on the scientific method. Tentative assertions are based on empirical experience and must be tested.

Thus, value in ethics and aesthetics depend upon the relative circumstances of the situation as it arises. Ultimate values cannot exist, for truth is always relative and conditional. Nevertheless, value judgments are useful as a means to an intelligent life that is successful, productive and happy.

### **Pragmatism and Aims of Education**

The pragmatists do not accept development of eternal spiritual values, discovery of pre-existing reality and universals and teaching of moral standards to pupils, as the aims of education which were the heart of the idealists' scheme of education. Pragmatists assert that any effort on the part of the educator to prescribe specific goals or to decide the child's purposes for him nullifies true education.

The aim of education as described by most pragmatists is the cultivation of a dynamic, adaptable mind which is resourceful and enterprising in all situations, one which is powerful enough to create values in an unknown future. The pragmatists accept growth or development of the child as the aim of education. But, the forms and standards of these are not pre-existing, not permanent and fixed. They are to be discovered in future. All the aims of education, they say, must be concerned with the present and the future, and must be subject to modification.

According to Dewey, education as such has no aims; education is an abstract idea. Only

persons have aims. And the aims of persons are indefinitely varied deferring with different children, changing as children and their teachers grow. Stated aims do more harm than good unless they are taken only as suggestions, not to be taken literally. Even these aims must possess three elements in order to be useful. These elements are:

(i) they must be based on educand's actions and needs, (ii) They must elicit educand's cooperation, and (iii) They must be specific and temporary, not permanent and general.

American pragmatism, however, is certainly not guilty of neglecting the social aspects of education, as it emphasizes that education must aim at realizing democratic values in life. It should instill in the educand a respect of the democratic institutions. Kilpatrick said, 'The classrooms must become living democracies; in a democracy it is self-directing personalities that we try to build; the kind that can carry forward life even more successfully in a developing world; and the progressive development of a better life for all men is the basis out of which morality and moral conduct arise.' Thus, it may be concluded that the pragmatists favour the democratic ideals of education.

Pragmatism is emphatically humanistic. It also assumes, like Protagoras, the sophist that 'man is the measure of all things' and emphasizes human purposes and the satisfaction of human wants rather than 'one grand purpose towards which the universe is to move'.

### ***Pragmatism and Curriculum***

The pragmatists favour that curriculum which satisfies the following criteria:

- **Utility criterion:** This criterion would mean that whatever is put in the curriculum, it should do good to the pupils, it should be of some utility, some use for the child. The knowledge that is provided to the child must help him in his later life in solving his problems and adjusting to his environment. 'The school must store up experience that is to stand the child in good stead.' The curriculum must include the knowledge and skills that the child requires not only for his present life as a child, but also for his future life as an adult. In view of this criterion, it was suggested that the curriculum for the young child of elementary school must include language, arithmetic, health and physical training, history, geography, domestic science for girls, agriculture for boys and training for some vocation.
- **Reality criterion:** The curriculum should be real, i.e., it should be concerned with the

realities of child's nature and of life. Hence, its content should be selected from different activities of real life. The determining principle should be the natural interests of the child.

- **Child's experience as the criterion:** This principle implies that the curriculum should be based on the child's experience. It means that practical work should constitute as an essential ingredient of the curriculum. Teaching through books should be supplemented by programmes which provide actual experience to the child.
- **Child's interest as the criterion:** This criterion implies that while selecting material for constructing curriculum, child's own interests must be taken into account. Genetically, children have four kinds of interests—talking, searching or discovering, creative and artistic. Hence, the curriculum should include reading, counting, handicraft, painting, etc.
- **Purposiveness criterion:** The curriculum, according to pragmatist should be purposive. It means the knowledge to be incorporated in the curriculum should be such as it serves some purpose in the life of the child.
- **Integration criterion:** This criterion emphasizes that the different subjects should not be completely differentiated from each other as knowledge is one single whole. This is an important criterion which has been much emphasized by the pragmatists. Knowledge contained under various subjects should be organized in the curriculum in an integrated manner as far as possible.

### ***Pragmatism and the Method***

Pragmatic methods of education are based on psychology and sociology subject to the conditions that they give adequate scope for active participation by the educand and also that the method adopted must be dynamic and changeable. The method suggested is the 'project method' which is the most characteristic and valuable contribution of the pragmatists. This method focuses on the learning process which involves some practical problem to be solved by the child.

The project as defined by Stevenson as a 'problematic act carried to completion in its natural setting'. Thomas and Lang define it as 'a voluntary undertaking which involves constructive effort or thought and eventuates into objective results.' Educational projects may be of individual or social character. Social projects are a sort of 'socialized activities' and they are preferred to individual projects. In case of very young children, projects may take the form of play such as playing the roles of the school teacher, or running a family or a post office, etc. At higher

levels, more complicated activities such as production of a play, or a concert involving elocution, music, literature, craft work, needle work, etc, may be organized in the form of projects. In all subjects such projects may be prepared. But, it is not like this that the whole of teaching may be done through projects. Nor can projects be suggested readymade from outside. It is the educator's insight that is needed for successful selection and completion of the project. What is more important is not the project itself but the incidental learning that takes place as a byproduct of the project method.

The great principle involved in the project method of teachings is learning by doing, experience-based learning, one's own learning. Pragmatism offers more help in the methods than in the aims of education. The pragmatists assert that education is not so much teaching the child things he ought to know, as encouraging him to learn for himself through experimental creative activity. It is action which is emphasized by them rather than reflection. It was the belief of the pragmatists that true knowledge does not come from books; it comes from child's own doing. The most general method of education, according to pragmatists, is putting the child into situation with which he wants to grapple and providing him, at the same time, with the means of dealing with them successfully.

### **Pragmatism and the educator**

The pragmatists consider the role of the educator important unlike the naturalists who like him to be banished from the scene. The educator has to be there in the capacity of an adviser and a guide of the pupils as well as a servant of society. His job is to create in the school an environment which may help in the development of the child's social personality and enable him to become a responsible democratic citizen. Dewey gives the educator so great an importance as he calls him God's representative on earth. But, unlike the idealists he has not to impose himself on pupils, rather he has to see how best he can help the pupils to grow and develop naturally in conformity with their interests and potentialities. He has to identify most appropriate educational project, motivate and guide students to carry them out, facilitate and provide essential materials needed for completing the projects. How efficiently, successfully and fruitfully the project method is used depends very much on the educator's insight and wisdom. He has to be a model for the pupils.

## **Pragmatism and discipline**

What discipline is and how discipline should be enforced are discussed in detail by the pragmatists. They stress self-discipline instead of discipline as control and restraint from outside. True discipline comes from child's own inner striving. Strict control imposed by authorities, ultimately, does harm to the child. True discipline is the result of developed social consciousness of the educand. It is this social consciousness which prevents the child from indulging in anti-social activity. Pragmatists believe that freedom is the root of true discipline. Freedom and discipline are inseparable according to them. Self-discipline is the best discipline to them.

For developing self-discipline, it is essential that the educand must understand and realize the importance of discipline. This realization emerges, according to the pragmatists, from the educand's engagement and participation in those activities which lead to the fulfillment of his social obligations. Participation in responsibility, inspiration, insight, cooperation, compassion, etc. will make him a good, responsible citizen. Blind obedience to rules is no discipline, they say. True discipline is responsible behaviour emerging from the sense of social responsibility. This developed sense leads the educand to be self-disciplined. Dewey maintained that discipline is not the sole function of child's personality; it is very much dependent upon the socio-psychological environment in which the child is placed. Hence, acquiring the habit of being self-disciplined is the consequence of environmental manipulation. School activities may generate the kind of environment needed. Free, happy and purposive activity of the pupil is likely to result in permanent attitudes, initiative and independence. Training in citizenship, character-formation, moral education come from school activities which, ultimately, lead to self-discipline on the part of the child.

## **Summary**

- Aims and goals of education have been perceived by Western philosophers according to their respective philosophical as well as educational sensitivity. The thinkers who shared common thinking were grouped in their respective categories.

In the writings of Plato, Descartes, the emphasis is placed on an idea, which is the ultimate reality and exists independent of matter, space and time. Therefore, the aims of education according to idealists were self-realization, character building and spiritual and moral development. Likewise, Edmund Husserl, Schultz and Mannheim refuted the idea of



physical environment and advocated the acceptance of the world of meanings to be understood symbolically.

- As the focus of understanding about the world, man and society shifted from idea to experiences, various dimensions of experience figured in the cognition of thinkers, whether they were empiricists (Bacon), naturalists (Rousseau), realists (Mulcaster), pragmatists (Dewey), deconstructionists (Theodore Brameld), positivists (A.J. Ayer), analysts (G.C. Moore and Bertrand Russell), existentialists (Jean Paul Sartre) and others.
- The Western thinkers made 'experience' as a deviating point from each other with regard to metaphysics, epistemology, values and the aims of education given by them are the consequence of their respective philosophical thinking.
- Empiricists suggested that education must develop the ability to arrive at empirical understanding; according to realists the aim of education is to provide the pupil with the essential knowledge one requires to survive in a natural world. Accordingly, naturalists advocate the inculcation of the power of self-expression and self-existence as aim of education.
- Apart from these, there are sociologists like Theodore Brameld, Carnap and Dewey who perceived education as a social thing and interpreted education from a sociological point of view. Therefore, Brameld proposed the aim of education as being the capacity to bring about a social reconstruction of experience.
- Carnap was of the opinion that education must develop the ability to provide logical solutions to the problems. John Dewey emphasized on the meaningful construction of experience as the aim of education to make it socially useful and productive. Marxists also provide the socialistic aim of education.

## 2.6 Key Terms

- **School of Thought:** It is understood as a set of ideas regarding reality, knowledge and values.
- **Macrocosm:** It refers to the universal mind, the first cause, creator or God.
- **Idealism:** It is a school of philosophy, which holds the human spirit as the most important element in life.

- **Naturalism:** It is a doctrine which separates Nature from God, subordinates spirit to matter and, sets up laws as supreme.
- **Pragmatism:** It refers to the doctrine which evaluates any assertion solely by its practical consequences and its impact on human interests.

## 2.7 Questions and Exercises

### Short-Answer Questions

1. Write a brief note on different schools of thought.
2. What are the aims of education according to idealism?
3. What is the role of teacher according to idealism?
4. List different types of naturalism.
5. What is negative education according to Rousseau with reference to naturalism?
6. What are the aims of education as per naturalism?
7. Write a note on pragmatism and curriculum.
8. What are the aims of education as per existentialism?

### Long-Answer Questions

1. Explain the mean of idealism and discuss its different dimensions.
2. Give a detailed view of naturalism and its aims and aspects.
3. What is pragmatism? Explain the different aspects of pragmatism.
4. Define and explain in detail the concept of existentialism, its scope and its views on education.

## 2.8 Suggested Reading

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**Unit -III**  
**EDUCATIONAL PSYCHOLOGY**

**Structure**

- 3.1 Introduction
- 3.2 Unit Objectives
- 3.3 Meaning, Nature and Scope of Educational Psychology
- 3.4 Concept of Growth and Development
- 3.5 Stages of Human Development
  - 3.5.1 Infancy
  - 3.5.2 Childhood
  - 3.5.2 Adolescence
- 3.6 Key Terms
- 3.7 Questions and Exercises

**3.1 Introduction**

Educational psychology is the most important branch of applied psychology. It is the study of the psychological aspects of educational situations. It is a study of educational problems with reference to psychological facts. Psychology is the science of behaviour and education aims at modifying the behaviour in the most desirable way. The modification of behaviour depends on some fundamental psychological laws and limitations. Educational psychology studies those facts and limitations. It covers the development of the child from early childhood to maturity.

In this unit, you will learn the meaning and scope of educational psychology.

You will also learn about the concept and theories of learning.

**3.2 Unit Objectives**

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

- State the meaning and definition of educational psychology

- Discuss the scope of educational psychology
- Explain the meaning and nature of learning
- Discuss the various theories of learning
- Differentiate between the various laws of learning

### 3.3 Meaning, Nature and Scope of Educational Psychology

Educational psychology consists of two words—psychology and education. Some of the important definitions of educational psychology as given by eminent psychologists are given below:

1. **Anderson** — ‘Educational psychology is a subject to be studied, an area or field of knowledge, a set of application of laws and principles from a wide field of knowledge to a social process, a set of tools and techniques, and a field of research. While general psychology is pure science, educational psychology is its application in the field of education with the aim of socializing man and modifying his behaviour.’
2. **Crow and Crow** — ‘Educational psychology describes and explains the learning experiences of an individual from birth through old age.’
3. **Anusubel, David P** — ‘Educational psychology is the special branch of psychology that is concerned with the nature, conditions, outcomes and evaluation of school learning and retention.’
4. **Encyclopaedia of Educational Research** — ‘Educational psychology is the study of the learner and of the learning-teaching process in its various ramifications (branches) directed towards helping the child come to terms with society with a maximum of security and satisfaction.’
5. **Judd** — ‘Educational psychology is the science that explains the changes that take place in the individuals as they pass through various stages of development.’
6. **Kolesnik, Walter B** — ‘Educational psychology is the study of those facts and principles of psychology that help to explain and improve the process of education.’
7. **Peel, EA** — ‘Educational psychology is the science of education.’
8. **Skinner** — He gives two definitions: (1) ‘Educational psychology covers the entire range

of behaviour and personality as related to education.’ (2) ‘Educational psychology is that branch of psychology that deals with teaching and learning.’

9. **Stephen** — ‘Educational psychology is the systematic study of educational growth and development of a child.’
10. **Trow** — ‘Educational psychology is the study of psychological aspects of educational situations.’

A perusal of the above-mentioned definitions shows that educational psychology deals with the conditions that promote or retard the development of the learner. Educational psychology attempts to define, describe and explain the changes that take place in the learner through his various stages of development. It is the study of the human mind as it bears upon learning and teaching activities. Teaching and learning are the focal points of educational psychology. Educational psychology investigates the methods and techniques of imparting education to the learner, discovers a number of general rules and applies these to the practical problems of learning.

### **Nature of Educational Psychology**

Following are the important characteristics of educational psychology:

1. It combines two fields, i.e., education and psychology.
2. It is the scientific study of human behaviour in educational situations.
3. It is one of the many branches of applied psychology.
4. It is concerned with those factors, principles and techniques that relate to the various aspects of child’s growth and development.
5. It is concerned with learning situation and the process by which learning can be made more efficient and effective.
6. Educational psychology draws heavily from various branches of psychology, biology, sociology and anthropology.
7. Educational psychology is not as exact and accurate as natural sciences since human behaviour cannot be predicted exactly.
8. Educational psychology is a science of education dealing primarily with *how, when* and

*what* of education.

Although educational psychology has drawn a great deal from the main field of psychology for its techniques, strategies and solution to problems of education, this branch of science is not merely a discipline made up of borrowed knowledge. It is a special field of study in its own right.

### **Tasks of Educational Psychology**

Well-known psychologist W. A. Kelly (1941) listed the following tasks of educational psychology:

9. To give knowledge about the nature of the child
10. To give understanding of the nature, aims and purpose of education
11. To give understanding of the scientific methods and procedures that have been used in arriving at the facts and principles of educational psychology
12. To present the principles and techniques of learning and teaching
13. To impart training in the methods of measuring abilities and achievement in school subjects
14. To give knowledge about the growth and development of children
15. To assist in better adjustment of children and to help them avoid maladjustment
16. To study the educational significance and control of emotions
17. To give an understanding of the principles and techniques of correct training

### **Focal Areas and Scope of Educational Psychology**

Five major areas covered by educational psychology are as follows:

18. The Learner
19. The Learning Process
20. The Learning Situation
21. The Teaching Situation
22. Evaluation of Learning Performance

The scope of educational psychology is as under.

1. **Educational psychology helps the teacher to realize the aims of education:** The main aim of education is harmonious and all-round development of the educand. Development comes from within, and the inner potentialities must be understood and approached for the desired modification in the development of the child. Educational psychology helps the teacher to understand the inner potentialities that underlie the behaviour of the child.
2. **Knowledge about the learner is as necessary as knowledge of the subject:** Acquisition of knowledge is no more the main object of education, though it is still a significant component of the process. Acquisition of knowledge also helps modifying the behaviour of the child. For this purpose, the educator will have to consider the mental processes of the child and not just the quality of knowledge that he is putting into the child's mind.
3. **Psychology tests the aims of education:** Educational psychologists can analyse an aim and determine its practicality with reference to the fundamental laws of psychology.
4. **The teaching situation:** Effectiveness of educational psychology becomes relevant only when its findings and methods become a part of educational practices followed by teachers.
5. **Evaluation of learning performance:** It includes the use of statistical methods and conducting research on educational problems.

A course in educational psychology must seek to enrich knowledge and develop competence in the following areas:

1. Individual growth and development
2. The process of learning
3. Motivation
4. Personality
5. Individual differences—heredity and environment
6. Intelligence
7. Measurement and evaluation
8. Elementary statistics in education



9. Special education

10. Elementary research techniques

### **3.4 Concept of Growth and Development**

Growth and development have been interchangeably used by most of the developmental psychologists because both the processes are interrelated and interdependent on each other. It is difficult to differentiate the contribution of either of them in the development of the personality of an individual. However, some psychologists define growth as an indicative of increase in the bodily dimensions: height and weight, which are generally confined to quantitative changes. Arnold Gessell, an American child psychologist, wrote,

‘. . . Growth is a function of the organism rather than of the environment as such: The environment furnishes the foil and the milieu for the manifestations of development, but these manifestations come from inner compulsion and are primarily organized by inherent inner mechanics and by an intrinsic physiology of development. The very plasticity of growth requires that there be limiting and regulatory mechanisms. Growth is a process so intricate and so sensitive that there must be powerful stabilizing factors, intrinsic rather than extrinsic, which preserve the balance of the total pattern and direction of the growth trend. Maturation is, in a sense, a name for this regulatory mechanism.’

Development can be defined as the emerging and expanding of capacities of the individual to provide greater facility in functioning, such as development of motor ability from uncertain steps to proficiency in games. Development as a matter of fact is achieved through growth.

Development refers to interactions of a person and his/her environmental surroundings whose after-products alter existing response tendencies in such a way as to increase: their strength, the degree of differentiation, and the organization of personality.

Development refers to those effects upon the person’s cognitive–emotional systems which strengthen or enlarge one or more of them, increase their number or interrelate them in some different way. In brief, development is confined to qualitative changes in the organism.

The process of development has been explained on the basis of different viewpoints.

Some of them are as follows:

1. Development as maturation: According to the famous child psychologist, Arnold Gessell, the role of physical changes is important in development. The development from infancy to adolescence is governed by physical changes that are mapped out in the individual's genes. For instance, a growing nervous system changes systematically and automatically; and this results in predictable changes in bones and muscles. He used the word maturation to describe growth processes that are governed by such automatic and genetically determined signals. He believed that most major changes in the organism are based on maturation.
2. Development as learning: Baer has defined development as 'behaviour change which requires programming; and programming requires time, but not enough of it to call it age'. Here, programming refers to sequences of learning which may happen naturally or may be arranged in the life of an individual. Development, in this view, is a collection of learning experiences which the child acquires in the process of interaction with his environment.
3. Development as synthesis: Piaget says, 'For some psychologists development is reduced to a series of specific learned items and development is thus the sum . . . of this series of specific items . . . In reality, development is the essential process, and each element of learning occurs as a function of total development rather than being an element which explains development.'

According to Piaget, there are four basic elements in development: (i) Maturation; (ii) Experience; (iii) Social transmission (learning through language, schooling or training by parents); and (iv) Equilibration.

### **Distinction between growth, development and maturation**

Growth refers to a process of becoming larger or longer or more numerous or more important, largely a physical change. Development, on the other hand, is a process in which something (mostly positive) transforms into a different stage or improves. Growth is taken to mean an increase in the size of an object or a living being. 'The lump as grown in size' is an example of its usage. Development is taken to mean an improvement in the level of functioning.

'He developed into a nice officer' is an example of its usage.

Development may mean a kind of improvement in the condition of health. 'He developed a better pulse rate now' is an example. Growth describes the process of growing. 'There was a rapid growth in the economy of the country' is an example. It indicates an increase in value. 'There was a growth in the number of hospitals in the city.' Growth can mean an increase in a crop or yield of some fruit for that matter. 'The farmer was amazed with the tremendous growth of grapes'. Development may mean a process of gradual transformation. You can use the word 'development' to suggest a process of developing.

Development is experiential change. It is orderly, adaptive and durable changes that occur throughout our life. Maturation, on the other hand, is naturally occurring change that is genetically controlled.

Some developmental changes are considered maturational, or indicators of physical maturity. Maturation is the progression of developmental changes toward the characteristics of adults. Physical maturation occurs from the time of conception, but some of the most commonly recognized indicators of maturation become apparent during adolescence. Changes in body shape, breast development in girls, pubic hair development in both genders, and development of facial hair in boys are visible indicators of maturation toward adult appearance of the body. The cessation of the growth of long bones, associated with the final attainment of adult stature is also a maturational event.

Although growth and maturation are certainly related, distinguishing between them is important because some physiological and hormonal processes affect growth and maturation differentially, as do some diseases. It is easy to observe that children of the same size can differ in maturational status and that fully mature individuals (adults) can be of different sizes.

Development leads to change

- Growth refers to quantitative changes—increase in size as well as structure.
- Development, by contrast, refers to qualitative changes. It is a progressive series of orderly, coherent changes. Progressive means that the changes are directional, which lead forward

rather than backward.

- Goals of developmental changes: self-realization or achievement of genetic potential.

*Types of changes in development:*

- A human being is never static and is always undergoing changes.
- Changes are antagonistic: On one hand, there is positive growth, such as gaining maturity with experiences and on the other, there is atrophy and decay of the human body as it grows older.
- Changes are interrelated: Changes never occur in isolation. They are in the form of size, altered proportions, and disappearance of old and acquisition of new features.

### **Early development is critically important more than later development**

- As per Freud, maladjustments lead to unfavorable child experiences. The more recent studies carried out on this aspect substantiate this theory.
- As per Erickson, babyhood is a time to 'build trust or distrust'—here, the individual learns to view the world as safe, reliable and nurturing or threatening and unpredictable.
- *Conditions affecting early childhood foundations:* Favourable interpersonal relations, emotional states, child-training methods, early role play, childhood family structure, and environmental stimulation.
- *Early foundations:* Early learning and experience play a big part and family should take part in the learning. Early foundations quickly develop into habitual patterns and will have a lifelong influence. Contrary to popular belief, children do not outgrow undesirable traits as grow older. Therefore, it is recommended to ensure that early learning is geared towards developing desired traits.

### **Maturation and learning both result in development**

- Meaning of maturation: It is the unfolding of characteristics potentially present in the individual that come from the individual's genetic endowment.
- Phylogenetic functions: These are common to race

- Ontogenetic functions: These are common to individual
- Meaning of learning: Development that comes from exercise and effort.
- Importance of readiness to learn: Interest in learning and sustained interest will gradually lead to improvement.
- Effects of maturation and learning interrelationships: Variations in pattern of development, maturation sets limits to development, maturational limits are rarely reached, deprivation of learning opportunities limits development. Stimulation is essential for full development and effectiveness of learning depends on proper timing.

### **Nature *versus* Nurture**

The nature *versus* nurture debate concerns the relative importance of an individual's innate qualities *versus* personal experiences in determining or causing individual differences in physical and behavioural traits. The view that humans acquire all or almost all their behavioural traits from 'nurture' is known as *tabula rasa* ('blank slate'). This question was once considered to be an appropriate division of developmental influences, but since both types of factors are known to play such interacting roles in development, many modern psychologists consider the question naive—representing an outdated state of knowledge.

In the social and political sciences, the nature *versus* nurture debate may be contrasted with the structure *versus* agency debate (i.e., socialization *versus* individual autonomy).

## **3.5 Stages of Human Development**

### **3.5.1 Infancy**

Infancy is the period that follows the neonatal period and includes the first two years of life. During this time tremendous growth, coordination and mental development occur. The developmental process during infancy occurs in the first 24 months of living and is the beginning foundation to an individual's physiological and psychological development. Humans experience rapid growth during this period in which many physical changes often occur. Newborns are essentially immobile and have very little voluntary control over many behaviours.

The infant's motor skills continue to evolve as muscles develop in the body. Psychologists believe the motor skill of an infant is a developmental process supported by the elements of nature and

nurture (Santrock, 2004). They also theorize that infants who are constantly encouraged and stimulated by their caregiver are likely to achieve certain milestones at a much more expedient rate. Infants are born with certain reflexes such as grasping, sucking, coughing, yawning and blinking. In the first three months, the infant is unable to roll over and support or control head movement. The infant's ability to stretch and kick is also more vigorous at this time. At four to six months, the baby should be able to roll over and hold its chest and head up. By seven to nine months, they should be able to sit and possibly stand. Walking capabilities should develop between twelve or thirteen months.

Brain development is also part of the physical process. Infants are not born with all the interconnections formed in their brains. 'At birth and in early infancy, the brain's 100 billion neurons have minimal connections' (Santrock, 2004). The synaptic connections within the brain begin to increase as the infant develops and responds to its environment. The infant's brain dramatically changes each time it learns a new skill or encounters a new experience. 'Infants are born not only with a brain ready to respond to critical features of the environment, but that the brain can react to particular features of the particular, individual environment' (Keller, 2007).

Within a few weeks of birth, the infant is able to respond to loud noises by blinking, or waking from sleep. The newborn can focus on objects 12 inches in distance and by three months, the infant should be able to examine visuals that are more complex as well as a variety of colours, sizes and shapes. By the end of three months, they may even be able to mimic facial expressions. Infants are born with the ability to cry in order to communicate discomfort. Babbling, squealing, cooing, gurgling and laughing become their added means of communication around four months of age. As their attention span increases, they will begin to decipher certain sounds and also recognize his or her name

Piaget's theory of cognitive development suggests that humans have an innate concept or framework that already exists at a given moment in order to organize and interpret information through the construction of schemas, which involves the two processes of assimilation and accommodation. From this standpoint, an individual can incorporate new information into existing knowledge and accommodate their schemas to new information. It is also through this theory that the human cognitive process is separated into gradually evolving stages. The time frame between birth and two years is known as the sensorimotor stage. In this stage, the infant begins to

construct an understanding of the world by correlating sensory experiences with physical actions. This theory also suggests that infants have a limited ability to understand that objects and events continue to exist even when they cannot be seen, heard or touched directly (object permanence).

The socio-emotional process of infants begins to develop from the responsiveness and sensitivity of their caregivers. It is during this process that the infant formulates an attachment to their caregiver from the establishment of trust. Since the infant's first experience is usually with its mother, it can distinguish the mother's voice because of its abstract memory of being inside the womb 'based on prenatal experiences that newborns prefer their mother's voices to the voice of another woman'. Thus, a nurturing and trusting relationship with the mother is vital to this process of development and helps to establish good temperament in childhood. A loving environment also promotes a sense of well-being within the infant, which makes them more tolerant to having new experiences with other strangers. The learning of other relationships in the future 'is based on infant's inherent curiosity and motivation to learn'.

#### *Baby's exposure to experiences affects its development*

Every experience an infant is exposed to impacts its developmental process. The elements of nature and nurture intertwine and shape the outcome of each experience. It is also the result from these early experiences that influence the later stages of human development. Ultimately it is safe to conclude that heredity, nutrition, health, stimulation and environment are the sustaining factors, which determine whether or not an infant can achieve optimal physical, cognitive and socio-emotional growth, which will be carried over into the next stage of human development.

Most infants learn to walk, manipulate objects and can form basic words by the end of infancy. Another characteristic of infancy is the development of deciduous teeth.

During this period, the behaviour of the infant is activated by innate needs which create tension and in order to reduce tension, the infant is motivated for action which gratify its needs. The infant's behaviour operates purely on an altruistic level unrelated to any social world but gradually social events become the prime motivator of behaviour, for example, hunger motivates the infant for action (crying) and it requires the bottle or breast for the gratification of its need and its actions become more learned and goal-directed. It strives to imitate previously successful actions and thus socialization begins.

The child depends on someone for the fulfilment of his basic needs. Dependency is a type of operant behaviour that has as its required environmental events affectionate and nurturant behaviour performed by another person.

In early infancy, the behaviour of the child is controlled by the principle of operant conditioning. Social environment in which an infant is born has a great influence on its later development. The sex of the child, ordinal position in the family and socio-economic condition of the parents have bearing on the development of personality. In India, a male child is preferred to a female and discriminative treatment is given right from the birth of the child.

According to Sears, 'A child is allocated to one sex or the other, and society begins to implant in him motives, interests, skills and attitudes appropriate to such membership.'

The first phase, as a matter of fact, interlinks the biological endowment of the child with his/her social environment where through the process of constant interaction his/her personality develops. Conducive social environment is very essentially required for the development of a harmonious personality.

### ***Deciduous teeth***

Deciduous teeth, otherwise known as milk teeth, baby teeth, or primary teeth, are the first set of teeth in the growth development of humans and many other animals. They develop during the embryonic stage of development and erupt—become visible in the mouth—during infancy. They are usually lost and replaced by permanent teeth, but in the absence of permanent replacements, they can remain functional for many years.

Deciduous teeth start to form during the embryo phase of pregnancy. The development of deciduous teeth starts at the sixth week of development as the dental lamina. This process starts at the midline and then spreads back into the posterior region. By the time the embryo is eight weeks old, there are ten areas on the upper and lower arches that will eventually become the deciduous dentition. These teeth will continue to form until they erupt in the mouth. In the deciduous dentition, there are a total of 20 teeth: 5 per quadrant and 10 per arch. In most babies, the eruption of these teeth begins at the age of six months and continues until 25 to 33 months of age. The first teeth seen in the mouth are the mandibular centrals and the last are the maxillary second molars. However, it is not unheard of for a baby to be born with teeth.



### ***Developmental Aspects***

'Healthy mind in a healthy body' is an old adage and is true to the core. The physical development of the child is very important for a number of reasons. Appropriate physical development makes valuable contribution to the all-round development of an individual. When a child is involved in some physical activity, he/she is emotionally as well mentally busy. Physical development of the individual is important both for the individual and social development. It is also important for ethical, moral and spiritual development. A physically unhealthy person, other things being equal, is unable to perform his/her duties to himself/herself, and to the community.

By not giving proper attention and care to the physical development of the child, we may be guilty of causing serious handicaps to the total development of the child, including his/her emotional, intellectual and social, even ethical and spiritual well-being. Knowledge of the process of the physical growth of the child and development will equip the teacher to set curricula according to the needs of the children.

### ***Meaning and dimensions of physical growth and development***

Physical growth and development refers to a process which brings about bodily and physiological changes—internal as well as external—in an organism from the conception till his death. Generally, these changes take place in the following dimensions:

- (i) **Gross physical structure or physique:** It involves changes in height, weight, body proportions and general physical appearance.
- (ii) **Internal organs:** It involves changes in the functioning of glands, nervous system and other body systems—circulatory, respiratory, digestive, muscular, lymphatic and reproductive.

### **3.5.2 Childhood**

Childhood is the age span ranging from birth to adolescence. According to Piaget's theory of cognitive development, childhood consists of two stages: preoperational stage and concrete operational stage. The early years of a child's life present a unique opportunity to lay the foundation for healthy development. It is a time of great growth and of vulnerability. Research confirms that negative early experiences can impair children's mental health and effect their cognitive, behavioural, social-emotional development (both as a child and as an adult).

This section explains the different physical and emotional development during the childhood period of a child.

### Visual Perception of Patterns and Forms

1. Early pattern perception (0 to 2 months)
  - (a) Very young infants prefer to look at high-contrast patterns with many sharp boundaries between light and dark areas, and at moderately complex patterns that have curvilinear features.
  - (b) Babies prefer to look at whatever they see well (Banks & Ginsburg, 1985), and the things they see best are moderately complex, high-contrast targets, particularly those that capture their attention by moving.
2. Later form perception (2 months to 1 year)
  - (a) Between 2 and 12 months of age, the infant's visual system rapidly matures.
  - (b) The infant now sees better and is capable of making increasingly complex visual discriminations.
  - (c) The infant also organizes what he or she sees to perceive visual forms.
  - (d) Kellman and Spelke (1983) were among the first to explore these issues. Infants were presented with a display consisting of a rod partially hidden by a block in front of it. The observations they made were as follows:
    - Newborns exposed to a partially screened moving rod see two separate objects rather than a continuous form
    - The impressive ability to use object movement to perceive form is already present by 2 months of age.
    - By age 3 to 4 months, infants can perceive form in some stationary scenes that capture their attention
  - (e) Even 12-month-old infants are better at constructing form from limited information. After seeing a single point of light move so as to trace a complex shape such as a star, 12-month-olds (but not 8- or 10-month-olds) prefer to look at actual objects with different shapes.

## 1. Face perception

- (a) Most studies report that, for the first 8 weeks, infants lock on to high-contrast outer boundaries of facial stimuli and spend little time looking at the internal features (eyes, mouth, and lips) that might define a face as a coherent and meaningful form.
- (b) As 9- to 12-week-old infants begin to scan intricate details, they also come to prefer faces to scrambled faces.
- (c) Three-month-olds know what faces are supposed to look like, for they clearly prefer a normal face to an otherwise identical stimulus with its patterns of visual contrast reversed.
- (d) Three-month-olds also recognize and prefer to look at their own mothers' face than those of other women who are similar in appearance.

### ***Perception of Three-Dimensional Space***

- Infants younger than 2 to 3 months of age do not exhibit any stereopsis—a convergence of the visual images of the two eyes to produce a singular, non-overlapping image that has depth
- Nativists would argue that several cues to depth and distance are monocular—that is, detectable with only one eye

#### 1. Early use of kinetic (motion) cues

- (a) As a moving object approaches, its retinal image becomes larger and larger and may expand to occupy the entire visual field (this is, loom) as it draws near the face.
- (b) We might infer that they can use kinetic cues to perceive movement. By 3–4 weeks of age, many infants blink in response to looming objects, thus displaying a 'defensive' reaction that becomes much stronger over the next 3 months.

#### 2. Development of size constancy

- (a) Size constancy is the ability to infer that the dimensions of an object remain constant over a change in distance.
- (b) Until recently, researchers claimed that size constancy could not emerge until 3 to 5 months of age, after infants had developed good binocular vision (stereopsis) that enabled them to make accurate spatial inferences. But even

newborns know something about an object's real size.

### 3. Use of pictorial cues

- (a) Albert Yonas (1987) and his associates have studied infants' reactions to monocular depth cues, which are the tricks artists and photographers use to portray depth and distance on a two-dimensional surface across the third dimension.
- (b) Yonas found that 7-month olds reliably reached toward the windows that appeared nearest, whereas 5-month olds displayed no such reaching preferences.

### 4. Development of depth perception

- (a) In the early 1960s, Eleanor Gibson and Richard Walk developed an apparatus they called the visual cliff to determine whether infants can perceive depth.

## Perception Developing during Childhood

In order to make sense of the world, the brain gathers and processes information it receives from the five senses. Visual perception is a critical part of this process and should not be considered as simply a passive recording of visible material. We do not always see things the way they are or as they relate to their environment. Only a part of what is perceived derives straight from our visual system, while the rest is the result of our interpretation, let us say the intellect.

### *Visual Perception: Visible and Intellectual*

- **The visual brain:** As far as the visual system is concerned, perception is purposeful and selective. The selectivity of our visual perception is greatly dependent upon our distinct 'attention' and 'visual search'. The former involves a kind of focalization on important aspects of the visual field and the periphery of the visual field, whereas the latter includes the process of linking several fixations on the same visual scene to allow more detailed exploration. The integration of all these fixations is an immediate and instinctive process that creates what we call our vision of an image.

But what are the main elements that we visually perceive?

- **Luminosity:** The response of the visual system to the actual quantity (intensity) of light sent out by an object
- **Colour vision:** The response of the visual system to the wavelength of light rays sent out or reflected by objects
- **Visual edges:** The response of the visual system to the spatial distribution of light, meaning the spatial limits of objects, their visual edges, outlines
- **Contrast:** The response of the visual system to the interaction of luminosity and edges

These elements are never perceived in isolation but always in relation to each other, they are produced simultaneously and, therefore, the perception of each has an effect on the perception of the others.

The major visual pathway from the retina to the brain is known as the optic pathway. It carries signals to the primary visual cortex situated at the back of the brain. In the primary visual cortex, cells that receive signals for the features of vision outlined above are neatly grouped together into different, anatomically identifiable compartments. The specialized compartments of the primary visual cortex send their signals to further visual areas. These further visual areas are located in a large area of the cortex that surrounds the primary visual cortex, which until recently was referred to as the 'visual association' cortex. They are themselves functionally specialized, but collectively they work to create the visual scene. So, the visual brain consists of many operationally distinct areas that work symphonically to produce an image, with the primary visual cortex serving as the royal gateway, providing a link to the retina. Each visual area works as a specialized processing system, devoted to a particular feature of the visual scene, which allows the brain to 'collect' different attributes of the visual scene simultaneously and in parallel. But the specialized areas do not all connect with a master area, which can then 'interpret' or understand what they have processed; there is no single master area to which all the visual areas uniquely project.

How exactly do the operations performed by the different visual areas integrate to give us our unitary image of the visual world? Functional specialization suggests a temporal hierarchy in vision, suggesting in turn that the processing systems are also perceptual systems. But, by definition, perception is a conscious act. Are 'seeing' and 'understanding' then indeed two separate processes, with separate seats in the cortex? Kant had put forward the view that the mind could be divided into two faculties, the passive one of sensibility, concerned with the collection of raw

data, and the active one of understanding, or in other words intellect, which made sense of the raw data.

1. **The intellect:** The intellect relates to a series of mental operations, which occur to manufacture the perception of an image. These involve receiving, storing and identifying the visual information, and therefore are significantly linked to memory, thinking and learning. Such processes include active exploration, selection, grasping of essentials, simplification, abstraction, analysis and synthesis, completion, correction, comparison, problem solving, combining, as well as separating and putting in context (Arnheim, 1969). These procedures may be carried out instinctively or intentionally and they construct the ways in which we filter, translate and understand what it is that we see.

### ***The co-relation***

The connection between the material and the mental in vision is uncertain; our mental image of what we see is importantly different from its retinal projection. The eye focuses an image of the object upon the retina, then messages are carried to the brain and certain physical and chemical effects vibrate the muscles and the nerves. From our early years upwards, these functions are increasingly subordinated to higher order cognitive processes taking place at other levels of our cortex. And there appears consciousness: what we understand of what we see is a mixture of complex visual judgments that are then passed into more complex intellectual judgments. Undoubtedly, the simple perceptual processes do still function to provide sensory data on which the operation of the more complex processes depends. But it is the more complex processes, which normally determine our understanding of and response to the environment.

Here lays an interesting example of how these complex processes work: When we move through an environment, we perceive an accordingly continuous change of the projective sizes of all the objects that surround us. The setting as a whole is subjected to a unified and constant adjustment in size; each part of the visual field is in constant relation, and hence, variability to every other part, and any particular entity is evaluated in relation to its complex content. In terms of vision, we are receiving full information on these contextual changes, but the intellect consciously ignores this rich information in favour of constancy. What we actually see and what we understand of seeing are two different things but are visually perceived as one and the same

in terms of our need for continuity and stability.

An answer to the co-relation of vision and the visible can be found in the 'synthetic approach' of visual perception, which proposes that we find equivalents for the visual world in stimuli alone. In other words, it suggests that our perception mechanism is sophisticated enough to recognize objects in space simply from an optical image on the retina. Although the optical image projected upon the retina is a mechanically complete recording of an image, the equivalent visual perception is not. The perception of a shape is the understanding of structural characteristics found in, or imposed upon, the stimulus material.

*The Gestalt Theory* rests on this approach emphasizing the natural competence of the brain to organize visual information according to universal and unchanging laws, such as proximity/contiguity, similarity, closure/good continuation, simplicity, area/smallness, figure and ground. The intellectual judgments will organize the stimulus material according to the simplest pattern compatible with it, based on its essential structural characteristics. Perception consists in fitting the stimulus material with templates of relatively similar shapes, which can be called visual concepts or visual categories. The simplicity of these visual concepts is relative, in that a complex stimulus pattern viewed by refined vision may produce a rather intricate shape, which is the simplest attainable under the circumstances. What matters is that an object at which someone is looking can be said to be truly perceived only to the extent to which it is fitted to some organized shape (Arnheim, 1969). Simple form and movement perception are integrated with and supported by processes of identification, classification and coding through the operation of perceptual schemata which depend to a considerable extent on learning, memory, attention, reasoning and language

### **Auditory Perception**

It is commonly thought that in the normal individual the auditory sense is the only one to function perfectly from the moment of birth, whereas other senses take some time to develop completely. However, unless an individual can make sense out of what is heard, hearing is, for all practical purposes, nonfunctional. Recently, we have come to realize that certain types of brain injury or dysfunction make it difficult, or impossible, for an individual to make sense naturally of the auditory stimuli received by the brain. It should be pointed out that hearing and listening are

not synonymous in the auditory process. Whereas hearing is basically a physiological process, listening is an intellectual one, requiring interpretation, analysis, integration and evaluation.

Some children have yet to learn that sounds have meaning. The ability to pinpoint the source of a sound and identify its unique characteristics requires that the child be able to focus attention long enough to learn these things. Outside noises and subtle classroom sounds, such as the hum of fluorescent lights and radiator noises, can distract the child who has a problem focusing attention. In addition, the ability to store auditory information and retrieve it in proper sequence is basic to the learning process. Without these skills it is virtually impossible to learn spoken or written language. Without language, one is extremely limited in the ability to communicate with others or to understand the world.

Children with auditory perception problems may have some of the following characteristics. It is seldom, however, that we would see all these behaviours in one individual.

Children with auditory perception problems may have an inability to:

- Locate the source of a sound (localization)
  - Identify specific characteristics of sound (intensity, duration, pitch, timbre)
  - Relate a sound to its symbol
  - Repeat what was said without visual clues
  - Follow directions without visual clues
  - Recognize when a sound changes
  - Identify same and different sounds
  - Distinguish a specific sound from among others (figure-ground)
  - Recognize previously learned auditory material when presented in a different medium
  - Integrate auditory information with other sensory data
  - Comprehend words in a song
- training in listening and interpreting sound develops auditory perception. It is obvious that music learning depends on one's ability to perceive aurally. Conversely, music training can enhance auditory perception. When planned with specific aural skills in mind, music activities can help a child:
- Improve the ability to attend to aural stimuli
  - Interpret both verbal and nonverbal information



- Remember auditory learning from one experience to the next
- Integrate auditory information with that received through other sensory channels

## Sound Discrimination

The characteristics of a sound (i.e., intensity, duration, pitch and timbre) are presented as subdivisions in the activities for developing auditory discrimination skills. Music education goals and objectives generate sequential music experiences leading to a thorough understanding of these characteristics and the ways in which they are combined in music composition. Children with auditory perception problems frequently have difficulty in processing speech sounds. It is interesting to note that speech, singing and music all have the following common elements; tempo, rhythm, pitch, stress (accent) and dynamics. Auditory discrimination skills, then, are equally important for general learning and for music learning.

**Intensity:** Of all music elements, dynamics is most easily comprehended. In the average child it is the first to develop, and we usually find that young children can easily discriminate between loud and soft by the time they enter preschool or kindergarten. With these children our task is mainly to refine their skills to include discrimination of more subtle differences in dynamic levels. Children who lack gross loud-soft discrimination are likely to include the hearing impaired.

**Duration:** Duration is the element in music that deals with time concepts. Time concepts are tempo (the speed of the music), meter (the organization of beats, usually into measure), and rhythm (the organization of longer and shorter sounds and silences within a time framework). Rhythm is basic to body function and speech as well as music. Recently, much attention has been focused on biorhythms, and educators, too, are beginning to be concerned with how an individual's natural inner rhythm relates to learning style and needs. Classroom activities (and/or tempo in music) are often paced too fast to enable all learners to grasp the objective.

- **Pitch:** Pitch concepts, such as high/low and up/down, are necessary for understanding the melodic structure of music. Seriation and sequencing skills, characteristically lacking in many learning-disabled children, are utilized in understanding scales, modes, and harmonic structure in music. In some countries of the orient and Africa, languages are tonally based; therefore, pitch discrimination is a prerequisite to speech. The same word spoken with different pitch inflections has multiple meanings. It is often said that there are no tone-deaf individuals in those countries.

Whether or not this is true, one can certainly appreciate why a poor sense of pitch would serve as a barrier when learning the language. The importance of pitch inflection in the English language is probably underestimated until one experiences listening to speech without inflection or with misplaced inflections. In addition to speech and language development, the ability to recognize, identify, and reproduce pitches of varying frequencies is necessary in perceiving and reacting to one's environment.

**Timbre:** Timbre refers to the 'colour' characteristics of a sound that give it a unique quality. It is the awareness of timbre that allows a person to aurally distinguish a clarinet from an oboe or a car horn from a train whistle. Without timbre discrimination skills, the environment could be a hostile place in which to live. Again, timbre discrimination is an important skill in the development of speech and language. Comprehending vowel and consonant sounds depends largely on the ability to discriminate differing timbres. When children are screened for auditory discrimination problems, the measure used tests for discrimination of speech sounds only. It is not unusual, however, for children who have been identified as having auditory discrimination problems to perform as well as their peers in nonverbal discrimination tasks. Discrimination of musical sounds involves a more gross discrimination. Often the child's problem will be more obvious in the inability to learn and remember words to songs.

In all discrimination tasks, the lowest level of competency is that of recognition of same and different, followed by identification of specific characteristics and, finally, by integration and synthesis. Discrimination tasks should begin with two greatly contrasting sounds and gradually move to finer discrimination of sound among more dimensions. Subsequent goals should facilitate generalization and transfer.

The long-range goals for auditory discrimination skills are found in all music education curriculums and are equally valid for developing auditory skills for general learning. Each child demonstrates:

- The ability to perceive and identify (label) each characteristic of sound
- An understanding of the characteristics of sound through musical performance
- The ability to creatively apply understanding of the characteristics of music

For the child who has difficulty processing sound, auditory learning is facilitated by pairing the auditory stimulus with another sensory mode such as visual (pictures, diagrams), kinesthetic (body movement), or tactile (manipulative materials). At some point, however, these extra auditory clues

must be withdrawn lest the child become dependent on them. It is recommended that the distance between the sound source and the child be increased gradually to as much as thirty feet for those activities in which it would be appropriate.

### **Depth Perception**

Humans have two eyes, and each eye receives different images. Humans perceive depth by coordinating the images of their left and right eyes to perceive stereoscopic depth, which is important for the visual perception of three-dimensional space. Thus, depth perception is actually considered to be the visual ability to perceive the world in three dimensions. It is believed that all animals who are moving have a sensation of depth. This depth perception helps all the moving animals including human beings to move accurately and to make a response based on the distances of objects in the environment.

Depth perception occurs because of depth cues. These cues are either binocular, which means the input from the environment is from both the eyes and monocular cues that require the input from just one eye. Monocular cues help in judging the relative distance and depth of the objects. The problem emerges from the fact that how the image of a three-dimensional world is projected on the two-dimensional retina. The retina directly reflects height and width, but depth information is lost and reconstructed on the brain of depth cues, different kinds of visual information that logically provide information about some object's depth. There are various cues for perceiving depth in the world, some of which are as follows:

**Monocular cues:** It is known as a pictorial depth cue because they include the kind of depth information found in the photographs and paintings. These are extensively used by the artists in their paintings. Their cues are as follows:

- (a) **Aerial perspective:** Distant mountains often look fuzzy and a building far in the distance is more blurred than those that are close. However, the further away an object is, the hazier the object will appear. This is called aerial perspective.
- (b) **Linear perspective:** When parallel lines appear to be converging at a distance, it is called linear perspective. The converging line means a great distance away from where they start.
- (c) **Relative size:** When objects that people expect to be of certain size appear to be small and are, therefore, assumed to be much farther away.

- (d) **Light and shadow:** We are often aware of the source and direction of light. It is generally from above, as sunlight. The shadow cast by one object on another can indicate which object is farther away.
- (e) **Interposition:** If one object seems to be blocking another, people assume that the blocked object is behind the first one and therefore farther away. This is also known as overlap.
- (f) **Texture gradient:** The object lying on a surface that look fine and smooth is texture are perceived at a greater distance than those objects on a rough surface. The pebbles or bricks that textured, but as you look farther off into distance, their texture become smaller and finer.
- (g) **Motion parallax:** The discrepancy in motion of near-far objects is called motion parallax.
- (h) **Accommodation:** Accommodation makes use of something that happens inside the eye. The brain can use this information about accommodation as a cue for distance. Accommodation is also called muscular cue.

### ***Cognitive Development: The Piagetian System***

Jean Piaget and his co-workers conducted research on cognitive development and the processes that lie under the adaptive behaviour from birth to adolescence and enormous literature was produced on cognitive development and other aspects of a child's development. Piaget has studied the developmental process of understanding knowledge and the working of the child's mind. His system though, did not express any definite opinion on educational practices but was nevertheless of great value to assess teaching, the structure and sequencing of subject matter in the curriculum and in the organization of various activities in and outside the classroom.

Before we describe the cognitive system as developed by Piaget, we shall first consider some of the concepts which are very essential to understand his system.

### ***Basic Concepts***

**Schema:** Piaget was interested in the developmental process and the change in behaviour. The concept of the schema or scheme applies to the sensorimotor behaviour of the infant. The infant sucks the breast of the mother; it looks at the objects of its environment; listens to different voices in its environment; and finally it tries to comprehend, conceptualize the articles,

animals, space and many other cognitive structures. The process of conceptualization is closely dependent upon the sequences of behaviour employed by the infant to adapt to its environment. Although a particular scheme derives its name from the behaviour sequence it describes, it implies some internal organizational disposition that enables the sequence to adopt itself to a variety of conditions.

According to Piaget, sensorimotor sequence and cognitive structures are of the same class because they are continuous processes. As the development proceeds, each scheme enlarges and changes, and is coordinated with other schemes to form more complex schemes.

The sensorimotor schemes develop out of reflex behaviour of the infant. They are reduced and internalized as they continue to function and are gradually converted into cognitive schemes. As the sensorimotor schemas are converted to the more covert and symbolic structures, they become generally synonymous with the processes we call concepts, generalizations, principles, constructs and plans.

Piaget believed that schemas (cognitive structures) exist in primitive form as a conception and progressively develop during the lifetime in certain systematic ways. According to him, cognitive structures contain all the necessary energy for their emergence and development without requiring some motivating force.

### ***Assimilation and Accommodation***

The schemas, which are acquired in infancy, are exercised and changed in later life. The process of change is accounted for by the psychological processes constantly at work called assimilation and accommodation.

At the sensorimotor level, when the infant acquires grasping schema, it picks up things and objects and grasps them. This scheme of grasping objects is called assimilation. Suppose, the grasping schema is inadequate, the object is too small, it must change in order to manage the new situation. This is accommodation at work. The play activities of infants are the examples of the process of assimilation. The infant will take a stick and assimilate it to its available schema, making it into a horse, cow or man. The example of accommodation is imitation of others. In the process of imitation, the child suppresses its available scheme and strives to establish a new schema. The structures or the schemes change from one stage to another by the process of equilibration. Through the processes of assimilation and accommodation the organism attempts to adapt to it

environment to maintain balance between itself and its changing environment.

### ***Piaget's Developmental Stages***

Jean Piaget advanced a quite new theory of development of cognitive abilities. He proposed that cognitive development proceeds through an orderly sequence of stages. The important concept of his theory of cognitive development is not the age at which the child moves from preferred mode of response to another but the fixed progression from one stage to another. The child cannot adopt the strategies of a later stage at an early stage of development without having first acquired and exercised the strategies of the earlier stage.

The stages of cognitive development are related in that they represent forms of adaptation but these forms are qualitatively different; that is the adaptive functions are transformed as the child moves from one stage to the next. This theory of development is quite different from the theory of associationists which emphasizes the gradual accumulation of responses.

### ***Stages of cognitive development***

Jean Piaget divides the stages of cognitive development in the following categories:

1. **The period of sensorimotor adaptation (since birth to 2 years):** The period from birth to two years is marked by an extraordinary development of the mind. The infant starts from reflex domination and reaches the stage of sensorimotor schemas. The development of this period is very important for future life.

The intellectual development at this age is marked by four fundamental characteristics: (i) object concept formation, (ii) coordinated space, (iii) objectified causality, and (iv) objectification of time.

The objects exist in the psychological world of an adult irrespective of their physical presence before the adult, but in the world of the child they only exist when they are physically present and the child looks at them, grasps them and acts with them. As soon as they move out of his/her range of acting, grasping and listening, they stop existing for the child. In the first year of life, the child develops the concept of permanence of objects and then then attempts to retrieve an object that disappears from his/her range of action. When the child acquires the scheme of object permanence, he/she is likely to exercise it at every opportunity; he/she will drop objects of his/her play and then try to

find out them.

The second characteristic of coordinated space is integrated with the formation of the object concept. The spatial world at first is totally uncoordinated. Each sensory modality has its own space and is centred on the child's current activities. By the end of two years, the child develops the concept which is characterized by relationship among objects and between objects and his/her own body.

The concept of causality depends on the activity of the child. Any action of the child which brings about an effect is taken as the cause of that event. The child, by a number of activities, develops the concept of causality by the end of two years of age.

The infant does not have any real sense of duration at the beginning of life. By the middle of first year of life, a rudimentary sense of duration is present, but it is entirely a subjective phenomenon. By the end of the first year, the infant frees himself/herself from this personal concept of time and the beginning of objective existence of time takes place. The infant can establish temporal relations between events in which he/she does not directly participate. Appearance of representations during the second year of life gives a considerable boost to the time concept. The infant can now recall events of long ago as well as those that occurred in the immediate past. Time is conceived as a dimension in which events occur, not just as a by-product of behaviour.

2. **Development of symbolic and pre-conceptual thought (2 to 4 years):** At the end of the sensorimotor period, the child starts dealing with the world by means of ideational representations. By imitation and other forms of behaviour, the child demonstrates that he/she is capable of extending his world beyond here and now. These actions of the child indicate the use of symbols. By the age of 4, the child develops ways of representing the environment in the absence of perceptual cues and build a set of symbolic schemes.
3. **Period of intuitive thought (4 to 8 years):** At this stage, the child is able to use concepts as stable generalization of past and present experiences. His reasoning is not logical and is based on intuition rather than on systematic logic. The intuitive thought of the child is mainly concerned with stages or static configurations and neglects transformation. The child talks about this or that momentary static conditions but is unable to adequately link a

whole set of successive conditions into an integrated totality by taking into account the transformations which unify them and render them logically coherent.

4. **Period of concrete operations (8 to 12 years):** Concrete operation means that stage of cognitive development when the child is able to direct attention away from the static conditions and can focus on the whole set of successive changes that occur in the process of transformation. At this stage, the child can reason well. Piaget has given a long list of operations which make possible the handling of numbers in various relations to each other, the arrangement of objects into classes and sub-classes and the ordering of objects according to one or more attributes. He has coined a term 'grouping' to describe a set of operations.

The starting point of concrete operations is always the real rather than potential. The child of 7–11 years acts as though the primary task were to organize and order what is immediately present. During the period of concrete operations, there are some logical inconsistencies in the child's thinking. Piaget calls this inefficiency 'syncretism'.

5. **Period of formal operations (from 12 years to adolescence):** At this stage the child's thought process becomes quite systematic and reasonably well-integrated. These qualities of the child's thought process are evident when events are present. Reality guides his/her contemplation of possibility. The child starts to form hypothetico-deductive reasoning. The use of formal operations is what is called the controlling aspects of comprehending.

The child at this stage in his/her formal thinking can free himself/herself of the here and now in a lawful and systematic way. The child's wisdom lies in the masterful administration of the unforeseen. When an adolescent is faced with a problem, he/she uses formal operations to identify the variables that seem relevant to the solutions, and then considers all the possible combinations of these variables.

The formal thought of adolescent is of propositional nature. The adolescents using formal operations view the concrete data as inducing a set of propositions and he/she then applies operations to these propositions which are themselves primary operations. Formal thinking is thus inter-propositional and inter-operational and entails working out propositions on propositions or applying second-order operations to primary ones.



The development of formal operations enables the adolescents to transfer understanding from one situation to another.

The adolescents show a particular orientation to problem solving. They analyse and organize their approach before attempting a specific empirical test.

The hallmark of formal operations period is the development of the ability to think in symbolic terms and comprehend content meaningfully without requiring physical objects or even visual or other imagery based on past experience with such objects. Formal operations are the logical and mathematical concepts which are used in advanced conceptualization and reasoning, etc., that is difficult to represent concretely.

### **3.5.2 Adolescence**

Adolescence is the period of life between childhood and adulthood, usually the age group of 11–19 year olds. This period starts with the beginnings of sexual maturity and terminates with being an independent adult. Many developmental issues occur during an adolescent's route to adulthood. We can also say that adolescence is that phase of life when an individual starts separating from parents with the goal of being independent (adult). Adolescence is usually marked with less parental influence and greater peer influence.

#### **Physiological Growth**

Physiological growth refers to the growth and development of physical as well as mental features. Development of the cognitive, emotional, intellectual and social skills is as important as the development of different body parts. The simultaneous growths of physical attributes along with mental abilities are both signifiers of physiological development.

Adolescence starts with puberty. Usually, puberty starts between ages 10–13 in girls and 12–15 in boys. During puberty, your body will grow faster than at any other time in your life, except when you were a baby. A boy or a girl at birth and before puberty can be distinguished from the sex organs. Sex organs are necessary for reproduction, therefore, they are called the primary sexual characteristics. At the onset of puberty, physical changes and development that are not directly part of the reproductive system, but distinguish the male from the female are called secondary sexual characteristics. The changes at puberty can be studied

under three headings:

- Development of secondary sexual characteristics
- Development of sex organs
- Intellectual, emotional and psychological development

## 1. Development of secondary sexual characteristics

The development of secondary sexual characteristics can be discussed under the following headings:

- **Increase in height:** The height increases from birth to the end of puberty. During adolescence, the height increases by 15–20 per cent. The height depends on the genes that you have inherited from parents. Right kind of diet, exercise and general health during these years also contribute to height.
- **Increase in weight:** During adolescence, the weight of a teenager almost doubles as the amount of muscles, fat and bones in their bodies change.
- **Development of shoulders and chest:** During this stage, boys develop broad shoulders and wider chests due to development of bones and muscles. This growth spurt might cause stretch marks in these areas.
- **Development of muscles:** During puberty, the muscles of the body increase in mass and strength, in both boys and girls.
- **Body hair pattern:** Both, boys and girls, grow a body hair pattern in the armpits (under the arms), in the pubic area (region above the thighs) and on the arms and legs. Boys also begin to grow facial hair, that is, moustache and beard and hair on chest.
- **Voice change:** Both girls and boys are affected by voice changes during their adolescence. In girls, the change in their voice is hardly noticeable because it becomes only slightly deeper. Boys develop high-pitched voice. In boys, changes that occur in the larynx cause their voices to deepen. The vocal cords of the larynx grow thicker and longer and when they vibrate the voices sound lower and deep. The larynx sticks out as a prominent Adam's apple in males.
- **Distribution of fat tissue:** The distribution of fat in the body changes during adolescence. Boys add more fat to their trunks than to their limbs, whereas in

adolescent girls there is increased distribution of fat in both. Among the limbs there is more fat added to their legs than to their arms as a result their waist becomes thin and the hips become more rounded. Adequate physical exercise should, therefore, be a part of daily life of an adolescent.

- **Increased activity of sweat and sebaceous glands:** During puberty, the sweat glands of both boys and girls become more active, especially those present in the armpits and groin and on the palms of the hands and soles of the feet. When sweat comes in contact with bacteria on the skin, it can produce an odour. The body odour (or BO as people call it) may be stronger in some people than others. Taking bath or shower daily and looking after one's personal hygiene is absolutely essential.

Sebaceous glands secrete an oily substance called 'sebum' onto the surface of the skin. These are especially common on the face, back and chest. During puberty, the secretion of sebaceous glands increases due to which the skin of these body regions tends to be oily.

- **Acne:** Acne is a common problem among adolescents. It appears in boys and girls around the beginning of puberty. The hormonal changes that are happening inside your body cause the sebaceous (oil) glands to become more active. When the oil glands get infected with bacteria an outbreak of acne takes place. Most teenagers get acne on the face, neck, upper back, upper chest, shoulders and back.
- **Breast development:** *The beginning of breast development is one of the earliest signs of puberty in girls. Breast is made up of fatty tissue and milk glands with ducts. The milk glands produce milk for the newborn child. Some adolescent boys also have breast development which is temporary. The swelling usually goes down within a year or so. In overweight boys, fat may also give the breasts an enlarged appearance.*

## 2. Development of sex organs

During puberty in boys, the penis, the testes and the scrotum continue to grow and develop completely. Testes begin to produce sperms. In girls, the ovaries enlarge, eggs begin to mature and menstruation begins. Menstruation is a major stage of puberty in girls. It marks the stage when ovulation begins, that is, the ovaries begin to release mature egg cells.

## What triggers the changes during adolescence?

The changes that occur during adolescence are initiated by hormones. You have read about the two hormones—estrogen, produced by the ovaries and testosterone, produced by the testes. At the onset of puberty, these hormones stimulate the growth and function of various organs like the bones, muscles, skin, breasts, brain and the reproductive organs and cause physiological changes. The secretion of these hormones is controlled by another hormone secreted into the bloodstream by the pituitary gland located in the brain. When this hormone from the pituitary gland stimulates the gonads (the ovaries and testes), they in turn secrete hormones that trigger off the changes in the body.

Hormones are chemical substances that are secreted by glands. Exocrine glands or duct glands secrete their products into ducts that open on to a surface. Examples include the sweat glands, sebaceous glands, salivary glands, digestive glands such as pancreas and mammary glands. Endocrine glands or ductless glands secrete their hormones directly into the bloodstream rather than through a duct. Examples include the pituitary gland, ovaries and testes.

The endocrine system is a system of glands that involves the release of specific chemical messengers called hormones into the bloodstream. The figure shows the position of some other endocrine glands which produce hormones other than sex hormones.

Let us learn about one hormone each, secreted by these endocrine glands and the diseases caused by an imbalance in the hormone levels. A hormonal imbalance occurs when secretion levels are not what they need to be.

### ***Some Glands of the Endocrine System***

S.No.	Name of the hormone and the endocrine gland which secretes it	Function of the hormone	Disease caused by imbalance in the hormone levels
1	Growth hormone by pituitary gland	Promotes normal growth of bones, muscles and other organs	Decreased levels of growth hormone cause decrease in height in children and adolescents. Increased levels may cause a condition called gigantism.
2	Thyroxine by thyroid gland	Controls the rate of metabolism. Iodine is necessary for the synthesis	Deficiency of iodine in the diet causes goitre which is a swelling of the thyroid gland.

		of thyroxine.	
3	Adrenalin by adrenal glands	Released in the body to cope up with anxiety, vigorous exercise or fear.	The body is unable to adjust to stress caused due to anger, worry, embarrassment or vigorous activity.
4	Insulin by pancreas	Controls the level of the glucose in the blood. Insulin moves glucose into the cells to produce energy.	When there is insufficiency of insulin, glucose cannot get into the cells to produce energy. This leads to build up of excess glucose in the bloodstream. Such a condition is known as diabetes.

### 1. Intellectual, emotional and psychological development

Another area of physical development is in the brain, especially the frontal lobe, which is the area for impulse control, judgment, and the ability to plan. The frontal lobe develops during the teens and early 20s. An undeveloped frontal lobe helps explain impulsiveness, risky behaviours, and moodiness among adolescents. In mid to late adolescence, young people often feel the need to establish their sexual identity by becoming comfortable with their body and sexual feelings. Through romantic friendships, dating, and experimenting, adolescents learn to express and receive intimate or sexual advances.

As an adolescent boy/girl grows, they develop problem-solving skills and become capable to take part in decision-making in school or at home. Adolescents are able to analyse information and experiences by critical thinking and handle new situations through creative thinking. The adolescents indulge in planning and goal setting for long-term and short-term tasks. Yet, the same hormones that cause changes in the appearance and intellect can also affect their emotions. One may feel awkward and self-conscious at times, confused and insecure at other times. All these are normal feelings and the adolescents gradually gets used to such emotions and eventually gets over them.

### Mental Development

Mental development or intellectual development is the development of mental abilities and capacities which help individuals to adjust their behaviour to the ever changing environmental conditions. It enables them to achieve complex tasks that require complex cognitive abilities.

According to Bruner (1964): 'Intellectual development is the capacity to deal with several choices at the same time.'

All studies on mental growth have reported that mental abilities increase with age. Mental development during adolescence accelerates on many intellectual fronts. The following are the characteristics of mental development in adolescence:

1. **Increased ability to generalize facts:** One noticeable characteristic of mental operation in adolescence is the increased ability to generalize facts. Children usually generalize in relation to concrete objects. The intellectual development in children operates on a perceptual level, but in adolescence the ability to generalize on conceptual level develops. The adolescent can generalize in an abstract way.

The acquisition of the ability to generalize accurately enhances the adolescent's self-concept and gives him/her the confidence to face situations different from those encountered before.

2. **Increased ability to understanding:** There is an elevation in the ability to understand relationships and to solve problems of greater complexity and difficulty. The depth of understanding also develops. The adolescents can think of solutions to more difficult problems.

3. **Increased ability to deal with abstraction:** The adolescents can think not only in general terms but in abstract terms as well. They can think in terms of symbols in addition to concrete things. The ability to carry on abstract thinking is not something that suddenly develops in adolescence. It is relative. This ability to comprehend and to communicate meanings in abstract qualitative concepts is an important aspect of intellectual maturity in adolescents.

The process of manipulating abstractions involves conceptualization, which means the process of forming a mental picture of something which can or cannot be pictured in concrete form.

4. **Development of memory and imagination:** The memory in adolescents develops tremendously with the growth in vocabulary. They can imagine a situation which is not physically present before them. Their long-term memory increases. They can retain facts for a longer period of time. They can anticipate future needs and can plan for it. The idea

of historical past can be grasped by adolescents. The idea of time concepts becomes clear to them.

**Growth away from trial and error method:** Trial and error is the primitive method to solve problems. During adolescence, an individual develops the capacity to cope with situations through manipulation of pertinent factors. Teachers should encourage adolescents to develop the habit of substituting thought for trial and error method of solving problems.

5. **Ability of problem solving:** The ability to solve problems increases in adolescence. Adolescents can solve problems with the help of symbols. They can deal with ideas that do not represent something in which a person is directly involved. The adolescents solve and talk about national and international problems. They are able to mentally deal with events in a world that extends far beyond their own immediate sphere of activity.
6. **Increased ability to communicate with other persons:** The adolescents on roads, in coffee houses, and tea stalls can be seen arguing for hours on topics of their interest.
7. **Identification with conditions and characters in the larger world:** Another important change in intellectual orientation that takes place at adolescence is the ability to identify with circumstances and people outside one's immediate environment.
8. **Ability to make decisions:** Individuals have to make many decisions in their daily life. Decision-making ability is necessary for successful adjustment in life. During adolescence, we expect the growing child to gain confidence and help in developing opinions. Thinking involves a certain amount of freedom as well as independence that comes from maturity and wisdom. Adolescents have the ability to think about their future. They can differentiate between the ideal and the actual. They are reasonably objective in taking note of some of their weaknesses.
9. **Understanding of moral concepts:** Children, without questioning the validity of moral training, obey the moral code framed by parents, but as they enter adolescence they critically examine the moral code and ask questions. The moral consent becomes internalized and the adolescent is able to differentiate between what is good and what is bad.
10. **Self-criticism and evaluation:** Adolescents begin to evaluate their performance

objectively but the majority of adolescents do not achieve the mental maturity to do so. They either overestimate or under-evaluate their performance.

11. **Increased rational self-control:** Generally children do what they want to do. They do not take into consideration the logic or rationale of doing a thing. Adolescents show more intellectual maturity in performing an act. They achieve rational self-control which is promoted by a good mastery over developmental tasks which develop a sense of achievement and duty in them.

## Emotions in Adolescence

The characteristics of emotions in adolescence are as follows:

- **Complexity:** By the age a child steps into adolescence, he/she experiences a number of emotional upheavals and storms. Emotional development becomes complex due to various experiences with the environment. We cannot understand adolescents by the overt emotional expression, but we have to fathom deep to understand them. The adolescents learn to conceal their true emotional experience.
- **Development of abstract emotion:** Generally children show emotional expression in relation to concrete objects but adolescents can express their emotional feelings in relation to objects which are abstract or which are not present in concrete form.
- **Emotional feelings are widened:** As the child grows he/she starts taking into account the past and imagines the future. Thus, we can expect the adolescents to become more patient and tolerant. There is great shift in their social sphere.
- **Bearing of tensions:** Adolescents develop competencies to bear the tensions in different social situations. The emphasis is on self-control. They feel a kind of inner freedom—freedom to feel and experience in an intimate personal way.
- **Capacity of sharing emotions:** The adolescents develop concern about the feelings of others and an increased capacity for sharing emotional experiences with others. In childhood, children are not able to control their emotions. Sharing of emotional experiences reaches the peak of development when adolescents are able to relate



themselves to other persons in such a way that the satisfaction of the person is just as important as their own. It means the adolescents begin to love their neighbours as much as themselves.

- **Loyalties expand:** Emotional development begins from the home environment of the infant and during adolescence it is expanded beyond home and neighbourhood. These loyalties are identified with peers and leaders of various fields.
- **Realism in emotional experiences:** Now the child enters the period of reality. An adolescent can perceive and appreciate people around him. They recognize the importance of weakness and strength of one's character.
- **Reviewing of hopes and aspirations:** Adolescence is the period of life when one has high hopes and aspirations for the future. Some adolescents work realistically to achieve their expectations and others do little to realize their hopes; they remain in illusion, and in the world of day-dreams and flights of fancy which make them unrealistic.
- **Toleration of aloneness:** The adolescents develop a feeling of aloneness. Sometimes they like to be alone in their home.
- **Externalization of feelings:** The adolescents learn to externalize their feelings in various situations of their external environment. They can project their feelings to others.
- **Increased compassion:** Compassion is the single quality which enables a man to achieve highest peak and the deepest reach in the search for self-fulfillment. Adolescents at this stage also develop the feeling of compassion.

### ***Common Emotional Patterns in Adolescence***

Emotions develop out of feelings of excitement in two channels from early childhood: delight and distress as love, affection and fear, anger and hostility. We will examine development of emotions during adolescence.

**Love and affection:** The emotion of love is very important in adolescents and is related to sexual impulse. It is due to the physiological disturbances. The emotion of love and affection develops from the very infancy in the life of the organism. In infancy, love and affection develop in concrete objects of the environment, inanimate and animate, but in adolescence emotion of love and affection is associated with people and only occasionally with pets. Adolescents are able to discriminate people with whom they like to associate and

build up affectionate associations. Gilliland reports that childhood loves are not sexual in nature but adolescence love becomes a source of pleasure. The circle of people becomes limited. The adolescents become very closely attached to one another because of intense feeling of love. The associations made in this period are lasting. The maturation of sex is the chief source of newness in the lives of the adolescents. Most of their conversation centres round sex and its problems. Commenting on the importance of love, Wenkart remarked, 'Adolescents who are able to love possess a priceless gift. When they are loved in return they taste one of life's greatest joys.'

- **Joy, pleasure and delight:** During adolescence, physical condition is one of the sources of joy and pleasure. The first cause of joy is one in which individuals fit, or to which, by virtue of capacity and ability gets well-adjusted.

The second situation which calls forth joy in the adolescents are the release of pent-up energy. The more intense the pent-up energy and the longer it has been bottled up in the individual, the stronger will be the release when it finally does take place.

The third common cause of happiness in adolescents is the feeling of superiority. Every adolescent feels insecure and uncertain in life. Any situation that is opposite to these feelings, give happiness. Passing the examination in first division, being elected to students union, and being declared first in athletics, or other contests, give feelings of superiority to adolescents.

- **Worry:** Worry is an imaginary fear. It is caused by a repeated rehearsal of the situation that is feared. It is referred by some psychologists as 'anxiety', an emotional state in which the disturbing situation does not accompany the state, but is anticipated in the future. The adolescents have the following types of worries:

- School work
- Examination and test
- School problems such as favouritism by the teacher, unreasonable homework, lack of ability to concentrate, not knowing how to study, worry of failure, and inadequacies related to their sex role.
- Home worries, i.e., lack of understanding between adolescents and parents, illness of parents, difficulty in marriage, friends' health, financial problems, personality weakness.

- **Fear:** Fear is an important negative emotion. No systematic work has been done on fears of

adolescents in Indian conditions. Fear is learned from the environment in which a child moves. No generalized conclusions can be drawn about the objects of fear during adolescence. Some categories of objects are listed below which may cause fear:

*Fear of material objects:* Fear of snakes, dogs, strange noise, lions, elephants, aeroplanes and so on.

*Social relationship:* (i) Meeting with people in high offices (ii) being with elders (iii) being alone in a room (iv) reciting in the class or speaking from the platform (v) meeting members of the opposite sex.

Adolescents are capable of disguising fear. A frightened person may show anger. Fears decrease with the advancing age of the child in number and intensity.

- **Anger:** Anger is also a learned response to environmental stimuli. It is social in nature. Hebb, writing about the nature and source of anger and fear, says: 'The fundamental source of either emotion is of the same kind, a disruption of coordinated cerebral activity'. Fight and aggression are two different modes of reaction tending to restore the dynamic equilibrium, or stability, of cerebral process. Each of these modes of response tends to restore integrated cerebral action.
  - (a) Failure of material object
  - (b) Teasing by teacher, parents, elders and peers
  - (c) Being unfairly treated
  - (d) Sarcastic remarks, encroachment of his/her rights by brothers or sisters
  - (e) Thwarting of self-assertions, insulting remarks, unwelcome advice, not being invited to a party and failure in activities undertaken

### ***Causes of Heightened Emotionality***

Causes of heightened emotionality are as follows:

1. **Change of roles in home, school and society:** As soon as children enter adolescence, their social roles and responsibilities change. Change of roles require adjustment to new situations in a different way. The adolescents have to change their old habits of childhood at home, in school and in the society. The change- over to new pattern of habits create

emotional tensions in adolescents. The process of weaning from total dependence to independent role with greater responsibility disturbs the adolescents.

2. **Unfavourable relations in home:** Parents in most cases are responsible for heightened emotional quotient in adolescents because they do not prepare their sons and daughter to meet the problems of adolescence. They do not change their own attitudes towards adolescents. They still treat them as children which creates rebelliousness in adolescents against their parents. There are quarrels with parents and siblings on trivial matters.

Adolescents need money to meet their demands of recreation and clothes, under peer pressure. They become emotionally disturbed when they fail to meet these demands.

Adolescents have to face new social situations which disturb them, for example, talking with members of the opposite sex and meeting officers or elders.

3. **Social expectations:** When children become adolescents, society and parents expect them to think and act like an adults for which they are not physically and intellectually mature. Adolescents fail to decide their status in social settings and the failure to meet social expectations results in emotional disturbances and failure to adjust to new environment. The adolescents, due to shift in roles, have to make new adjustment in different social situations. They have to leave the accustomed patterns of childhood and make new adjustment in a short period of time.

4. **Difficulty in adjustment to the member of opposite sex:** We observe that in later childhood, there is little interaction between boys and girls. In adolescence there is attraction towards the member of the opposite sex but the adolescents are not able to understand the correct social behaviour, of how to make friendship with members of the opposite sex. These problems create emotional tensions in them.

5. **Religious conflicts:** Every child is trained in a special setting of religious beliefs and values. The child without questioning the authenticity of the teachings of his/ her parents obeys them but with advancing age, is able to critically examine the beliefs and starts to question the teachings of the parents. This leads to conflicts in their mind.

6. **School failures:** School failures cause heightened emotions so much so that many adolescents commit suicide, run away from home and sometimes give up studies.

7. **Conflicts with friends and family members:** Adolescents come in conflict with their

friends and family members who fail to understand them. Too much discipline, restriction on movements and lack of understanding of their interests or point of views are the chief sources of emotional disturbances.

8. **Vocational problems:** The most pressing problem for Indian adolescents is the future vocation after schooling. When the adolescents find many adults without any means of livelihood, they get disturbed and a permanent anxiety sets in their minds. Particularly those adolescents coming from poor families and who are the only supports of their families are more disturbed.

### **Social Development during Adolescence**

Man is basically a social animal. His existence without the social set-up can hardly be imagined. He is born in society, and develops, works and progresses in society. Social development is essential for proper adjustment in the society. Social adjustment of the child starts from early infancy. The foundation of social development is laid by parents in the family. The success in future social adjustment depends on parents and other members of the family who lay the foundation of social development. In adolescence the child enters quite a new field of social responsibilities. The society and parents place upon the child new demands which sometimes bewilder the child and he/she fails to adjust successfully in the new role.

The most characteristic social development is the increased influence of peer group. With advancing age, the child remains most of the time with his friends. The friends and type of peer group the adolescent joins, shape his behaviour to a great extent. His interests, attitudes and values are influenced by peers. Studies show that adolescents in urban areas are more guided by their peer group and adolescents in rural areas are guided by their parents and elder family members.

Adolescents become self-conscious of their place in the society and desire that their peers should accept them and should be respected. Therefore, the adolescents conform to the norms of the peer group. Adolescents can do anything for the sake of pleasing their peers.

### ***Changes in Social Behaviour***

The most marked change in adolescents is their place in their family. Attitudes of the parents change and they assign social responsibilities to them. Adolescents are taken into confidence on important family matters. The circle of the adolescents tends to become small and their

interests become specialized. They start identifying themselves with adults and tries to imitate them.

The most marked and important development appears in their relation with the members of the opposite sex. In childhood, boys play with boys and girls with girls, while in adolescence there is heterosexual trend in companionship.

The adolescent boys and girls form their groups based on their common interests and goals. The social group of boys are larger than girls because boys in our society have more freedom than girls. But very recently in big cities, a new trend toward giving more freedom to girls is emerging as a new social pattern among adolescent girls.

Adolescents make friendship with those who conform to their standard and possess the personality traits they like. The number of friends decrease but the affiliation becomes more permanent. There is interest to make friendship with the members of the opposite sex. The adolescents do not tolerate the interference of the parents and other members in selecting friends. Sometimes because of immature decisions, they can be unwise in selecting friends. The friendship of this period tends to be permanent.

#### *Social interests*

- **Parties, celebration:** There is an increasing interest in adolescent boys and girls to attend parties, celebrations and fairs where members of both sex meet.
- **Conversation:** Adolescents take interest in talking about various types of problems. They show interest in social problems of wide variety. Talking plays a cathartic role for adolescents.

#### ***School and Social Development***

Adolescents need guidance in the development of healthy social relations and for this purpose school is the most appropriate place where a variety of activities can be organized to foster social development. The following activities can help in the development of proper social attitudes:

- **Organize social functions:** The teacher should organize informal social functions in which students may come closer to each other and have an opportunity to understand interests and aspirations of each other. The students may be divided into smaller groups to discuss their problems informally. Social functions should be organized in such a way

that must cater to the needs of all types of students.

- **Arrange excursions and trips:** Excursions and outings provide more opportunity for informal conversations and close contact with each other.
- **Arrange games, debates and seminars:** Teachers should organize group- games, debates and seminars to train adolescents to participate in social activities.
- **Appraise social interests:** The teacher should make an appraisal of student's social interests, social acceptance in classroom, socio-economic conditions and organize activities to foster socialization.

### Interests of Adolescents

Interest means to make a difference. It describes why the organism tends to favoursome situation and reacts to them in a very selective manner. Interest and attention are closely related. Interests of adolescents play an important role in the development of their behaviour and personality. Interest is any activity that drives or motivates individuals to act upon. Interests are very important to understand an individual and to guide future activities.

### Characteristics of Adolescents' Interests

1. **Instability:** In early adolescence boys and girls have a variety of interests. Everything which is new draws their attention. But by the end of adolescence, interests stabilize. They concentrate on selected interests.
2. **Interests in adolescence expand:** Many of the childhood interests are carried over and some are new ones. The field of interests expands with the development of intellectual and social development. An adolescent starts taking interest in national and international affairs. With the advancing age, by the end of adolescence, the interests become stable and specialized.
3. **Interests of adolescents shift in values:** Another characteristic of adolescent interest is the shift in values of different interests. The major interests of childhood may become minor and some new interests may become major interests.

### *Factors affecting interests*

Interests are highly individual actions. The variations in the interests are influenced by a number of factors which are listed below:

1. **Physical development:** Physical development is very important in deciding the development of interest. If the adolescent is physically sound and strong, he/she can participate in sports and games which require strength. But if the adolescent is physically handicapped then his/her interests will be confined to different kinds of activities, mostly indoor.
2. **Sex differences:** There is a great difference between the interests of adolescent boys and girls. The differences may be attributed to the physiological differences and cultural influences. Girls participate in those games and sports which need less vigour. Boys like competitive games of muscular dexterity. The differences among the play interests of boys and girls are not only caused by sex differences but by cultural conditions. Educational level and environmental conditions are also important factors.
3. **Environment:** Environment plays an important role in deciding the interests of adolescents. It influences in giving the opportunity to come in contact with various items of interest. The geographical conditions and climatic conditions influence the interests of adolescents. There is a great difference in the interests of boys and girls from rural and urban areas. Culture also influences the interests of adolescents.
4. **Socio-economic status:** Socio-economic condition of the family also plays an important role in deciding the interests of adolescents. Adolescents belonging to lower socio-economic condition remain busy in the work. They do not have money to purchase articles of games or books, magazines, etc.
5. **Intelligence and play interest:** Lehman and Witty conducted a survey of interest in play activities as shown by gifted and dull adolescents. They concluded that gifted adolescents participate in solitary types of play. They prefer games which involve rules and well-organized system. They do not like those activities which require muscular strength, but on the other hand they like problem-solving activities. Dull boys participate in social games requiring muscular strength.



## ***Types of Interests***

The four types of interests are social, recreational, personal and vocational.

### **1. Social interests**

The social sphere of adolescents increases outside the home and neighbourhood. They now come in contact with more people. They develop an urge to communicate with others. The adolescents remain in the company of their friends outside their home most of the time. The adolescents identify themselves with a group with whom they discuss different types of problems. Their talks generally centre round the following themes:

- **Chit-chat:** The adolescents love to meet in groups and do small talks.
- **Discussion:** Adolescents discuss many problems facing the society from every possible angle. Discussions are serious in nature and cover a wide range of subjects and topics. Discussion is more satisfying because it gives them an opportunity to freedom of expression.
- **Arguments:** Arguments grow out of discussion. A discussion starts out to be a friendly exchange of views in which each adolescent contributes his/her knowledge of the subject. When the point of view in a discussion differs, it becomes an argument.
- **Parties, celebration:** There is an increasing interest in adolescent boys and girls to attend parties, celebrations and fairs where members of both sexes meet.
- **Conversation:** Adolescents take interest in talking about various types of problems. They show interest in social problems of wide variety. Talking plays a cathartic role for adolescents.

Studies have been conducted by psychologists to survey the topics of conversation of adolescents. It has been invariably reported by all the investigators that conversation of adolescents centres mainly on sex, clothes, shady stories, vocations and criticism of home, school, adults and teachers among others.

### **2. Recreational Interests**

Recreation contributes to mental health of adolescents by providing them opportunity to express their pent-up emotional feelings and ease their tensions which develop in classroom teaching. In addition to recreation develops creativity and engages adolescent's mind in constructive

activities.

Unfortunately there are many Indian adolescents who are deprived of recreational activities. Rural adolescents coming from low socio-economic status have fewer opportunities for constructive recreational activities. Girls in rural areas have even lesser opportunities than girls in urban areas. In the last two decades, recreational activities have tremendously increased with the socio-economic development and technological development in the country.

### ***Types of Recreations***

From 12 years to 17 years, all types of games and sports are played by boys and girls but sports requiring physical strength are more popular with boys. Boys who are physically stronger engage in games requiring muscular strength and competition. Weak boys engage in games of individualistic sort with little competition. Girls with strong physique engage in competitive games.

**Hobbies:** Hobby is an activity in which something is created or constructed for the purpose of fun. In our country, adolescents in rural areas hardly get time to engage in a hobby. Their hobby is to help their parents in their occupation but in urban areas adolescents develop some hobby to utilize their time and to get the pleasure from their own creation. Adolescents in cities engage in hobbies like free-drawing, gardening, writing, collection and photographing, etc.

Adolescence is a period of life which is full of physical vigour. Adolescents take interest in adventurous activities as climbing mountain peak, exploring unfamiliar places, fishing, etc. These activities give pleasure to adolescents because they are undertaken free from supervision of adults and full freedom is given to meet the challenge.

**Reading interests:** Reading in adolescence is very important for various reasons. One reason is that reading gives an opportunity for identification with the characters of the reading material. It gives knowledge and entertains the individual. Reading interest reaches its climax in adolescence. They develop a mania for reading novels, short stories, adventure stories and light poetry. Reading interest in adolescence is influenced by a number of factors such as intelligence, socio-economic condition, availability of the reading material and urban-rural factors, and sex. Adolescents read books, magazines, comics, newspapers, etc.

Adolescents like light music, sports news, serial plays, detective, mysterious and crime stories, humorous sketches and dramas. Preferences of radio programme listening is influenced

by sex, age and intelligence of adolescents. Nowadays TV, in India, has become a very popular media of entertainment and education. The socio-cultural climate of our country is influenced by multi-channel television programmes. Television has a great impact on the interests of adolescents.

### **3. Personal interests**

Adolescents are more interested in show off than any other thing. They want to attract the attention of others by their muscular body and facial beauty, coloured clothes, hairstyles and gait. Social success in adolescence depends on physical appearance. The areas of personal appearance are the body size, hair style, face and nails in girls. Adolescents take interest in developing their body size according to the standard of the culture they live in.

Interest in clothes also becomes prominent in the life of adolescents. They wear multi-coloured and clothes of latest fashion. An adolescent girl who wears extreme in styles draws more attention from people and arouses feelings of admiration and becomes an envy for other girls.

Adolescents are also interested and conscious of physical health and its importance in society. They know the value and influence of good health on their general well-being in the society. They become interested to know as to how to avoid diseases and how to develop good health.

### **4. Vocational interests**

Child up to 12 years of age does not bother much about their future career but as they reach 16 years of age they start thinking about their future career. The choice of future career by an adolescent significantly affects his/her future social relationship in the society and indirect progress of the country. In our country great revolution is taking place in socio-economic and educational fields. These revolutionary changes make it imperative to provide proper guidance to adolescents to help make career decisions.

#### *Factors affecting vocational interests*

Several factors affect the choice of future career in adolescence. The most important factors are given below:

- **Urban-rural factor:** The community residence of an adolescent affects his/hervocational

interest. Adolescents who come from rural areas generally aspire for low paid and lower prestige jobs than adolescents from urban areas. It may be because of poor educational facilities and experiences of rural adolescents. Even in the rural areas, there are differences in adolescents on the basis of intelligence, sex, socio-economic condition and parental education.

An interesting study was conducted by Sewell and Ovenstein in 1965 to study the relationship between socio-economic status and community size. They have reported in their study that adolescents coming from lower socio-economic conditions are exposed to poor stimulation in the sense that they have contact with people of low status who do not provide good models for inspiring adolescents for higher vocations. They are exposed to less number of vocations. The rural adolescents do not have opportunities of coming into contact with people of high vocations who can guide, inspire and provide proper information to them. But it does not mean that adolescents from rural areas do not aspire for higher vocation. There are many examples in which rural adolescents have excelled their counterparts from urban areas.

- **Sex differences:** Sex differences make great differences in the choice of vocation. Formerly in our country education of women was completely neglected; very few women studied who never thought of joining the service industry. Acceleration of women education and their aspirations for equal access in vocation has created problems. Earlier women were thought to be fit for limited vocations but recently women have entered almost all professions with success.
- **Father's occupation:** Generally adolescent boys identify themselves with the career of their fathers. Werts, 1968, who studied fathers' occupation and career choice of 76,000 boys, found that the sons of physical scientists, social scientists, and medical men tended to choose the careers of their fathers. In addition, the encouragement and inspiration of low socio-economic status parents to their sons plays an important role to select a profession.
- **Occupational attractiveness:** Adolescents are led to make their vocational choice by the prestige, income, and social recognition of the profession by the society. Socio-economic class and intellectual level and availability of vocation are important factors which affect the choice of career in adolescents.

## ***Problems of Adolescents***

Any period of change is likely to be accompanied by many potential difficulties. Adolescence is a period of transition from childhood which implies many developmental changes. G. S. Hall has called this period as a period of strain and stress fraught with many problems but other psychologists have laid emphasis on the cultural conditions as the causes of problems in adolescence. Problems of adolescence have been studied by psychologists since a long time but systematic studies were conducted for the first time by Hall in 1904.

tasks:

Laycock (2009) grouped the problems of adolescents under the following major

- Adjustment in home, school, society and to opposite sex
- Freedom from home
- Adjustment in suitable vocation
- Developing a sound philosophy of life

Charlotte Pope made an extensive study of the problems of adolescent boys and girls and reported the following areas of problems:

1. Teaching-learning relationship in school: Most of the adolescents face problem in adjustment with teachers. Teachers are rigid, conservative and do not change their attitude. Some adolescents reported the problem of favouritism by teachers. Students also resent the amount of homework given to them.

It is unfortunate that our curriculum is purely theoretical and there is hardly any active participation on the part of the students. Sitting passive in the class creates annoyance in adolescent boys and girls.

2. Occupational adjustments: The greatest single problem which bothers the mind of adolescent boys in India is uncertainty of the future. The problem of what to do after the studies are over haunts the minds of unemployed adolescents. There is another black side of the picture when adolescents come across scores of unemployed adolescents. The mind of an adolescent agitates against the social order, and he/she

becomes rebellious. It is further unfortunate that most of our adolescents study without future planning. When they finish their study they find themselves incapable of taking up any independent means of livelihood.

3. Financial problem: If we recollect the problems of adolescents of pre- Independence period in India, we find that at that time problems were limited. The problems of adolescents have multiplied with the socio-economic development of the country. The problem of money is a big issue. There are many activities of adolescents which involve money. The adolescents need money. They feel ashamed of asking for money from their parents. Parents in turn are conservative in handing out money for extra activities to their adolescent children.
4. Home life relationship and social adjustment: Adolescents want more freedom to attend social functions but parents do not permit them to move outside the home. This is particularly more so in case of girls from rural areas.

The second important problem is regarding high aspirations of parents regarding achievement of their wards and when they do not come up to their expectations there is constant quarrelling among parents and adolescents. Sometimes these quarrels result in dire consequences. Adolescents run from their home and may even commit suicide.

There is lack of understanding between parents and adolescents, regarding freedom and money. The parents treat the adolescent like a child. They never discuss problems freely with them.

5. Health adjustment: Physical health is a very important factor for adequate social adjustment. Both boys and girls are very particular regarding their physical appearance. Those adolescents who are either underdeveloped or overdeveloped have great problem in adjustment.

### ***Sex Education and Adolescents***

Adolescents have to live in the society; their development depends on proper type of social interactions. We cannot isolate our adolescents from the social set-up. Social environment has many occasions when adolescents come to know about sex and its problems. The child

comes to know about sex from the early age of six. Surveys made by Ramsey and Hamilton prove that children cannot be kept ignorant of sex knowledge. The following are the important sources which provide sex knowledge to children:

- Friends
- Literature
- Old people
- Movies
- Drawings
- Reproduction in animal life
- Physiological development

These sources and a number of other sources are responsible for providing knowledge of sex. Many boys and girls worry and suffer from venereal diseases because of wrong information about sex and due to lack of proper guidance. All teachers, social workers and psychologists agree that sex education should be provided to children.

## **Summary**

- Educational psychology consists of two words—psychology and education.
- Educational psychology attempts to define, describe and explain the changes that take place in the learner through his various stages of development. It is the study of the human mind as it bears upon learning and teaching activities.
- Educational psychology provides to the teacher information on certain problems regarding the development of children. The teacher's effectiveness will depend on his own experience and approach towards educational problems.
- Educational psychology deals with the nature of the children and the environment, and both of these are unstable. A child may not behave the same way even in the same environment at different times. Educational psychology provides only the guidelines. Its generalizations are not as exact as the generalizations of natural sciences.
- Educational psychology employs various methods to improve the teaching-learning process in the classroom. It uses these methods to gather facts about the nature of children; how

they learn and how they develop. It employs methods to know how any aspect of a child's personality, such as learning, social adjustment or skills, develop from the elementary stage to a complex one.

- Introspection is composed of two words, *intro* and *aspection*. *Intro* means *within* or *inward* and *aspection* means *looking*. Hence, the word implies self-observation or looking *within* or looking *inward* to experience 'one's' mental state. It is a process of examining one's mental process of thought, feelings and motives. An individual looks within, observes, analyses and reports his feelings.
- Infancy is the earliest period of childhood, which is the first state of development. On the other hand, childhood is the age span ranging from birth to adolescence.
- Cognitive development focuses on a child's development, referring to his capability to process information, abstract resources, perceptual abilities, language learning and other characteristics of brain development and cognitive psychology, as compared to an adult's approach.
- Language development helps a child communicate and convey and comprehend feelings. It also supports thought processes and the ability to solve problems and develop and maintain relations. The abilities to understand, use and take pleasure in language are the crucial first steps.
- Intellectual development refers to the development of an individual's intellectual faculties which includes comprehension, cognition as well as reasoning based on abstractions. Essentially, intellectual development is the pursuit of activities that involves a higher degree of mental functioning.
- The extent of intellectual development is indicative of an individual's mental health.
- Physiological growth refers to the growth and development of physical as well as mental features. Development of the cognitive, emotional, intellectual and social skills is as important as the development of different body parts.
- Intellectual development is the development of mental abilities and capacities which helps individuals to adjust behaviour to the ever changing environmental conditions.
- Mental health is very important for efficient learning and proper development of personality.



### 3.6 Key Terms

- Introspection: The word implies self-observation or looking within or looking inward to experience 'one's' mental state. It is a process of examining one's mental process of thought, feelings and motives.
- Cognitive theories: These theories emphasize the role of purpose, insight, understanding, reasoning, memory and other cognitive factors in the process of learning.
- Conditioning theory of learning: It involves the conditioning of respondent behaviour through a process of stimulus association and substitution.
- Extinction: It is a process in which conditioned response disappears gradually or S-R association is disconnected.
- Negative reinforce: It is any stimulus, the removal or withdrawal of which increases the likelihood of a particular behaviour.
- Gestalt: It is a German word whose equivalent in English is 'form' or 'pattern' or 'configuration'.
- Adolescent: It is the period through which a child develops into an adult.
- Genetic: It is related to genes or heredity.
- Cognitive development: It is the development of the ability to think and reason.
- Depth perception: It is the visual ability to perceive the world in three dimensions.

### 3.7 Questions and Exercises

#### Short-Answer Questions

1. State the importance of educational psychology.
2. What are the limitations of educational psychology?
3. List the different methods and techniques of collecting data.
4. What is learning?

5. Write a short note on the different factors that affect learning.
6. What are the different types of learning?
7. Which method of learning did Kohler draw attention of the people to?
8. Briefly mention the contribution of Pavlov in learning.

#### Long-Answer Questions

1. Discuss the focal areas and scope of educational psychology.
2. Explain the relevance of educational psychology for the people involved in teaching.
3. Write in detail any two methods of educational psychology.
4. Why is learning important for us?
5. Clarify Kohler's method of learning.
6. Mention the experiments of Pavlov in the field of conditioned response.
7. Summarize the contribution of Watson in learning.
8. Explain the laws of learning in the light of historical background.
9. Discuss the characteristics of adolescent interests.
10. In Piaget's theory, discuss the role of the schema.
11. Discuss the ways in which social development is dependent on the presence of family and peers.

### **3.8 Suggested Reading**

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**UNIT-IV**  
**EDUCATIONAL SOCIOLOGY AND MODERNIZATION**

**Structure**

- 4.1 Introduction
- 4.2 Unit Objectives
- 4.3 Concept and Nature and Scope of Educational Sociology
- 4.4 Socialization: Concept and Process
- 4.5 Agencies of Socialization
- 4.6 Social Change and factors responsible for Social Change
- 4.7 Education as an instrument of Social Change
- 4.8 School as a sub social system
- 4.9 Modernization : Concept and Characteristics
- 4.10 Key Terms
- 4.11 Questions and Exercises
- 4.12 Suggested Readings

**4.1 Introduction**

The term sociology has been derived from the two words: society which means society and logos which means science. Thus, from an etymological point of view sociology is the science of society.

Auguste Comte, who is known as the father of sociology, used the term for the first time in 1837, while delivering a series of lectures. He introduced sociology as a fundamental science in his book Positive Philosophy and employed scientific methods to collect data about mankind.

Children in society differ from each other in terms of their gender, family, social environment, class, caste and racial backgrounds. They are exposed to different child rearing practices that are known to have an indelible impact on their personality and cognitive abilities. These

differences among children influence and are themselves influenced by classroom processes in a manner which reinforces differences among them, facilitating learning among students from a favourable background and at the same time, inhibiting learning among those from a relatively disadvantaged background.

Here we discuss the meaning, nature and scope of educational sociology and the relationship between society and education. In this unit we seek to understand the manner in which differential socialization practices and patterns in a society shape people's self- concept and personality, thereby leading to differential educational experiences in schools. The differences which the students carry from their homes to the classrooms have an important bearing on their performance and achievement levels in education.

#### **4.2 Unit Objectives**

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

- Reiterate the meaning, nature and scope of sociology
- Discuss the affect of education in the development of society
- Explain the meaning of socialization
- State the stages and types of socialization
- Discuss the theories of socialization

#### **4.3 Concept and Nature and Scope of Educational Sociology**

Sociology, according to Duncan, is the scientific study of dynamic processes of interactions of person and the patterns which form in relation to biological, psychological and cultural influences. It studies social phenomena, social organizations and cultural patterns. It seeks to discover the laws that govern social relations and the forces that develop the personality of an individual. It is built upon the study of the behaviour of ants, birds, and primitive men. It has drawn for its material on social history and social physics. It has received impetus from biology and psychology. Sociology is based upon two fundamentals:

- (i) Each individual is born into a cultural world created by his predecessors. This world has a continuity of existence. It appears to be independent of individuals who enter or leave

this culture stream.

- (ii) The individual becomes, as he grows up, identified with the vast body of culture, and finds his role in it. He further seeks to modify it in his dealings with the world around him. Thus, he becomes not an individual that he was at birth, but a person.

### ***Meaning***

Educational sociology is a synthesis of education and sociology. It is the study of the principles of sociology of education. It is a science born of sciences. According to E. George Payne, educational sociology is an applied science in the field of sociology. It is concerned 'with the effect of learning on group life and in its turn the effect of smaller group life upon the larger group', since the subject matter of educational sociology is the process of social interaction. 'Of both the individual and his social environment', says

F. G. Brown, it is 'neither education nor sociology alone; it is education and sociology when these are both considered as a total educative process'. Educational sociology utilizes all that has been learned in both fields but joins them in a new science which applies sociological principles to the whole process of education, including subject matter and activities, method, school organization and measurement.

### ***Nature***

Educational sociology is not merely theoretical, i.e., it does not merely study the forces of interaction between the individual and the society or the group, but it is also practical because besides studying the interacting forces, it tries to regulate and control the interacting forces.

It is the job of educational sociology to find out ways and means as to how to manipulate the educational process to achieve better personality development and thus, better social control.

### ***Importance***

There is, explains Brown, 'a constant interaction of the individual and his cultural environment. He is influenced by it. This constant interaction, which is the subject-

matter of educational sociology, is the basic pattern of life'. Any attempt, therefore, says Brown, to

understand and foster the development of the individual and every effort to provide the means and agencies for such development must be based upon an analysis of this two-way process in which the individual and the forces external to him are in continual interaction.

Also, this interaction is inevitable. Man must be able to control the physical and social forces around him if he is not to fall a passive victim in the continuous struggle for existence. By his inventions, he has been able to harness the forces of nature, and to eliminate time and distance through radio and television. But these physical forces, like the hydrogen bomb and atomic energy, unless directed by him wisely, would be let loose on him and destroy him and his social organizations. This is the vital, gripping and urgent problem of the day. As never before, man must learn the ways and means of controlling human behaviour, his own and others. It is, therefore, very important for an individual to have some grasp of the interrelations of nations and the social forces that influence their policies and activities.

Moreover, the knowledge of a total social life enables a child to choose his own patterns of social behaviour, to control his own behaviour patterns and of other individuals and groups. One's attitude towards state, religion and other communities is often the product of group associations. An intelligent study of these attitudes should guide one in adopting the right social attitudes.

Also, biology and psychology have, no doubt, probed and gauged the less tangible forces within man and helped us to understand him better. But man is an integral member of the many groups amongst whom he lives and moves. He cannot be understood independently of these: family, church, community, nation, means of communication, folkways and more. It is no longer enough for us to understand the individual without knowing or understanding the interacting forces that are working on him. Education must, therefore, go beyond the individual and reach out into the total social milieu.

There is a two-fold approach to the study of the development of the child; one from the viewpoint of the individual, and the other from that of the society. The individual approach is studied by biology and psychology, while the 'societal' approach concerns sociology. It is, however, contended that the individual approach is inadequate and incomplete, and must therefore, be reinforced by the societal approach also.

Both biology and psychology have been found to be incomplete in explaining human behaviour and, therefore, need to be supplemented by educational sociology. It was claimed in

the beginning that biological factors had a direct bearing upon human behaviour. The 'mechanistic school' held that an individual was the product of innate characteristics and influences—both animal and human—which were beyond his control. But recent research has revealed that these were not the sole or primary factors, but only a part of the infinitely complete forces that develop and mould the individual. Some of these forces are inherited and predetermined; some are capable of modification to an appreciable extent; while others are the product of environment.

Psychologists, on their part, hold that human behaviour is determined by instincts. The 'instinctive behaviour patterns' are unlearned, relatively stereotyped and automatic. But observation of dogs, apes and infants stimuli, including the learning process, the nature of response to a specific action, conditions the behaviour of man or animal. Therefore, environmental factors and motivation are as important as innate characteristics in the development of the individual. Psychiatry too has moved far away from what Freud thought it to be — to unravel the complex factors which are the causes of behaviour. Now psychiatry takes the whole physical and cultural background into consideration.

### ***Scope of Educational Sociology***

The subject of educational sociology, as we have seen above, is the constant and dynamic interaction of the individual and his cultural environment or the basic pattern of life. It is, therefore, according to Dodson, interested in three things: total cultural milieu, the school as its agency and the educational process that conditions personality development.

- The social milieu can be broken up into, what Payne calls, social independencies. These are institutions, social groups, social customs and conventions. Through these the individual gains and organizes his experiences and these influence the evolution of the educational system because it equips the youth with knowledge and character to function and fit into society. Educational sociology deals, therefore, with groups like the family, school, team, club, union, community, church, state and the world.
- In the second place, it is concerned with the sciences which help to understand its function in its various aspects. It is consequently not concerned with aspects of any science which does not condition personality development. It is, however, concerned with the school which is a specific educational agency as well as with other social agencies like the family, the play group, the church, school union; club, social customs and the mode of living, which all of which



contribute to the development of personality. The personality of an individual first develops in the family through the process of interaction. The business of educational sociology is to discover the area of interaction within the family and then in the school or elsewhere. Sociology would, however, confine itself to the history of the development of family and its various patterns. Sociology deals with social theory and group phenomena, but ignores the educative process and the educational agencies.

- Next to sociology, educational sociology is related to educational psychology. Both of them deal with the school as the agency of education. Both seek to determine and influence the school's effect upon individual behaviour. Both are applied sciences. Educational psychology is applied to learning, while the other studies impact the effects of learning. The latter deals with individual's relation to society while the former is interested in the techniques of building new habits into the child. The latter regards school as a social institution, a part of total social milieu; a form of collective behaviour and so shapes its curriculum, its teaching methods and its organization so as to prepare children for further participation in social life. In short, the former deals with the process of learning, while the latter deals with the problem of personality or behaviour.
- Psychology has been delving deep into the human mind to discover its peculiar pattern, but experimental studies of infant behaviour conducted by Gesell have led him to the conclusion that 'infants are individuals – individuals in the making as well as by birthright. The child's personality is the product of slow and gradual growth... mental growth is a patterning process, because the mind is essentially the sum total of a growing multitude of behaviour patterns.' The most significant recent development in psychology, says Brown, has been the increasing recognition of environmental factors in the development of personality and in the specific processes of learning. The borderline between psychology and sociology is not sharp today. Moreover, educational sociology manipulates these environmental factors in the interest of interaction. Biology offers us the data that forms the basis of individual behaviour. Sociology studies how the laws of heredity and impulses determine an individual's interaction with others as individuals or as groups. Educational sociology goes a step further. It seeks to influence this interaction in harmony with social ideas.

## ***Aims of Educational Sociology***

Educational sociology, according to Herrington, has four specific aims. They flow from the larger aim, i.e., to achieve better personality development by influencing the processes of education. The specific aims deal with the various aspects of the total social milieu as well as the means, the methods, the curriculum and the agencies of education. The achievement of these aims is essential for the achievement of the larger aim. Educational sociology should explain (a) the role of the school in the community (b) the role of the school (c) and the social factors influencing schools. Secondly, it should understand democratic ideologies, cultural, economic and social trends that influence formal and informal agencies of education. Thirdly, it should estimate the social forces and their effects upon individuals. Fourthly, it should socialize curriculum. Lastly, in order to achieve these aims, educational sociology should encourage research and critical thinking, and adopt the results thus obtained.

### **4.4 Socialization: Concept and Process**

**Meaning of Socialization:** It is an unhidden truth that human being evolved from animal and it is the society which he formed gradually at early stages of human formation which also brings a drastic change in his mentality. To form any society it needs to develop an individual according to ideals, customs, beliefs, and traditions. Socialisation is a process in which an individual is moulded with certain social ways and means of living. Accordingly he gets recognition in the society. In this way an individual learns to adjust in his family, peer group, religious group, etc. which make him a social animal. Socialisation process is very helpful in retaining our society culture, ideals, customs and traditions. Our societies also do exist because of this socialisation process going on in our society.

Many sociologists have defined the term socialization in different ways.

Havinghurst and Newgorton define, "Socialisation is the process by which children learn the ways of their society and make these ways part of their personality."

W.F. Ogburn defines "Socialization is the process by which the individual learns to conform to the norms of the group."

E.S. Bogardus defined "Socialization is the process of working together, of developing group responsibility or being guided by the welfare needs of others."

Lundberg says that "Socialization consists of the complex processes of interaction through which the individual learns the habits, beliefs, skills and standards of judgment that are necessary for his effective participation in social groups and communities."

A.W. Green opines, "Socialization is the process by which the child acquires a cultural content, along with selfhood and personality".

According to Horton and Hunt "Socialization is the process by which one internalizes the norms of his groups, so that a distinct "self" emerges, unique to this individual.

Peter Worsley explains "Socialization as the process of transmission of culture, the process whereby men learn the rules and practices of social groups.

According to H.T. Majumdar "Socialization as the process whereby original nature is transformed into human nature and the individual into person".

From the above definitions it is clear that socialisation is a process, whereby a person developed group responsibility, ideals, norms, and traditions of society. It helps in the smooth functioning of society. Socialisation brings transformation of human nature in more socially desirable way.

#### **4.5 Agencies of Socialization**

The process of socialization is a continuous process, because learning is an unending process. So the process of socialisation continues till the end of life. It is not only limited to a child but an adult members also learn the process of socialisation until death. During the time of birth, till childhood child is very assertive and unaware of the various ways and means of society. But gradually when he comes in contact with parents and other members of family various social cultures, ideals and behaviours started to mould his behaviour. Socialisation of any member of the society an important matter, because the future of our existing society is totally depend on how we socialise our young generations. By looking into the gravity of socialisation on our society it is not enviable that the process of socialisation should be left to mere accident. It needs our attention and directions through various agencies to mould them

in the right direction to develop and maintain an ideal society. It helps the child to get a social recognition and also to become a useful member of society. The socialisation process of child can be done in two ways. In the first one those persons engage who have authority over him like parents, elders and teachers and on the second those persons are engaged who are equal in authority to him, eg, peer group, friends, etc. Here it is worth mentioning that both means of socialisation have their own importance and place in society to mould complete socialisation of child.

Important agencies of socialization are

### **1. The Family**

When the child comes into this world the parents and other family members are the first person to come in contact with him. In this way they are the closest to the child physically and socially. The child started to learn everything from his family members. In this way the child learns gradually, starting from crawling to other social behaviours, ideals, traditions and customs of society from the family members first and then from others members of society. The child needs love and affection, care, and other demand which are being fulfilled by the family members. So gradually the child started to learn and share love, social responsibility, morality, virtues, and respect from his own family. The child gets his first experience in co-operation, tolerance, and other social behaviours in the family.

The social development of child is mostly depending on the home environment, the child will learn bad habit in bad family environment and good habit in good family environment. Smooth social development of child need congenial home environment. Studies conducted by many researchers' shows that most of the juvenile delinquency comes from broken families. In family every members has certain influence on the social development of the child, so every members of family has to play their role very judiciously and responsibly to make congenial home atmosphere and proper socialisation of child.

### **2. The School**

The school is also one of the important agencies of socialisation. It may be called as the second agency of socialisation, because after family the next socialisation of child is take place in

school. In school the child gets education which is very helpful in the modification of his behaviour. Here the child explore the knowledge, ideas, and also develop positive attitude towards the society if he come in contact with proper curriculum and teachers. The child also gets an opportunity to mingle up with the peer group or friends which enhance his socialisation process.

### **3. The Peer Group**

The child's Peer group have a great influence on the process of socialisation, so it is one of the most important agencies of socialisation. Here every member of the peer group is having the same authority over one another. Basically peer group exist because of common feeling and cooperation of the group members. The child gets unique experience in his peer group which he never gets from his home environment or family. The child can independently share his feeling and other emotional aspect with his friends and also learn many socially useful experiences. He also learns the spirit of team work and we feeling in the peer group. Many forbidden knowledge are also shared by the peer group which is very important to learn for future consequences.

### **4. The Religion**

The importance of religion in this modern era has faded up to certain level but its value cannot be neglected. It continues influence human behaviour, belief, morality, and the way of life since time immemorial. Religion is also attached with almost every family because one or the other member of the family is religious or due to its attachment with certain festivals or occasion it cannot be totally avoided by individuals. In this way the child get involve in religious ceremonies and listen the religious sermon which ultimately influence his behaviour.

### **5. The Authority**

Every society is controlled by a certain authority which ultimately makes laws, code, and norms. Authority is empower give penalty to a person who disobey authorise law or norms. So every individual is bound to obey the law implemented by the authority which ultimately influences our behaviour and socialisation process.

#### **4.6 Social Cahnge and factors responsible for Social Change**

Social changes are the changes that occur in various components of socialization forwhatever

reasons and circumstances. Social change is the most operative aspect of the society.

### **Definition of Social Change**

Social change is a term used to describe variation in or modification of any aspects of social processes, social interactions or social organization, and are variations from accepted modes of life existing in a society from time to time. Society is dynamic, it grows and it grows through social change caused by various circumstances and reasons over a period of time. Social change is in fact, a variation in perception between generations separated by time and space. But, does it not make social change as good as cultural change? Are social changes and cultural changes not integrally related? In short could there be any social change without corresponding cultural change, and vice versa?

‘Social change’ indicates the changes that take place in human interactions or interrelationships. Society is regarded as a ‘web of social relationships’ and in that sense social change refers to change in the system of social relationships. It is the alteration or modification of the structure and function of any system. For example, change in interpersonal relationships, inter-caste and inter-community marriage, change in family type from joint-living to nuclear households, etc., can be called social change.

Different scholars have defined social change in different ways. A glance at some of them can make understanding clear. According to Morris Ginsberg, a British Sociologist, ‘Social change is the change in social structure, i.e., the size of a society, the composition or balance of its parts or the type of its organization. The term social change must also include changes in attitudes or beliefs, in so far as they sustain institutions and change with them.’ Here, he talks about two types of changes: changes in the structure of society and changes in the values system of society. However, these two types of changes should not be treated separately because a change in one brings on changes in the other, as a change in the attitude of people may bring about changes in the social structure and vice versa. Describing it as a part of ‘cultural change’, Kingsley Davis an American sociologist, says, ‘Social change is meant only such alterations as occur in social organizations, i.e., the structure and function of society’. The renowned sociologist, Macdonald defines social change as the ‘transformation in the organization of society and in patterns of thought and behaviour over time’. So, it can be summarized from the above definitions that almost all the authors while defining social change, give emphasis on social relationships, social organizations, social patterns and values. Social change, therefore, is

change in the societal system as a whole.

### **Factors responsible for Social Change**

Some factors that may affect the social structure of a setup are:

- Physical environment
- Scientific and technological advancement
- Inter-dynamics

According to Ogburn an American sociologist, social change first occurs in the material culture and then in the non-material culture. But these cultural changes do not take place one after the other, but it is a product of the inter-dynamics of the two. Social or cultural change occurs because of the interaction of technological researches or scientific inventions and the ideals, values and aims of society. In other words, social change occurs through the interaction of technological techniques and social values. Both the elements are essential. Any one of them without the other will not bring about any social change. As these factors namely technology, techniques and values play an essential role in any social change, it is necessary to understand the meaning and significance of these words. Technology is that branch of science which develops various techniques. Techniques are the means which fulfill various basic needs of human beings in a society. In the end values are those objectives, beliefs, thoughts and abstract concepts which make human life dynamic, successful and purposeful.

It may, therefore, be observed that neither technological advancements alone nor the values in themselves bring about any real social change. In fact when technology changes, it effects change in values and when values change, they bring out the corresponding change in technology. In this way, technological advancements as well as values are both the essential basis of social change. Both are equally important and essential. Both actively interact and bring about social change.

### **Factors Resisting Social Change**

The following factors resist social change:

- **Cultural inertia:** Cultural inertia refers to some blind beliefs, superstition customs, taboos, traditions, etc. which are passed down from generation to generation, and are considered sacred and inviolable.

- **Fear of the new:** People stick to traditional routine life for fear of the new elements that may turn harmful and injurious. Believing in the status quo, such people are content with the existing economic order.
- **Vested interests:** These interests suit a privileged section of the society who is powerful and influential to thwart any change.
- **Degree of isolation:** Some sections of the society remain isolated and insulated, with hardly any outside contacts with progressive groups, and deny themselves the benefits of social change.

### ***Interrelationship between Change and Development***

Development is a form of change. However, there are differences between the two. Change is a value-neutral concept while development, as discussed in the previous sections, is value-loaded one. Change is ethically neutral and suggests alterations or modifications in the structure and functioning of society over a period of time. Development, on the other hand, advocates change for good. It is a process of desired change. Although development leads to change, all forms of change don't indicate development. Those changes which are planned are termed as development. A change to be defined as development must occur continuously in a desired direction. These desired goals are set looking at the values, norms and needs of any society. Any change in the society must get absorbed in the system and must be felt by the people to make it more effective. Such change can then be regarded as development.

Advancement in education and modern means of transport and communication has resulted in high female literacy in the modern societies. This has led to women joining various jobs in both government and non-government establishments, changing the family relationship as a whole. Such a move leads to a situation like role conflict where the modern women are confused whether to perform the role of a traditional family woman, a mother, a daughter, a wife or to play the role of a teacher, an administrator or an engineer. Such a phenomenon is an example of social change. However, such change can be regarded as development only when proper institutional arrangements and social adjustments are made so that the working women don't face the situation like role-conflict and manages both her roles well. Such institutional arrangements and social adjustments will then be called as development.

Development is a multi-faceted term and there are lots of confusions over its meaning



and definition. Questions are often raised about how one should count the development parameters. How can a society be called developed and underdeveloped? What should be the basis? Education is the medium through which the members of society are socialized and the modern means of knowledge, skill and technique are imparted to them. Formal education and training expands opportunities for people and increase their capacities.

Availability of educated labour force in a country is a prerequisite for development, better governance system and healthy functioning of democracy. In India, to eradicate illiteracy, the successive governments have come out with policies like 'Sarva Shiksha Abhiyan' (SSA), 'Midday Meal Scheme', 'Mahila Samakhya Scheme', 'Teacher Education Scheme', etc. Following the National Literacy Mission (NLM), set up in 1988, the 'Total Literacy Campaign' was initiated to eliminate illiteracy. India's soaring literacy helped the country to become a knowledge economy. From a mere 12 per cent during independence, India's literacy has reached at 65 per cent (2001 census) now. This is a strong indicator of development.

### **Result of Social Change**

The form of each aspect of social life is being continually transformed to the effect of the aforementioned factors which cause social change. New institutions and associations are being formed and destroyed in the social, economic, political, cultural, verily all spheres. The form of family, marriage, state, religion, civilization, culture educational system, economic structure and the social structure is always changing and being transformed. As a result, a change occurs in the life of an individual and his relations with others. To take an example, the result of social change can be well understood and realized by studying the history of the objectives, structures, forms, importance and functions of the family from the early past to the present day. Similarly, all the change and difference that is seen between the tribal society and present day society can be attributed to social change.

### **4.7 Education as an instrument of Social Change**

To make the society worth living, education and society should be closely associated with each other. They should depend on each other for their growth and development. If we neglect this contact, education would remain ineffective and artificial and cannot be used as an instrument of social progress. Education, therefore, is a society in miniature,

where students and teachers function together by a code of conduct that directs their behaviour. Organizations of activities like prize distribution ceremonies, athletic events, education assemblies and clubs are integral part of the education culture. These are some important features of social life. To supervise the rights and duties of the members of education there are some authorities also. The relationships between the administrators and teachers, teachers and teachers, students and teachers, determine the efficiency of the education system. Thus education is a social organization. Education may be called either a natural society or as an artificial society. Education becomes a natural society when there is no possibility of break of the conditions of life both inside the education and the society outside it. Nothing can be forced upon the children to learn. A nation's education, we might say, is an organ of its life, whose special function is to consolidate its spiritual strength, to maintain its historic continuity, to secure its past achievements, to guarantee its future. Thus education is an idealized epitome of society, which extends its boundaries to humanity at large.

The school, in order to function as a society in miniature should organize activities like morning assembly, ceremonies and functions like the prize giving ceremony, games and sports, debates and seminars to cultivate community feeling, teaching of subjects like history, music, art and literature should be recognized. Student's self-government should be organized to provide training for leadership and community living. Thus, we can relate education to life and society.

### ***Education and Social Change***

Some of the ways in which education affects social change are listed below:

- Education helps perpetuate, stabilize, stabilize and consolidate some eternal values by means of its programmes and applications thus inculcating faith in social change.
- Education helps understand and accept the emerging social change smoothly and willingly.
- Education determines the desirability and efficacy of the social changes by continuous and critical evaluation.
- Education prepares ground for social change by generating public opinion.
- Education is a means of conserving and transmitting culture from generation to generation facilitating social changes at appropriate time.
- Education promotes unity and total integration which fosters social change at a mass

scale.

- Education helps maintain human and social relation by keeping the structural equation and balance.
- Education spreads the message by word of mouth, print and electronic media.
- Education prepares enlightened public opinion by removing the resisting factors and obstacles to social change.
- Education increases depth and variety of knowledge to appreciate change.
- Education inculcates the spirit of reform and social welfare to conceptualize and promote change.

### ***Social Factors Determining Educational Policy***

Generally education leads to social change but at times social changes also determine the educational policy, theory and practice. This indicates the close and integral relationship between education and social change. Some of the instances wherein social change determines education are as under:

- **Educational changes because of social forces:** Social aspirations, social values and social dynamism are some of the social powers. When these forces change, change occurs in the educational process also.
- **Educational changes because of social needs:** Society has various needs which affect the process of education for the purpose of their own satisfaction. It means that educational changes occur because of social needs and aspirations. Compulsory, free and universal education; diversification of secondary and higher education; adult education; agricultural, industrial, vocational, professional and scientific education are the various forms and varieties of education which have been brought about by the needs of modern Indian society.
- **Educational changes because of cultural changes:** Many changes in education occur because of cultural changes. It may be noted that first the material aspects of culture changes and then the non-material aspect of culture gradually changes. Thus, when cultural changes occur, changes also occur in education.

### ***Role of Education in the Emerging Indian Society***

In India, a state of social equilibrium existed for thousands of years before the English conquered the country. This equilibrium was the result of the scientific organization of education. The social feelings have influenced education and education has kept the aim of social progress always in view.

Observance of dharma was the aim of social life and education. Dharma according to the Indians is that which holds society together and it denotes justice, duty, right, moral obligations and several virtues. It stands for the individual's rights, duties and obligations towards oneself, one's kith and kin, towards the society at large. Thus observance of dharma aimed at physical well-being, emotional integration and refinement, intellectual stability and enlightenment, social and cultural coherence and harmony, and the true knowledge of dharma helped the people to be socialized. The social teachings of the great seers and sages of India united the country.

With the coming of British rule, the positive aspects of the country were altogether disregarded. To the people of India, such an educational system was bestowed, which had its roots in western social life. This obstructed the progress of socialization of the people through education.

With the dawn of independence, several attempts have been made to enhance the society with the help of education. Now the effect of sociology on Indian education is rapidly growing. Therefore, it is very necessary on the part of the people to be conversant with educational sociology. The study of educational sociology helps the students to understand the geographical unity, ethnic unity, fellowship of faiths, social institutions, and Indian culture based on the principles of socialization of the people. It helps the students of the emerging Indian society to know about the vast storehouse of sociological material that awaits careful study, analysis and orderly presentation. Beginning with the Vedic seers and sages, with Manu Varvaswata and Gautama Buddha, and ending with Rabindranath Tagore, Sri Aurobindo, Annie Besant, Bhagawan Das, Swami Dayanand Saraswati, Mahatma Gandhi and Vinohbha Bhave, India has given birth to seers, sages, saints, scientists, statesmen, social reformers and others, who preserved the Indian social tradition, while India's cultural and social life was shaken to its very foundation by the unsettling effects of contacts with other countries and by other agencies of social change. Our country's need today is to equip our students with the sociologist's

concept of equality, secular attitude, broad-mindedness and cultural unity of the country.

### **Education as a Centre of Community Life**

A group of people living together by common interests and purpose may be called a community. But in actual practice, we do not have such a community. Generally, people living together in a community have conflicting interests in their process of living. The interests of the 'haves' have always dominated over the interests of the 'have-nots'. In spite of these differences, there are certain grounds common among all the members and groups of any given community. These grounds are: beliefs, customs, traditions and attitudes because of these common interests, perhaps we call it a community. Even though different groups in a community may differ from each other on the basis of their basic interest. Therefore, it is very difficult on the part of education to look to the interests of several groups of a community equally. The group that becomes powerful influences the community as a whole and dominates over the policies and practices of the education system. In such a situation, it is very difficult to practice the principles like 'equality of educational opportunity.' During the British Raj, the people of India could not realize the importance of the education.

The various sections of the community dominated education to safeguard their own interests. But now the question arises as to how far the education enters the community. This is a crucial problem for anybody who deals with education. Our problem is to check the influence of different groups on education and use education as an instrument for general improvement of the community as a whole.

To achieve the above goal, it is essential that the work inside the education and the experience of the child in the society should be integrated, as a result of which education can become a social process and a dynamic part of the social life of the entire community. Such unification or integration between the two fields of education will be possible only when education can participate in the life of the community and take active part to solve the problems confronted by the community. When education understands the needs, interests and problems of the community as a whole, it can serve the community in the true sense of the term. In this respect, K.G. Saiyidain, former education secretary of India, opines, 'A 'people's' education must obviously be based on the 'people's' needs and problems. Its curriculum should be an epitome of their life. Its methods of work must approximate to theirs. It should reflect all that is significant and

characteristic in the life of the community in its natural setting’.

Education is the only means to lead the individuals towards all-round development and progress. Therefore, each community maintains education in order to fulfill its economic, political, cultural and social needs and the education on the other hand maintains the community through its many different activities and diverse programmes.

Relation of education and community is a two-way traffic. The community conveys its problems to the education for solution and guidance and the searched out experimented knowledge is fed back to the community. The progress of the community depends upon the effective feedback process. A community cannot progress, if it does not get feedback from its education as guidance and required solutions. Thus, education and community depend upon each other for their progress. Education can solve the economic problems of the community.

Some are of the opinion that the education can meet the needs of the people, if it can orient the students to the existing industrial and agricultural conditions and prepare them for specific jobs. But some people criticize this opinion and argue that in a democratic country, it is not at all desirable to introduce early specialization. It may be introduced at an advanced stage of development. Regarding such vocational orientation in the education, some other experts advocate that introduction of socially useful productive work make learning more meaningful and effective. It helps the students realize the importance of dignity of labor and develops their personality. Thus, education can solve the economic problems of the community.

### **Education as a Solves of the Social and Cultural Problems of the Community**

Education can solve the social and cultural problems confronted by the community in many different ways. For example, the social problems like untouchability, health and hygiene etc. should be discussed by the students, teachers and the members of the community and find out desirable solutions. Education may organize activities like literary classes, discussions, plays, Parent Teachers’ Association, Adult Education Association etc. to solve the social and cultural problems of the community.

#### **4.8 School as a sub social system**

A school is more than just an institution where learning takes place; it is a microcosm of the larger society. Within the framework of systems theory, a school can be understood as a sub-social system—an organized entity composed of interconnected parts that interact with each

other and with the larger social system. This perspective provides a comprehensive understanding of how schools function, how they interact with external societal forces, and how they contribute to the overall fabric of society. This note delves into the various aspects of a school as a sub-social system, exploring its components, functions, interdependencies, feedback mechanisms, and the challenges it faces.

### **Components of the School System**

A school, as a sub-social system, comprises several key components, each playing a critical role in its overall functioning:

1. **Students:** Students are the primary focus of the school system. They are the recipients of educational services and are central to the school's mission. Students' learning, development, and socialization are core objectives of the educational process.
2. **Teachers and Staff:** Teachers are the facilitators of learning, responsible for delivering the curriculum and fostering a conducive learning environment. Support staff, including administrative personnel, counselors, and maintenance workers, play crucial roles in the smooth operation of the school.
3. **Administration:** The school administration, typically including the principal, vice-principals, and other managerial staff, oversees the day-to-day operations, policy implementation, and strategic planning. They ensure that the school runs efficiently and meets its educational goals.
4. **Curriculum:** The curriculum represents the structured set of educational content and experiences provided to students. It includes academic subjects, extracurricular activities, and other programs designed to promote holistic development.
5. **Facilities:** The physical infrastructure of the school, including classrooms, laboratories, libraries, sports facilities, and administrative offices, forms the physical environment where educational activities take place.
6. **Parents and Community:** Parents and the wider community are external yet integral parts of the school system. They provide support, resources, and feedback, influencing the school's operations and policies.

### **Functions of the School System**

The school system performs several critical functions that contribute to both individual development and societal well-being:

1. **Education:** The primary function of a school is to provide education. This encompasses the delivery of academic content, development of cognitive skills, and fostering of critical thinking. Schools equip students with the knowledge and skills necessary for personal and professional success.
2. **Socialization:** Schools play a key role in socializing young people. They teach societal norms, values, and behaviors, helping students integrate into society. Through

interactions with peers and educators, students learn social skills and develop their identities.

3. **Selection and Allocation:** Schools help identify and develop talents and allocate students into various educational and career paths. Through assessments and evaluations, schools guide students toward areas where they can excel and contribute to society.
4. **Integration:** Schools promote social cohesion by bringing together students from diverse backgrounds. They foster an inclusive environment where differences are respected and celebrated, contributing to social harmony.
5. **Custodial Care:** Especially for younger children, schools provide a safe and structured environment during the day. This custodial function allows parents to work and contribute to the economy, knowing their children are in a secure and supervised setting.

### **Interdependence within the School System**

The effectiveness of the school system relies on the interdependence of its components. Each element influences and is influenced by others, creating a dynamic and interconnected network:

1. **Student-Teacher Interaction:** The quality of education students receive is directly influenced by the effectiveness of teachers. In turn, teachers' success depends on their ability to engage and motivate students. Positive student-teacher relationships enhance learning outcomes and foster a supportive educational environment.
2. **Administrative Support:** The administration plays a pivotal role in providing resources, setting policies, and creating a conducive learning environment. Effective administration supports teachers and staff, enabling them to perform their duties efficiently. Administrative decisions impact all aspects of the school system, from curriculum design to resource allocation.
3. **Parental Involvement:** Parental support and involvement are crucial for student success. Engaged parents contribute to a positive school culture, support their children's learning at home, and provide valuable feedback to the school. Schools that foster strong parent-school partnerships tend to have better educational outcomes.
4. **Community Engagement:** The school-community relationship is mutually beneficial. Schools contribute to community development by educating future citizens, while the community provides resources, support, and real-world learning opportunities. Community involvement enhances the relevance and richness of the educational experience.

### **Interaction with the Broader Social System**

Schools do not exist in isolation; they are part of the larger social system and interact with various societal institutions and forces:



1. **Economic System:** Schools prepare students for the workforce, influencing and being influenced by the economic conditions and needs of society. Economic factors, such as funding and resource availability, directly impact the quality of education. Conversely, the quality of education affects the economic prospects of individuals and the overall economy.
2. **Political System:** Education policies, funding, and regulations are often determined by political decisions at local, state, and national levels. Political priorities shape the goals and functioning of schools, influencing curriculum standards, teacher qualifications, and accountability measures.
3. **Cultural System:** Schools transmit cultural values and norms, helping to preserve and evolve societal culture. They must adapt to cultural changes and diversity within the student body, promoting inclusivity and cultural awareness. Schools play a crucial role in shaping the cultural identity of future generations.
4. **Technological System:** Technological advancements impact how education is delivered and how schools operate. Integration of technology in the classroom enhances learning opportunities, provides access to information, and supports innovative teaching methods. Schools must adapt to technological changes to remain relevant and effective.

### Feedback Mechanisms

Effective school systems employ various feedback mechanisms to monitor performance, identify areas for improvement, and adapt to changing conditions:

1. **Standardized Testing:** Standardized tests provide data on student performance, helping schools evaluate the effectiveness of their curriculum and teaching methods. This data informs decisions on instructional improvements and resource allocation.
2. **Teacher Evaluations:** Regular evaluations of teachers' performance help identify strengths and areas needing development. Professional development programs and support systems are designed based on these evaluations to enhance teaching quality.
3. **Student Feedback:** Feedback from students provides insights into their learning experiences and satisfaction. Schools use this feedback to make adjustments to the curriculum, teaching methods, and school environment to better meet students' needs.
4. **Parental and Community Input:** Parents and community members offer valuable perspectives on the school's functioning. Regular communication, surveys, and involvement in decision-making processes help schools align their goals with community expectations and needs.
5. **Internal Assessments:** Schools conduct internal assessments and reviews to evaluate various aspects of their operations, from administrative efficiency to resource management. These assessments help identify strengths, weaknesses, and opportunities for improvement.

## Challenges and Issues

Despite their critical role, schools face numerous challenges that can impact their effectiveness:

1. **Equity and Access:** Ensuring that all students have access to quality education regardless of their socio-economic background is a significant challenge. Disparities in funding, resources, and opportunities can create inequities that affect student outcomes.
2. **Resource Allocation:** Balancing budgets and resources while maintaining or improving educational quality is a constant challenge. Schools often face constraints in funding, leading to difficult decisions about staffing, programs, and facilities.
3. **Adaptability:** Schools must continuously adapt to societal changes, such as technological advancements, shifts in the job market, and evolving cultural norms. Staying relevant requires ongoing innovation and flexibility in curriculum and teaching methods.
4. **Accountability:** Measuring and ensuring the effectiveness of educational outcomes and administrative processes is crucial. Schools are held accountable by various stakeholders, including governments, parents, and the community. Balancing accountability with autonomy can be challenging.
5. **Mental Health and Well-being:** Addressing the mental health and well-being of students and staff is increasingly important. Schools must create supportive environments that promote mental health, provide counseling services, and address issues such as bullying and stress.
6. **Diversity and Inclusion:** Embracing diversity and fostering an inclusive environment are essential for social cohesion and student development. Schools must address challenges related to cultural differences, language barriers, and discrimination to create an equitable learning environment.
- 7.

### 4.9 Modernization : Concept and Characteristics

The report of the Education Commission (1964-66) states, 'The most distinctive feature of a modern society, in contrast with a traditional one, is in its adoption of a science-based technology. It is this which has helped such societies to increase their production so spectacularly. It may be pointed out, however, that science-based technology has other important implications for social and cultural life and it involves fundamental social and cultural change which is broadly described as modernization. Thus, modernization is a process of change from traditional and quasi-traditional order to certain desired types of technology. These changes take place in values, social structure, and achievements of the students. In the words of William E. Moore, 'Modernization is a revolutionary change leading

to transformation of a traditional or pre-modern society into the type of technology and associated social organization that characterizes the advanced, economically prosperous and relatively politically stable nations of the western world.'

Nearly one-third of the countries of the world have been branded as developed countries and two-thirds as the developing countries. These developing countries have a traditional type of society. Their tradition is based on some unscientific attitudes which obstruct advancement. Their cultural life is based on superstition, ignorance and orthodoxy. Now there is a need to transform these countries into a society which is technology- oriented and scientifically attuned. This process of transformation is known as modernization.

Modernization refers to the changes in material elements and also the belief of the people, their values and way of life as a whole. The process of modernization aims at bringing about desirable changes in the social structure, values and the social norms.

Mere imitation of the way of life of the advanced countries is not modernization. Every developing country has a right to learn a lot from the advanced countries. But it should not be a carbon copy of some other country. A society can become modernized, if it does not lose its identity and makes full use of the discoveries and innovations in the field of science and technology. Such a society should use the natural resources profitably for improving the living conditions of the people. Instead of ignoring the cultural heritage, it adds some new cultural elements. It accepts scientific and technological advancement.

A modernized society is one which adopts a new way of life according to the changing circumstances and does not remain at a level of 10th century society. If it remains at the level, it will be just like persons who use a watch, travel by train and bus, watch television, but follow the traditional way of life. Modernization is a process of changing the outlook of man. In this respect, education plays a very important role.

### **Modernization versus Westernization**

Some people consider Western way of life as an indicator of modernization. In order to be modernized, they blindly follow Western way of life, language dressing pattern. Thus, they become a carbon copy of the West. If we scientifically analyze the problem we will find that modernization is in no way connected with Westernization. There are certain arguments, in favour of this view. First, it is not wise to say that the Western civilization can work as a model for

all the countries of the world. Second, we cannot accept the Western way of living and thinking. For example, the world experienced two global wars because of difference in economic and political ideologies. Third, some of the values of the West may not be accepted by different countries. Fourth, if we analyse the way of life of the Japanese, we will find that this country can contribute a lot to the process of modernization, even if it is a non-western country. Fifth, it is not at all desirable on the part of a nation to lose its identity in the name of modernization. It will be a destructive policy and will make a clean sweep of the entire cultural heritage. Thus, westernization should not be considered as modernization.

### ***Industrialization is not modernization***

Some people think if we can industrialize our country, we can be modernized. But by starting industries, modernization cannot take place. Industrialization can only help in the modernization process. It speeds up and directs the process of modernization. It cannot be considered as modernization itself. If we open an industry, we can change our economic life and understand the value of technological advancement. But it cannot be considered modernization. For example, the economies of some Middle Eastern countries have developed a lot because of the use of scientific methods of extracting oil. But the nations cannot be considered modernized, because they have not changed their traditional outlook.

We experience modernization in many different forms. The most spectacular of it is industrial and technological forms. Besides these, modernization also takes place in the field of education, culture, social order, methods of agriculture, bureaucracy and soon. When changes take place in these areas, we call it modernization.

### ***Development of modernization***

History of modernization states that it was first initiated by West European countries and the USA. Rapid industrialization and their monopoly in the markets of their colonies changed their economy. As a result of this there took place a change of attitude. They also influenced their colonies towards their way of life. Thus, started the process of modernization.

With the outbreak of October Revolution in Russia in 1917, another type of modernization began. It started with non-capitalist economy. Emphasis was laid on public ownership of the means of production and distribution. Many developing countries of the world followed their pattern. Thus, modernization began with two patterns—the capitalist and the non-

capitalist.

### **Role of Education in Modernization**

From the discussions above, it appears that patterns of modernization have many implications for education. The capitalist pattern of education aims at developing affluent society and enables every individual to further his interests. The non-capitalist pattern of education aims at eradicating poverty and removing disparities in every field. They aim at social uplift but not the uplift of an individual in his own personal capacity. People purchase education in a capitalist country. But education is meant for all in a non-capitalist country.

Education in the present day context is the most important and dynamic force in the life of an individual, influencing his social development. It functions more as an agent of social change and mobility in social structure. It leads to economic development by providing ways and means to improve the standard of life. The positive attitude towards education leads to socio-economic mobility among the individuals and groups. That means, a person who is born in an agricultural family can, by means of education, become an administrator or any other government employee. Secondly, education leads to change in the lifestyles of people. It modifies the attitudes, habits, manners and their mode of social living. Thirdly, the education is responsible for inter-generational mobility among the individuals and groups. Through inter-generational mobility, social groups are able to maintain their status and the status of their family. Therefore, it can be said that education plays an important contributory role in the mobility of individuals and groups regarding their social position, occupational structure, styles of life, habits and manners.

Education in a modern society is no longer concerned mainly with imparting of knowledge and preparation of a finished product, but with the awakening of curiosity, the development of proper interest, attitudes and values and the building up of such essential skills as independent study and capacity to think and judge for ourselves, without which it is not possible to become a responsible member of a democratic society. Therefore, the process of modernization will be directly related to the process of educational advancement. A sure way of modernizing a society quickly is to spread education, to produce educated and skilled citizens and to train an adequate and competent intelligence, coming from all strata of society and whose loyalties and aspiration are deeply rooted in the sacred soil of India.

### ***Explosion of knowledge***

There has been an unprecedented explosion of knowledge in the last few decades. In a traditional society, the quantum of knowledge is very limited and gradually increases so that the main aim of education, i.e., preservation, promotion and maintenance of existing culture is achieved. But in the present society, the quantum of knowledge is vast. Hence, one of the important tasks of education in the present day society is to keep pace with this progress of knowledge. Knowledge these days should not be received passively. Rather, it should be discovered actively. For example, when the traditional society lays emphasis on 'to know' only, the modern society lays stress on 'to know by heart'. Thus, it encourages creative and critical knowledge. In the words of the Education Commission, 'In India, as in other countries where similar conditions prevail, this would require, among other things, a new approach to the objective and methods of education, and changes in the training of the teachers. Unless they are trained in new ways of teaching and learning the students in schools and colleges will not be able to receive the type of education needed for the new society.'

### ***Rapid social change***

Another important feature of the present day society is the quick and breath-taking rate of social change. Due to the rapid change, the centres of learning should be alert in order to keep abreast of significant changes that are taking place in the society. There is need for adopting a dynamic policy in the field of education. The system of education which does not take into account this aspect, becomes out-of-date and out-of-tune and stands in the way of development, both in quality and quantity. The Education Commission, therefore, recommends, 'The very aim of education has to be viewed differently it is no longer taken as concerned primarily with imparting of knowledge or the preparation of finished product, but with the awakening of curiosity, the development of proper interest, attitudes and values and the building up of such essential skills as independent study and the capacity to think and judge for oneself without which it is not possible to become a responsible member of a democratic society.'

### ***Need for rapid advance***

Once the process of modernization is launched, it is not possible to go back or to stop the process half-way. At the initial stage there is a possibility of disturbance of the traditional equilibrium reached and maintained over centuries. Besides this, there is the possibility of a lot of unexpected

social, economic, cultural and political problems. If we do not accept these changes or if our convictions become half hearted, the new situation will become worse than the traditional one. Hence, it is wise to move rapidly forward and create a new equilibrium, based on the process of modernization.

### ***Modernization and Educational Progress***

On modernization and education progress, the Education Commission states, 'The progress of modernization, will therefore, be directly related to the pace of educational advance and the one sure way to modernize quickly is to spread education, produce educated and skilled citizens and train an adequate and competent intelligentsia.'

The Indian society today is heir to a great culture. Unfortunately, however, it is not an adequately educated society, and unless it becomes one, it will not be able to modernize itself and to respond appropriately to the new challenges of national reconstruction or take its rightful place in the community of nations. The proportion of persons who have so far been able to receive secondary and higher education is very small, at present less than two per cent of the entire population. This will have to be increased to at least ten per cent to make any significant impact. The composition of the intelligent must also be changed. It should consist of able persons, both men and women drawn from all strata of society. There must also be changes in the skills and field of specialization to be cultivated. At present, the intelligentsia consists pre-dominantly of the white-collar professions and students of the humanities while the proportion of scientists and technical workers in its ranks is quite small. To change this, greater emphasis must be placed on vocational subjects, science education and research. The average level of competence is not at all satisfactory due to inadequate standards maintained in the universities. This is inadequate standards maintained in the universities. This is damaging to Indian academic life and its regulation. In order to change this situation radically, it will be necessary to establish a few 'major' universities in the country which attain standards comparable to best in any part of the world, and which will gradually spread their influence to others. In the changing contemporary world, function and organization of education at different stages need rapid evolution to meet the demand of modernization.

Modernization is a process of bringing change. But this change does not necessarily mean a complete isolation from our own tradition. In order to modernize society, attempt must be made on the foundation of the past, reflecting the needs of the present and vision of the future

society. Modernization of Indian society should be based on moral and spiritual values and self-discipline. The Kothari Commission, therefore, opines that 'modernization aims, amongst other things, at creating an economy of plenty which will offer to every individual a larger way of life and wider variety of choices. Freedom of choice has some advantages no doubt, but it also depends on the value system and motivation.'

Knowledge and power of the people are expanded because of modernization it is, therefore, necessary to strengthen and deepen the sense of social responsibility and power of appreciation of the spiritual and moral values.

Modernization should not be madly followed at the cost of human values. Therefore, attempts must be made to inculcate value-oriented education at all stages of education children should learn to maintain a balance between spiritual and material values of life while modernizing them.

### **Summary**

- All societies assign roles to their members in terms of superiority, inferiority and equality. This vertical scale of evaluation of people's ability and their placement in strata or levels is called 'stratification'.
- Social differentiation serves as a sorting process according to which people are graded on the basis of roles and status. Through social stratification people are fixed in the structure of the society. In other words, social stratification tends to perpetuate the differences in people's status.
- Since the second half of the 19th century, four broad sociological theories have been used to explain and interpret the phenomenon of social stratification. They are: (i) Natural superiority theory, (ii) Functionalist theory, (iii) Marxian class conflict theory, and (iv) Weberian multiple hierarchies theory.
- If the society offers a large number of opportunities and encourages members to achieve higher positions, then the society can be called an 'open stratification society'. On the other hand, if the society has a limited number of opportunities for upward mobility and its normative values prohibit its members from achieving higher positions, that society is called a 'closed stratification society'.
- There are three types of social stratification: slavery, social class and caste.



- ‘Social mobility’ may be understood as the movement of people or groups from one social status or position to another status or position. Social mobility is of three types, namely (a) Vertical social mobility, and (b) Horizontal social mobility, and (c) Spatial social mobility.
- Socialization is a process, whereby people learn the attitudes, values and actions appropriate to individuals as members of a particular social group.
- Education, as John Dewey says, ‘is the process of living through a continuous reconstruction of experiences. It is the development of all those capacities in the individual which will enable him to control his environment and fulfil his possibilities’. This function of education is primarily a function for socializing the individuals living in society.
- There are four different stages of socialization from infancy to adulthood. These are: (i) The oral stage, (ii) The anal stage, (iii) The oedipal stage and (iv) Adolescence.
- All types of socialization may be classified into two broad groups, viz., primary socialization and secondary socialization. This division is based on the primary and secondary needs of individuals.
- Agencies of education may be classified under two heads: the formal agencies and the informal agencies. The formal agencies are those institutions and organizations which are organized systematically. Processes of education in these institutions are deliberately planned.
- Agencies of education may also be divided into active and passive agencies. Active agencies are those which try to control the social process and direct it to a definite goal. The passive agencies, on the other hand, act in one way only. There is no such interaction between educator and the educand.
- There are different functions of the school, modern school and as a substitute to the family. There are also distinct education functions of home.
- In modern society, the means of mass communication such as television, radio, cinema, newspaper, books and audio-video cassettes have become an integral part of life. They play a very important role in the socialization process of their viewers, readers and listeners.
- Modernization is a process of change from traditional and quasi-traditional order to certain desired types of technology. These changes take place in values, social structure, and achievements of the students.
- If we scientifically analyze the problem, we will find that modernization is in no way connected with westernization.
- The two patterns of modernization have many implications for education. The capitalist pattern of education aims at developing affluent society and enable every individual to further his

interests. The non-capitalist pattern of education aims at eradicating poverty and removing disparities in every field. They aim at social upliftment but not the upliftment of an individual in his own personal capacity.

#### 4.10 Key Terms

- Stratification: It is the vertical scale of evaluation of people's ability and their placement in strata or levels.
- Class solidarity: It refers to the degree to which workers collaborate to achieve their political and economic targets.
- Endogamy: It refers to the marriage practice in which the members of a group marry within the group.
- Social mobility: It is the movement of people or groups from one social status or position to another status or position.
- Socialization: It is a process, whereby people learn the attitudes, values and actions appropriate to individuals as members of a particular social group.
- Modernization: It refers to the changes in material elements and also the belief of the people, their values and way of life as a whole.

#### 4.11 Questions and Exercises

##### Short-Answer Questions

1. Explain the characteristics of social stratification.
2. Discuss the four broad sociological theories.
3. What are the functions of social stratification?
4. Discuss the role of education in the emerging Indian society in the process of socialization.

##### Long-Answer Questions

1. Explain Mead's theory of socialization.
2. What are the functions of the school as a substitute family?
3. Write an essay on the concept of modernization and the role of education.
4. Describe the factors affecting social mobility

#### 4.12 Suggested Readings

Sharma, K.L. 1994. *Social Stratification and Mobility*. Jaipur, New Delhi: Rawat Publications.

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