UNIT 3   SCOPE OF EDUCATION

Structure

3.1   INTRODUCTION

In the earlier units, you have got an understanding of the concept 'Education'. In this unit, we will focus on the scope of education. By scope of education, we mean the range of educational operation in terms of various learning environments, the major focus of the study of knowledge or the mode of imparting education. The scope of educational operation is very broad. It cannot be equated with schooling alone; it starts from the cradle and ends with the grave and, therefore, is a lifelong process. In order to conceptualise educational operation according to different social spaces educationists have broadly classified education into three major forms of education. These are informal, formal and non-formal. Based on the major focus of the study of knowledge, educational operation is also perceived as liberal, professional, vocational and technical education. Moreover, educational operation is perceived as face-to-face and distance, based on the mode of transaction of educational experiences. Our discussion in this unit will, however, centre on these major classifications of educational operation.

3.2   OBJECTIVES

After going through this unit you should be able to:

●   define the meaning of scope of education;

●   classify education from the viewpoint of different learning environments;

- categorise education from the viewpoint of the major focus of the study of knowledge; and

- categorise education according to the mode of providing education.

3.3 SCOPE OF EDUCATION FROM THE VIEW-POINT OF DIFFERENT LEARNING ENVIRONMENTS

While trying to understand what constitutes the meaning or concept of education, you must have noticed that the concept of education has been perceived differently by different scholars. Similarly, education has been characterized differently by different viewpoints. One such characterization about the concept of education is that education is a social action or a social process. It operates in various social spaces. One may ascribe to this operation as the human socialisation. In this sense, education is a socialisation process.

As you know, human learning mostly takes place in a learning environment, although some kinds of human learning taking place during infancy are linked to biological impulses. Hence, education of a child, in a broader sense, starts from the family or home, which is the first social environment/space for him/her. From a natural learning environment like the family, a child moves to a contrived social environment or space like the school. Here he spends a substantial time of his formative period. Once he/she is out of contrived social environment and enters the world of work, he/she as an adult who still continues to educate himself through many semi-contrived learning environments. Based on these three different kinds of learning environments, educationists have broadly classified education into three forums of education: informal, formal and non-formal. Let us discuss these three forms of education in greater detail.

3.3.1 Informal Education

Informal education, as the phrase itself indicates, takes place in any kind of informal learning environment. There is no formality attached to such education. This form of education is the most primitive form of education and the most broad-based in its nature and scope. As we have already stated, the first social environment for informal education is the family or home of a child. He learns a lot of life skills, attitudes, social manners and knowledge of his immediate world through his interaction with family members like mother, father, brothers, sisters and others. In this way, the family becomes a launching pad for child's future education. In earlier times, the family also used to provide the children skills that are necessary to earn a livelihood. Even now, in rural areas and tribal societies, the children are indoctrinated into the family profession. But with the advent of industrialisation and the emergence of alternative modes of living, this role of family has substantially decreased as most family professions fail to provide the children a decent livelihood.

Beyond the framework of family, a child acquires a lot of knowledge or skills from a host of informal agencies of education. The child's peer groups, neighbourhood, the village community, market places and so on. All these informal agencies help in socialisation of the child.

A child also gets a number of learning experiences through his/her interaction with different kinds of environmental situations he/she encounters everyday. A child who has cut his finger with a blade knows that he/she should use the blade carefully. Such experiences are not consciously provided by any informal agencies, but acquired by the child through his interaction in the environment. This is also a kind of informal education, although more appropriately called 'incidental learning or education'. But, many learning experiences gathered from interaction with the environment may be

undesirable; hence they cannot be recognised as educational. For example, a child's taking to smoking under peer pressure may not be considered as an educational experience. Apart from family, neighbourhood and peer-groups, a child learns from a variety of informal agencies, which provide learning experiences in informal environments. Agencies like television, radio, films, newspapers, magazines, books of readings, etc. do help in the process of socialisation of the child. But learning experiences are not purposefully designed. However, when a child interacts with such agencies, he/she acquires a lot of learning experiences, which are educative.

Based on our discussions so far we may characterise informal education as follows:

- Informal education is the outcome of the interaction between a child/a learner with his/her social environment.

- Informal education is not organised and structured.

- Only desirable learning in an informal education can be called 'informal education'.

- Informal education is purposeful but many times incidental.

- Informal education can take place in a variety of physical and social settings; there is no regular or prescribed form.

- Informal education is experiential in nature. This means the learner learns a lot through interacting with the learning environment.

- Informal education is a lifelong process which starts at the time of birth and continues till the death of a human being.

The above characteristics of informal education can be summarised in the following paragraph:

> "Informal education: The truly lifelong process whereby every individual acquires attitudes, values, skills and knowledge from daily experience and the educative influences and resources in his or her environment from family and neighbours, from work and play, from the market place, the library and the mass media".

> (Coombs, Processor and Ahmed, 1973)

In conclusion, we can say that informal education operates in a broad and wide social space. One cannot define its operation in a narrow and limited organised social environment. Although its operation is not aimed at achieving any explicit objectives of education, there are objectives of education implicit in the entire process of informal education. It is the most primitive and happening form of education.

Since time immemorial, informal education has been the natural form of imparting education or socialisation of human beings. As knowledge pertaining to different types of social operation grew and became complex in nature, informal ways of socialising and educating human beings seemed to be inadequate. Hence, society thought of prevailing learning experiences in an organised way in a controlled environment rather than in an uncontrolled environment as happens in an informal education context. Such realisation by the society led to the idea of setting up a structured and organised learning environment in the form of formal education. Let us discuss the nature of formal education in detail.

3.3.2 Formal Education

The inadequacy of informal education in catering to the transmission of the ever-growing body of knowledge to the future members of the society gave rise to formal education. Hence, the primary objective of formal education is to transmit the knowledge, skills, attitudes, beliefs, etc. preserved and propagated by a society. In order that transmission of societal knowledge takes place, education must be formalised and co-ordinated by an agency like the State, keeping in focus the broad societal aims. Hence, it is the responsibility of the State to carry out this function through its designated

agencies like school, college, or university. Against this backdrop, let us examine the definition of formal education.

"Formal education: The hierarchically structured, chronologically graded education system, running from primary school through the university and including, in addition to general academic studies, a variety of specialised programmes and institutions for full-time technical and professional training".

(Coombs, Processor and Ahmed, 1973)

From the above definition, it is apparent that learning experiences provided through formal education are vertically and horizontally structured. Vertically, formal education starts from primary school to secondary education and university education and horizontally, to run through general academic studies, technical, vocational and professional studies. Let us discuss various aspects of formal education.

Aspects of Formal Education

i) **Goals:** Goals of formal education are explicit. They are generally deduced from the broad societal or national goals, and are formulated in such a way that they are achieved in the long-term perspective. However, in order to achieve the goals, short-term objectives are formulated and pursued in the educational operation.

ii) **Timing:** Unlike informal education, formal education follows a rigid and fixed time schedule, learning time is defined and structured according to the prescribed guidelines set by the school or the State.

iii) **Content/Curricular experiences:** Content and duration of a programme/ a course is decided by the State or the educational institution. Content/curriculum is created based on the broad social/national needs as well as individual needs. Even the transaction of curricular experiences is geared towards the achievement of long-term social goals.

iv) **Entry Requirements:** Educational institutions or the State determines entry requirements to formal education. Hence, to acquire a certain kind of learning experience, one has to fulfil the entry requirements. For example, one cannot take admission in a college unless he/she completes school education.

v) **Delivery system:** Delivery of learning experiences is rigidly structured, teacher-centred and resource intensive. Transaction of learning experiences mostly takes place within the institution isolated from the environment. All this does not mean undermining of the learner. But, the degree of control in the delivery system rests more with the teacher and the institution than with the learner.

vi) **Operational Control:** The operation of formal education is controlled by a hierarchical administrative-academic structure wherein a number of functionaries like the headmaster/principal, vice-principal, and teacher operate in a hierarchical order.

vii) **Achievement of learning objectives:** Unlike informal education, specific procedures or mechanisms are followed to assess the achievement of learning objectives in formal education. These mechanisms are student assessment through conduct of tests and examination.

By now, you should be clear about what formal education is and what its various aspects are. Although formal education has become an inevitable part of what constitutes the 'education' of a human being, it also suffers from inadequacies to meet the growing demand for education. Therefore, non-formal education emerged out of the inadequacies of formal education to meet the ever-increasing demand for education. Let us discuss non-formal education.

3.3.3 Non-formal Education

The genesis of non-formal education is traced back to the 1960's and 1970's. During this period, there was concern about unsuitable curricula; a realisation that educational growth and economic growth were not necessarily in step, and that jobs did not emerge directly as a result of educational inputs. Many countries were finding it difficult (politically or economically) to pay for the expansion of formal education. (Smith, 2004) The above development reflected that formal education systems could not cope up with the socio-economic changes around them. Secondly, UNESCO in its landmark report of the International Education Commission, 1972 'Learning to be', propagated the idea of lifelong education and the learning society. Third, the idea of 'deschooling' which was launched by the great American educationist Ivan Ilich also pointed to the redundancy of the formal education system like the school to meet the learning requirements of human beings.

All these developments contributed to the emergence of non-formal education system through out the world. Although these were western developments, many socialist countries like Russia, Cuba, Tanzania, Somalia and Nicaragua were using successful mass campaigns for literacy, which may be labelled as non-formal education.

Having seen the genesis of non-formal education, we shall try to understand its meaning and characteristic features. Non-formal education has a lot of resemblances with formal education, but differs from it in certain aspects. Let us study the following definition:

> "Non-formal education: any organised educational activity outside the established formal system – whether operating separately or as an important feature of some broader activity that is intended to serve identifiable learning clienteles and learning objectives".

<div align="right">(Coombs, Processor and Ahmed, 1973)</div>

From the above definition, it is clear that non-formal education, like formal education, is an organised activity, which takes place outside the formal educational structure. It also intends to achieve pre-determined educational objectives. But, unlike formal education, non-formal education always caters to the learning need of a specific target group. In a country, one can find a number of initiatives and programmes, which are non-formal by nature. In India, adult education programmes, basic education programmes, literacy programmes, health awareness programme, programmes meant for school drop outs, agricultural extension programmes and the like constitute non-formal education programmes. Let's discuss certain characteristic features of non-formal education.

i) **Goals and Objectives**: Non-formal education programmes are always conceptualised to achieve short-term and special educational goals and objectives. For example, in any kind of literacy programme, the objective is only to achieve literacy among the illiterates and the programme is geared towards the achievement of that objective only.

ii) **Timing**: Non-formal education programmes are generally run for a short period on a part-time and recurrent basis. For example, agricultural extension programmes are short-term programmes but are provided again and again to the farmers.

iii) **Curricular Experiences**: Curricular experiences are generally formulated keeping in mind the specific needs of the target group. These are more individualised rather than broad-based and general in nature. For example, programmes meant for village level health workers contain specific information pertaining to health care in the context of village environment.

iv) **Teaching-Learning Process**: The teaching-learning process is generally learner-oriented and flexible in nature. Transaction of learning experiences is centred around community resources.

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v) **Administrative Mechanism**: It is self-governing and democratic in nature. Activities in non-formal education programmes are mostly organised keeping in mind the convenience of the organisers as well as the learners.

vi) **Assessment of Learning Objectives**: Like formal education, measures are also taken to carry out both formative and summative assessment by mid-term review and final review.

Non-formal Education in India

In the west, NFE refers to all kinds of out-of-school activities, namely, adult and continuing education, agricultural extension activities, skill-based vocational programmes and such other professional programmes. On the other hand, the Indian view of NFE refers to a programme of part-time education designed to meet the educational needs of children who, for various reasons, cannot enrol in the regular, formal and full time schooling and dropped out of its without completing the prescribed years of education. (Dasgupta, 2004). In India, it started during the latter part of the 1970s with the objective of providing education to all children in the age group of 6-14 for achieving the goal of a Universalisation of Elementary Education (UEE). The nomenclature of NFE emerged in 1977-78 with the launch of the centrally sponsored scheme of NFE by the Ministry of Human Resources Development and Social Welfare in nine educationally backward states of India. Prior to that, there were certain developments in the regard. The Education Commission (1964-66) explored the potentialities of part-time education for widening the access to primary education. In 1947, the Central Advisory Board of Education (CABE) emphasized, "The goal of universal education cannot be realized through exclusive reliance on the formal system of education with its single point entry, sequential character, and full–time professional teachers". All these observation led the Working Group Meeting of the Planning Commission to emphasize in 1977 the identification of viable alternative part-time educational designs, widening access to education for all children in the age group of 6-14 years who failed to avail of full time schooling facilities. The National Policy Education (1986) also stressed the importance of non-formed education. It stated, " a large and systematic programme of Non-formal education will be launched for school drop-outs, for children from habitations without schools, working children, children and girls who cannot attend whole day school". The Programme of Action (1986) further stated that efforts would be made to evolve different models of NFE programmes and agencies implementing the program will be encouraged to evolve and adopt the most suitable model depending upon the requirements of the target groups. (GOI, 1986). In 1987, the NFE scheme was received and expanded to 10 educationally backward states (including Arunachal Pradesh) and to educationally backward pockets of all others states and union territories. When the Alternative Schooling Programme was launched under the World Bank Sponsored District Primary Education Programme (DPEP), the NFE scheme was overhauled. In 2001, the NFE scheme was replaced by the Education Guarantee Scheme and Alternative and Innovative Scheme (EGS and AIE Scheme). More about these Schemes will be covered in the Course "Operational Dimensions of Education".

A major portion of the NFE scheme is run by the State Governments, which set up NFE centres. One component of this scheme provides grants to Voluntary Agencies (VAs) directly from the Central Government for running of NFE centres and a third is for projects of experimental innovative nature by VAs.

Apart from the NFE scheme, open learning systems both at school and tertiary levels are also in operation for providing non-formal education. Indira Gandhi National Open University (IGNOU), State Open Universities (SOUs) and Correspondence Course Institutes (CCIs) offer a large umber of programmes to prospective students at tertiary level whereas National Institute of Open Schooling (NIOS) and State Open Schools provide school education programmes on non-formal basis.

Check Your Progress

Notes: a) Write your answers in the space given below.

b) Compare your answers with the one given at the end of the unit.

1. Define the scope of education.

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2. What is informal education? Give examples of informal education.

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3. What is the major difference between formal education and non-formal education?

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3.4 SCOPE OF EDUCATION FROM THE VIEW-POINT OF MAJOR FOCUS OF THE STUDY OF KNOWLEDGE

So far, we have discussed how education operates in three major social spaces, namely, informal, formal, non-formal. This is one way of understanding the scope of education. The second way of looking at the scope of education is from the viewpoint of major focus of the study of knowledge. These are liberal education, professional education, technical education and vocational education.

3.4.1 Liberal Education

The study of knowledge in its various forms existed right from the period of Aristotle and Plato. The ancient civilisations of Greece and Rome had learning centres. There were universities, which in Latin means corporation, for awarding degrees to students. Abbeys (monasteries or convents) were self-sustaining institutions meant for women's education during the medieval period. By the end of the Middle Ages, Europe had 80 universities (Newman, 1998). During this period, liberal arts education was the predominant form of education in the university system. Liberal arts education was intended to develop the faculties of the human mind. Gradually, this education came to be known as liberal education, whose main objective was to develop the powers of intelligence and imagination without which no intellectual pursuit is possible. Liberal education has been interpreted in three different ways:

i) From the etymological point of view, liber means 'freedom'

ii) From pan sophism point of view, liberal education means education in all knowledge, the sciences, the arts, etc.

iii) From non-authoritarian point of view, liberal education means education which respects the autonomy and freedom of the learner, devoid of freedom violating methods like indoctrination.

There were two components of liberal arts education. One was trivium, which comprised grammar, rhetoric, and logic. It taught the arts of reading and writing, of listening and speaking, and of sound thinking. The other part, the quadrivium, consisted of arithmetic, geometry, astronomy and music. It taught the art of observing, calculation and measurement and how to apprehend the quantitative aspect of things. Now-a-days many disciplines in sciences and social sciences are also included under liberal education as they develop the power of mind.

From the above discussion, it could be deduced that liberal education is essentially an intellectual pursuit, which aims at cultivation of human mind. Although liberal education is always associated with liberal arts and education, there are many areas of learning like sports, training in virtues etc. where the mind plays a great role in conceptualising and theorising new ideas. Hence, some elements of liberal education are also present in other areas of learning other than liberal arts education.

We can conclude that liberal education in the words of Lemann (2004) is defined as:

"Liberal education is best defined with its most literal meaning. It is the education that liberates, that frees the mind from the constraints of a particular moment and set of circumstances, that permits one to see possibilities that are not immediately apparent, to understand things in a larger context, to think about situations conceptually and analytically, to draw upon and muster knowledge when faced with specific situations."

3.4.2 Professional Education

As opposed to liberal education, which aims at cultivation of human mind and development of mental faculties, and creation of discipline-based knowledge, professional education deals with a body of specialised knowledge and application of this knowledge to serve various requirements of the society. Hence, professional education involves the application of theoretical knowledge to various practical social situations. As we know, human beings require a number of services for their sustenance in the society. Services like education, health, legal, etc. are badly required by members of the society to lead a successful life. Professional education, thus, is social service oriented rather than a leisure time intellectual pursuit. Let us now see what constitutes a profession. One can find a number of definitions to define a profession. We present one of these definitions below:

"A profession ... is a field of endeavour whose practitioners have a collective idea of the good in their work that does not overlap exactly with the self-interest of either themselves or their employers. Professionals have goals and ideals and purposes having to do with the history, the techniques and the social role of their field, which rise above the daily demands of work. They are in discourse with each other about matters broader than just the completion of the work assignment at hand. Professionals have to deal with complexity in their work. Professionals do work that has a public purpose."

(Lemann, 2004)

From the above definition and many more definitions, we can find out the following important features of a profession:

1) A profession renders a crucial social service.

2) A profession comprises a specialised body of knowledge, skills and attitude.

3) A profession requires continuous updating in the knowledge base and inservice practical training of the members.

4)   A profession demands that its practitioners form professional groups or association to enhance and safeguard the interests of group members.

5)   A profession expects its members to be guided by a code of ethics and professional values.

6)   A profession ensures that its members grow in their professional careers.

7)   A profession enable a professional to make his own judgement in relation to appropriate practices.

Looking at the features of a profession, certain areas of study can be aptly called professional education. For example, management education, medical education, legal education, teacher education, agricultural education are some areas of study in which practice of the body of knowledge is more important and essential than engaging oneself in the study of knowledge alone. One can find all the necessary features of a profession with the academic involved in such professional education. For example, professionals belonging to teacher education do form professional associations and are governed by a code of ethics and strive to upgrade and enhance their professional capabilities. We know that there are so many professional associations in the field of teacher education.. For example, All India Association for Teacher Educators is a national level professional association for teacher educators. Similarly, All India Federation for University and College Teachers' Organisation (AIFUCTO) and the Federation of Central University Teachers' Association (FEDCUTA) are national level teachers' organisations, which take up the cause of the teaching profession. Similarly, the Bar Council of India, Indian Council of Technical Education, Medical Council of India, the Nursing Council of India, etc, are responsible for professional education in their respective fields. They formulate norms for appointment of teachers, guidelines for design and development of curriculum, rules for professional development of their peers, etc.

Thus, in this section, we have studied about professional education, which is basically related to various aspects of social service. But for an individual, the first and foremost concern is to earn his/her livelihood. Though in traditional societies, and even modern society, many people are indoctrinated into their parental occupation in order to carve out a livelihood for them, the knowledge and skills about many of these occupations or vocations are being provided through institutional mechanisms. The main thrust of our next discussion is on vocational education.

3.4.3 Vocational Education

Vocational education was not a part of organised effort earlier. The need for vocational education was mainly catered to by various informal agencies of education like the family, the community, etc. But with the advent of industrialisation and its impact on society and on various aspects of human life, the range and diversity in vocational education requirements expanded and this necessity for purposeful and organised effort to provide vocational education was felt by the society. Hence, vocational education became an institutionalised activity. Let us then understand the meaning of vocational education.

Defining Vocational Education

Vocational education, in ordinary parlance, refers to education, which prepares a person for a particular vocation or occupation. In this sense, vocational education refers to education one receives from a variety of informal and formal situations. Although traditionally, an individual is provided vocational education in his family or community, its scope is limited to family vocations or vocations available in the community. With industrialisation there emerged a host of areas where specific vocational skills were needed. In order to train people in these specialised vocational areas, the society instituted organised educational programmes, which began to be called vocational

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education. The following definition of vocational education clarifies the meaning of
the term.

Vocational education: "means organised educational programmes that are directly related
to the preparation of individuals for paid or unpaid employment, or for additional
preparation for a career requiring other than a baccalaureate or advanced degree."
Google.com (2004)

From the above definition, vocational education means educational programmes, which
are organised to prepare individuals for different kinds of paid or unpaid ur. nployment.
Sometimes, such programmes may not be aimed at any specific employment but for a
career other than baccalaureate or advanced degree.

John Twining (1987) says:

"Vocational education, world-wide, is rich and diverse. The students range in age
from those who are at school full-time, those emerging into the world of work and
those studying for a trade, a profession or to be entrepreneurs, to those seeking,
updating or changing careers and those preparing for retirement. The aims of their
studies range from basic numeracy, language, and survival skills, through competence
at work, to professional qualifications at postgraduate level. The content of vocational
education is the 'hidden hand' behind most aspects of everyday life. Everything
we do is affected by commerce or industry, and behind commerce and industry is a
massive chain of vocational competence which is normally based on vocational
education."

From the above definition, it can be concluded that vocational education is meant for
preparing youth for a vocation of their choice and thereby enhancing their employability,
productivity and economic development. In others words, vocational education refers
to education or training intended to prepare one for an occupation, sometimes specific
in a trade (Devdas 2004).Emphasising the importance of vocational education, the
Education Commission (1964-66) highlighted that "while the development of physical
resources is a means to an end, that of human resources is an end in itself; and without
it even the adequate development of physical resources is not possible."

Indian Context

In India, the concept of vocational education was first propagated in 1854 by Wood's
Despatch where the suggestion was made of introducing pre-vocational education at
the secondary stage. The Calcutta University Commission (Sadler Commission) of
1917 made recommendations for the establishment of Intermediate Colleges with
Arts, Science, Medicine and Engineering subjects. The Sapru committee of 1934
recommended a vocational stream of education in the form of industrial and commercial
channels. In 1937, Mahatma Gandhi also emphasized the importance of manuals and
productive work in his Scheme of Basic Education. The Secondary Education
Commission (1952-53) recommended the introduction of diversified streams in higher
secondary schools such a technical subjects, commercial subjects, agriculture, fine
arts, etc. The Education Commission (1964-66) also emphasized work experience
and vocationalization as part of secondary education, The National Council of
Educational Research and Training (NCERT) came out with a document in 1976
titled, "Higher Secondary Education and its Vocationalization" which contained a model
conceptual frame for implementing the programme for vocational education. A National
Working Group was set up in 1985 on vocationalization of education, which provided
wide-ranging recommendations on vocational education. According to the working
group, areas of knowledge such as Engineering, Medicine, Agriculture and Law were

recognised as professional fields. The programme of education and training to meet the sub-professional manpower needs of all these professions at the secondary and tertiary levels is referred to as vocational education. Socially Useful Productive Work (SUPW) and Work Experience (WE) were introduced in most schools to give vocational orientation to the students. The National Policy on Education (1986) called for the introduction for a systematic well-planned and rigorously implemented programme of vocational education in the proposed educational reorganisation. The Acharya Rammurthy Committee (1990) and Janardana Reddy Committee (1992), which reviewed the status of vocational education, also recommended WE/SUPW in schools. The UGC also constituted a Standing Committee on Vocational Educational (SCOVE) to recommend on the implementation of the vocational education scheme. Of late, vocational education courses are also offered through open universities and open schools. The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), a constituent unit of NCERT at Bhopal, is committed to work on the various aspects of vocational education. There are 150 educational courses in 6 major areas, viz. Agriculture, Business and Commerce, Engineering and Technology, Health and Paramedical Sciences, Home Science, Humanities and others, (Kulandai Swami 2004). For vocational education in India, please see Kulandai Swami (2004). Vocational education is imparted in many areas of vocations. But, broadly they can be categorised under six major categories and each category covers a few vocations, as per the Apprentices Act (1961). For our understanding, let us look at the following vocational areas and a few related vocations under each area:

1. **Agriculture**
   - Poultry Farming
   - Dairying
   - Sericulture
   - Floriculture

2. **Engineering and Technology**
   - Mechanical Services
   - Audio-visual Technician
   - Computer Technique
   - Tanneries
   - Sugar Technology

3. **Health and Paramedical**
   - Health Worker
   - X-ray Technician
   - Pharmacist
   - Auxiliary Nurse and Midwives
   - Primary Health Worker

4. **Home Science**
   - Food Preservation
   - Interior Design
   - Child Care and Nutrition
   - Knitting Technology
   - Pre-School and Crèche Management

5. **Science and Humanities**

- Library and Information Science
- Photography
- Commercial Act
- Indian Music
- Classical Dance

3.4.4 Technical Education

Technical and Management Education is one of the more significant components of the Human Resource Development spectrum with great potential for adding value to product and services and for contributing to the national economy and improving quality of life of the people (NPE, 1986). Five years plan have emphasized the role of technical education for national development. Although there was emphasis on the study of technology in the past, the first systematic formal effort was made when the first survey school on the Indian soil started functioning with eight students at Madras in May 1794. Then the first civil engineering college at Roorkee was set up in January 1848 (Gopalan, 2004). But the major landmark came when the Government of India decided on November 1945 to set up All India Council for Technical Education (AICTE) to coordinate and supervise technical education above the high school stage.

In India, the structure of technical education is basically at four levels. At the first level, certificate level programmes under the Craftsmen Training Scheme (CTS) are offered to person in the age group of 14 to 25 years in 41 engineering and 22 non-engineering trades in Industrial Training Institutes/Centres in the country. The second level of technical education in the diploma level training is offered in polytechnics. The third level of technical education is offered at the degree level in engineering and technology. The fourth level of technical education constitutes postgraduate and doctoral degrees in engineering and technology.

Check Your Progress

Notes: a) Write your answers in the space given below.

b) Compare your answers with the one given at the end of the unit.

4. What is the main focus of liberal education?

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5. Differentiate between professional education and vocational education.

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6. What are the four levels of technical education?

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3.5 SCOPE OF EDUCATION FROM THE VIEW-POINT OF MODE OF PROVIDING EDUCATION

In the earlier sections, we discussed the scope of education in terms of the social space where education operates, and in terms of the nature of knowledge pursued by an individual. In this section, we discuss the scope of education in terms of mode of providing education. From the viewpoint of mode of providing education, education can broadly be categorised into face-to-face education and distance education. Let us discuss each of these forms of education in detail.

3.5.1 Face-to-Face Education

Face to face education generally refers to education in which the transaction of learning experiences takes place between the teacher and the learners on a face-to-face basis. The existence of face-to-face education dates back to the ancient time when the *Guru* (the teacher) was teaching *Shishyas* (the learners) in *Gurukulas*.

But face-to-face mode of imparting education in an informal and unstructured environment shifted to a formal and structured environment when schools were conceptualised and established by the society to impart education to its future members. Although face-to-face education takes place both in formal and informal environments, mostly face-to-face mode of education is attributed to the formal education system. Hence all the characteristics, which are associated with formal education, can be seen in the face-to-face mode of education. But the most important characteristic of the face-to-face mode of education is that interaction between the learners and the teacher takes place at the same time, and the same place. Although the teacher uses a host of communication media, the most prominent among them is the teacher's voice. The teacher mostly controls the teaching-learning environment. Although the degree of control of the learning environment most of the time rests with the teacher, the learners also control the learning environment in learner-directed or group-directed learning environment. Face to face education, in a formal education context, takes place in schools, colleges and universities.

3.5.2 Distance Education

Since the demand for education is increasing with the growth of population, face-to-face mode of education in formal form is not able to cope up with the increasing demand for education. Moreover, the concept of lifelong education mooted by the International Commission of Education, 1972 and reiterated in the report of the UNESCO, Learning: The Treasure Within, 1996, emphasis is being laid on alternative forms of education. Developments like these have given rise to distance mode of education as an alternative to face-to-face mode of education. Distance education, in ordinary parlance, means education that is imparted at a distance. Although several authors have attempted to define distance education, with the passage of time, it is adopting different approaches, which characterise the basic tenets of distance education. These approaches are:

- Correspondence study
- Home study
- Independent study
- Internal studies
- Continuing education
- Distance teaching
- Self-instruction

- Learner-centred education
- Technology based or mediated education
- Distributed learning
- Flexible learning

Although all the above are approaches to distance education, there are certain characteristics associated with distance education. Keegan (1986) synthesised the following characteristics of distance education:

- The quasi-permanent separation of teacher and learner throughout the length of the learning process (this distinguishes it from conventional face-to-face education);

- The influence of an educational organisation both in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programmes);

- The use of technical media – print, audio, video or computer – to unite teacher and learner and carry the content of the course;

- The provision of two-way communication so that the student may benefit from or initiate dialogue (this distinguishes it from other uses of technology is education);

- The quasi-permanent absence of the learning group through out the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility, of occasional meetings for both didactic and socialisation purposes (p.44).

Moore (1990) defines distance education as " all deliberate and planned learning that is directed or facilitated in a structured manner by an instructor…separated in space and/or time from the learners." According to Rowntree (1992), distance education is "…learning while at a distance from one's teacher–usually with the help of pre-recorded, packaged learning materials. The learners are separated from their teachers in time and space but are still guided by them." But Kulandai Swamy (1992) views distance education in a different way. To him, it is the third stage in the evolution of education – the first stage being represented by the *Gurukul* system of ancient India, and the second stage by the conventional classroom system. He believes that charactreised by flexibility, high productivity and the capability to readily respond to market demands, it is an instrument that can satisfy the requirements of equity and universal education. Let us compare between face-toface and distance education.

3.5.3 Comparison between Face-to-Face and Distance Education

Face-to-face Education System	Distance Education System
• Teacher and learner are in close contact, and there are constant face-to-face meetings.	• Teacher and learner physically separated, there are intermittent face-to-face meetings.
• Teacher decides the pacing of learning	• Self-Pacing of learning by learners
• Teacher lectures and library books are major source of information.	• Self-instructional print materials, variety of electronic media and liberty along with counselling by teachers and compulsory face-to-face interaction in workshop
• Constant peer contact	• Limited peer contact
• Stringent entry qualifications, less number of learners benefited at a particular time	• Relaxed entry qualifications, reasonable number of learners benefited at a particular time
• Learner input includes contact time and private time.	• Learner input includes study time and contact time.

3.5.4 Distance Education in India

In the post Independence period, the First Five Year Plan, 1951, envisaged courses and radio talks organized as far as possible by the various Universities and allowing students the various examination privately. In 1961, a committee under the chairmanship of D.S. Kothari was set up the Government of India to prepare the scheme for establishing correspondence courses. On the recommendation of the committee, the first-ever correspondence course in higher education in India was introduced in the University of Delhi in 1962. Since then the number of Correspondence Course Institutes has increased remarkably and now their number is more than 100 but the effort to establish an open university was made in 1974, when the Government of India constituted a committee under the chairmanship G. Parthasarathi in this regard. However, in 1982, a committee under the chairmanship of Madhuri R. Shah recommended the establishment of a national open university without delay. The National Open University, recommended by the committee, came into existence in 1985, by an Act of Parliament. It was named as Indira Gandhi National Open University. Prior to IGNOU's establishment, the first-ever open university was set up by the Government of Andhra Pradesh in Hyderabad in 1982. It was then known as AP Open University and later on changed to Dr. B.R. Ambedkar Open University. Later on, many other state governments established their own open universities. Now, there are 13 open universities and one National Open University. There are also 106 odd Correspondence Course Institutes (CCIs) in India.

Apart from the development of distance education at higher education level, it has also made good stride at school level in India. The National Institute of Open Learning (formerly known as National Open School), which is also a national institute, has been offering programmes nationwide at secondary and higher secondary levels in both academic and vocational streams. There are also a few State Open Schools, which are catering to the educational demands of students in their respective states.

Milestones in Distance Education in India

1961 : Proposal to start correspondence courses was made to the Central Advisory Board on Education, Government of India.

1962 : Correspondence course was started at the University of Delhi, at undergraduate level, with 1112 student in B. A.

1966 : The Kothari Commission Report was submitted in which it was strongly recommended that correspondence courses be started in technical/professional areas and these be given multimedia and regular learner support.

1967 : First Indian delegation visited U.S.S.R. to study its evening and correspondence courses. The delegation recommended these for teacher training.

1968 : Second Indian delegation visited U.S.S.R. to study its evening and correspondence courses. The delegation recommended these for science courses, post-graduate courses and professional courses.

1970 : A seminar sponsored by the Ministry of Education and Social Welfare, GOI, UGC and UNESCO recommends the establishment of an open university in India.

1982 : The first open university in the country, the Andhra Pradesh Open University, was established at Hyderabad.

1985 : The first national open university, the Indira Gandhi National Open University, was established at New Delhi and given the dual responsibility of offering programmes and maintaining standards in open education in the country.

1991 : The Distance Education Council was established.

1999 : The distance education system in India grows to include 10 open universities and 62 correspondence course institutes and covers 20% of all students in higher education.

Source: Powar, et al. (2000).

Check Your Progress

Notes: a) Write your answers in the space given below.

　　　　b) Compare your answers with the one given at the end of the unit.

7. Write any three differences between face-to-face education and distance education.

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8. What is the main purpose of spreading distance education in our country?

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3.6 LET US SUM UP

In this unit, the main thrust of our discussion was to present the scope of education. We discussed the scope of education as the range of operation of education in terms of various social spaces or environments, the major focus of the study of knowledge or the mode of imparting education.. Based on these three major parameters, we presented the scope of education in three different perspectives. According to the different learning environment, education can be classified into informal, formal and non-formal education. According to the focus of study of knowledge, education can be categorised into liberal education, professional education, vocational education and technical education. Similarly, according to the mode of providing education, education can be classified into face-to-face education and distance education.

3.7 UNIT-END ACTIVITIES

1. Make a comprehensive list of informal, formal, and non-formal education providers you are familiar with.

2. Identify at least five professional organisations that you know and critically analyse their functions.

3. Find out the spread and status of distance education programme in your State.

3.8 POINTS FOR DISCUSSION

1. Why does liberal education get less priority among students of higher education? Discuss.

2. Do you think that distance education will be the mode of education in future? Discuss.

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3.9 ANSWERS TO CHECK YOUR PROGRESS

1. The scope of education means the range of educational operation in terms of various social spaces or environments, the major focus of the study of knowledge or the mode of imparting education.

2. Informal education is the form of education which takes place in informal learning environment. The examples of informal education are the family, the neighbourhood, the market places, etc.

3. Formal education refers to the form of education, which is organised in a structured learning environment. The main aim of formal education is to provide individuals learning experiences in vertically or horizontally structured learning environments. Non-formal education is an organised educational activity, taking place outside the formal system. But it intends to cater to the learning need of a specific target group.

4. The main focus of liberal education is to undertake intellectual pursuit, which aims at cultivation of mind.

5. Professional education deals with a body of specialised knowledge and application of this knowledge to serve various requirements of the society. Vocational education refers to the form of education, which provides a person learning experiences required of a particular vocation or occupation.

6. The main focus of technical education is the study of knowledge pertaining to technology.

7. Face-to-face Education System

    - Teacher and learner are in close contact and there are constant face-to-face meeting.

    - Teacher decides the pace of student learning.

    - Constant peer contact

    Distance Education System

    - Teacher and learner physically separated; there are intermittent face-to-face meetings.

    - Self-pacing of learning by learners.

    - Limited peer contact.

8. The main purpose of spreading distance education in our country is to widen the access to educational opportunities for the masses.