PREFACE

In a bid to standardize higher education in the country, the University Grants Commission (UGC) has introduced Choice Based Credit System (CBCS) based on five types of courses viz. *core, discipline specific, generic elective, ability and skill enhancement* for graduate students of all programmes at Honours level. This brings in the semester pattern, which finds efficacy in sync with credit system, credit tranafer, comprehensive continuous assessments and a graded pattern of evaluation. The objective is to offer learners ample flexibility to choose from a wide gamut of courses, as also to provide them lateral mobility between various educational institutions in the country where they can carry their acquired credits. I am happy to note that the University has been recently accredited by National Assessment and Accreditation Council of India (NAAC) with grade "A".

UGC (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020 have mandated compliance with CBCS for U. G. programmes for all the HEIs in this mode. Welcoming this paradigm shift in higher education, Netaji Subhas Open University (NSOU) has resolved to adopt CBCS from the academic session 2021-22 at the under graduate Degree Programme level. The present syllabus, framed in the spirit of syllabi recommended by UGC, lays due stress on all aspects envisaged in the curricular framework of the apex body on higher education. It will be imparted to learners over the six semesters of the Programme.

Self Learning Materials (SLMs) are the mainstay of Student Support Services (SSS) of an Open University. From a logistic point of view, NSOU has embarked upon CBCS presently with SLMs in English/Bengali. Eventually, the English version SLMs will be translated into Bengali too, for the benefit of learners. As always, all of our teaching faculties contributed in this process. In addition to this we have also requisitioned the services of best academics in each domain in preparation of the new SLMs. I am sure they will be of commendable academic support. We look forward to proactive feedback from all stakeholders who will participate in the teaching-learning based on these study materials. It has been a very challenging task well executed, and I congratulate all concerned in the preparation of these SLMs.

I wish the venture a grand success.

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Vice-Chancellor

Netaji Subhas Open University
Under Graduate Degree Programme
Choice Based Credit System (CBCS)
Subject : Honours in Education (HED)
Course : Open and Distance Education
Course Code : GE-ED-42

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Netaji Subhas Open University

Course : Open and Distance Education

Course Code : GE-ED-42

MODULE – 1 (Perspectives of Open & Distance Education)

MODULE – 2 (Support services to Open & Distance Education)

Module - 1

(Perspectives of Open & Distance Education)

Unit - 1 ❑ Perspectives of Distance Education

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1.1 Objectives

After the completion of the course, the learners are expected to :

● understand the concept Distance Education;

● understand the concept Open Education;

● realise the Difference between Open Education and Distance Education;

● know nature of open education;

● realise objectives of Open and Distance Education;

● realise need of Open and Distance Education;

● know scope of Open and Distance Education;

● understand the challenges of Open and Distance Education;

● understand the Historical Perspective of Open and Distance Education;

● understand the Sociological Perspective of Open and Distance Education;

1.2 Introduction

Open and Distance learning is one of the most recent developments in the direction of democratizing education in India. It is a modern system of Non-formal education. Prof. F.R. Jevons (1983) called it a "bewildering nomenclature". Now different terms are used for distance learning which include- (1) Continuing Education; (2) Correspondence Education; (3) Correspondence Learning; (4) Correspondence Course; (5) Correspondence School; (6) Correspondence Teaching; (7) Distance Education; (8) Distance Learning; (9) Distance Teaching; (10) External Degree Programme; (11) External Studies; (12) Extra-mural System; (13) Home Study; (14) Home Tuition; (15) Independent Learning; (16) Independent Study; (17) Life-long education; (18) Non-formal Education; (19) Off-campus study; (20) Open Education; (21) Open Learning; (22) Open School; (23) Open Education; (24) Open University; (25) Out of School Education; (26) Postal Courses; (27) Teach Yourself Programme; (28) Tele University; (29) University of the Art; (30) University without Walls. All the above mentioned terms are associated with non-traditional and non-

conventional teaching–learning programme. These terms derived their names from the medium of communication. By and large, they are based on same economic, educational, philosophical and psychological basis. The distance and open learning system adopts a flexible approach in respect of content selection, pace and place of study in an ever updating manifestation of modern communication technology. The distance mode allows the educational system to be open and flexible which is the most important characteristic of this system (Manjulika and Reddy, 1996). The new National Policy of Education, 1986 also emphasized the role of the Open University and distance education in the process of democratization of education in the country (Manjulika and Reddy, 1996).

1.3 Open and Distance Education : Concept, Nature and Scope

Here we will try to get clear conception of Open and Distance education. Then we will understand the nature of it and we will also know the scope of this type of education.

1.3.1 Concept of Open and Distance Education :

The terminology, Open and Distance education, consist of closely related but little different two terminologies. These are 'Open education'and'Distance education'. Here we need to get clear conception of these two interrelated terminologies.

1.3.1.1 Concept of Open Education :

Mackenzie N., Postagate R. and Scuphm (1975) use the term 'Open Learning'. According to them "Open Learning Systems are designed to offer opportunities for part-time study, for learning at a distance and for innovations in the curriculum. They are intended to allow access to wider section of adult population, to enable students to compensate for lost opportunities in the past or to acquire new skills and qualifications for the future. Open Learning systems aim to redress social and educational inequality and to offer opportunities not provided by conventional colleges and universities".

"An open learning system is one in which the restrictions placed on the student are under constant review and removed wherever possible. It incorporates the widest ranges of teaching strategies, in particular those using independent and individualized learning." (Coffey, 1977).

"Open learning: arrangements to enable people to learn at the time, place and pace which satisfies their circumstances and requirement. The emphasis is on opening of opportunities by overcoming the barrier that results from geographical isolation, personal or work commitments or conventional course structure which have often prevented people from gaining access to the training they need." (MSC, 1984)

Open education has been described as "arrangement to enable people to learn at the place and space which satisfies their circumstances and requirements" (Man Power Service Commission 1984).

"Open learning' is a term used to describe courses flexibly designed to meet individual requirements. It is often applied to provision which tries to remove barrier that prevent attendance at more traditional courses, it also suggests a learner centered philosophy." (Lewis and Spencer, 1986).

From the review of above definitions, it may be concluded that Open Education is essentially a philosophical construct. Open learning is defined as an approach to learning that allows learners flexibility and choice over what, when, at what pace, where and how they learn. Open learning tends to be delivered through distance education that is characterized by separation of geographical distance and time. In open education, more emphasis has been given on openness. Openness in open education is measured in terms it flexibility or lack of restriction. It advocates conscious removal of all those constraints or reduce that have imposed by formal education in terms of admission, attendance, examination, course duration, entry qualification, age, examination scheduled etc. The open system that reduces a large number of this constraint is more open than the one that does not remove as many as the formal. Open education is a relative term as institution-A is more open than institution-B or Institution-B is more open than institution-C.

1.3.1.2 Concept of Distance Education :

Distance education is the general term that includes the range of teaching and learning strategies used by institutions like Correspondence colleges, Distance education departments of conventional universities, Distance education training units of private sector organizations and Open universities. Thus, the term is used to refer

to the education of those who, for one reason or another, choose notto attend conventional schools, colleges, or universities but study at home.

In the words of Dohmen (1967) "Distance education is a systematically organized form of self-study in which student counseling, the presentation of learning material and securing and supervising of students' success is carried out by a team of teachers, each of whom has responsibilities. It is made possible at a distance by means of media which can cover long distances".

According to Peter (1973) - "Distance teaching/education is a method of imparting knowledge, skills and attitudes which is rationalized by the application of division of labour and organizational principles as well as by the extensive use of technical media, especially for the purpose of reproducing high quality teaching material which makes it possible to instruct great numbers of students at the same time wherever they live.

Holmberg (1979) states that "The term Distance Education covers the various forms of study at all level which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial oraganisation".

Moore's (1991) definition is : "The transaction that we call distance education occurs between individuals who are teachers and learner, in an environment that has separation of one from another, and a consequent sate of special teaching and learning behaviours".

Ian Mugridge (1991) states that it is "a form of education in which there is normally a separation between teacher and learner and thus one in which other means the printed and written word, the telephone, computer conferencing or teleconferencing, for example are used to bridge the physical gap."

One of the most comprehensive definitions is by Keegan (1996) in which six basic defining elements of Distance Education are suggested. He observes that it is characterised by :

● The separation of learner and tutor as opposed to face-to-face teaching;

● The influence of an educational organisation which distinguishes distance education from private study;

● The use of technical media, e.g. print, audio, or website to unite tutor and learner;

● The provision of a two-way communication so that the student may engage in dialogue with the tutor;

● The possibility of occasional meetings for purposes of interaction;

● The self-directed nature of the learner's involvement;

An even more succinct definition is that Distance Education is characterized by its focus on "open access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners" (UNESCO, 2002).

Kulandai Swami (1992) refers to distance education as the third stage in the evaluation 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 the distance education system symbolizes the transition of education from the stage of craft to the technology. Characterized by flexibility, high productivity and the capability to readily respond to market demands, an instrument can satisfy the requirements of equity and universal education.

1.3.1.3 Difference between Open Education and Distance Education :

Open Education is a term that has been used inter changeably with distance education. While distance education refers to the process of learning in which there is spatial, and usually temporal distance between the teacher and learner, on the other hand open education or open learning refers to the process of making learning available to a learner at a place and time of his/her choice, and at a rate suitable to the learner. Open education has obviously long term goals as in essence it is socio-educational change which can make its way only gradually. The pattern of Open University is same.

Open learning together with flexible learning and distance learning seem to have formed the concept of open and distance learning (ODL). Maxwell makes the following distinction between open & distance learning.

"Open learning is defined as a student-centered approach to education that removes all barriers to access while providing a high degree of learner autonomy.

Distance education refers to a mode of delivering a course of study in which the majority of communication between teachers and students occurs noncontiguous and the two-way communication between teacher and student necessary for the educational process is technologically mediated. Distance education may or may not be based on open-learning ideals." (Maxwell 1995, 43)

Maxwell (1995) regards open learning and distance education as two non-traditional learning approaches that might provide an option for reaching non-traditional students. He further argues that "distance education and open learning should be recognized as two distinct concepts. Distance education refers to a mode of delivery with certain characteristics that distinguish it from the campus-based mode of learning. Open learning refers to a philosophy of education providing students with as much choice and control as possible over content and learning strategies. A distance-education institution could be open or closed. An open learning course could be offered on campus or at a distance." (Maxwell 1995, 46)

The tools and software used in Distance education are often quite the same as in ODL, but there is a shift in emphasis from a more teacher-focused environment towards an open learner-centered and virtual learning environment with a focus on distributed expertise and cognitive tools.

1.3.2 Objectives of Open and Distance Education :

The CABE Committee's report (1994) has listed the major objectives of distance education as:

● To provide an alternate, cost-effective, non-formal channel for tertiary education.

● To supplement the conventional university system and to reduce the pressure on it.

● To provide 'second chance' education to those who have had to discontinue their formal education or could not join regular colleges or universities owing to social, economic and other consideration.

● To democratize higher education by providing access to large segments of the population, in particular the disadvantaged groups such as those living in remote and rural areas, including working people like women and other adults, who wish to acquire and upgrade their knowledge and/or skills.

● To strengthen and diversity the degree, certificate and diploma courses related to employment, and necessary for building the economy, on the basis of its natural and human resources.

● To provide continuing and life-long education to enrich the lives of the people.

To provide an innovative system of university-level education, which is flexible and open in terms of method and pace of learning, combination of courses, eligibility for enrollment, age of entry, conduct of examination and operation of the programmes with a view to promote learning and encourage excellence in new fields of learning.

1.3.3 Nature of Open and Distance Education :

University Grants Commission (UGC) has set the target of enhancing the gross enrolment ratio in higher education. To achieve this difficult target Govt. of India also considered ODL system as alternative model with special emphasis from the 10th Plan. ODL system is the only system that can reach the door step of every section of the society irrespective of class, creed, gender, race and geographic location. The characteristic features which make the system so important are:

(1) Flexibility : The system is flexible in regard to modalities, timing, pace, place, age, admission criteria etc. Learners who are not able to continue their education through traditional system due to socio-economic or cultural reasons are getting opportunities here. Flexibility in age and qualification to enter in desired academic programs makes the system learners friendly. Here students are free to choose the subject of studies according their interest. Use of satellite, e-books/ journals, audio-visual system in teaching learning process helps the learner to study their course materials in their own space and place. Again for better understanding, learners can attend counseling or Personal Contact Program (PCP) in the nearby study centre during weekends/holidays.

(2) Cost Effective : Expenditure for higher education in the traditional system, both for public and private institutes, is very high. Education through distance mode is able to help the students by saving considerable amount of money by removing the cost of transportation and high-priced printed text books of high cost. As the teaching learning process in this system adopts multimedia approach, students can

avail digital study materials for a reduced price. Radio and television programmes also helps them to take classes at their own places. Apart from this, the system also permits learning while earning.

(3) Learning Satisfaction : Unlike traditional system, students of ODL system attend online classes individually without any disturbance from others. When difficulties arise students review their lessons more than once and solve the problem. Students can also manipulate the coursework to fit their learning by focusing more on their weaker topics. In this way students can build self-confidence and get higher satisfaction with their learning experiences. A survey report reveals that the technique is very much fruitful for building confidence and problem solving ability.

(4) Equal Access : In the traditional system, students of a certain age group are allowed. Again, for SC, ST and Physically Challenged students some reservation is there. It is very difficult for Trans-Genders to take education in the traditional system. Peoples who are in jail are unable to obtain any degrees through traditional system. Distance education may provide equal access irrespective of socioeconomic status, gender, race, age, or cost per student.

(5) Dual Degree : While studying under traditional system a student can simultaneously enroll for a degree of the same level in Open University. In such case credit transfer will be given due consideration through a MOU between Open University and the respective University.

(6) Migration Problem : Students taking admission for Masters degree in Open University do not need any migration from previous university where he/she obtained Bachelor degree. However, when a student graduated from Open University takes admission for Masters degree in a traditional university he/she needs migration.

(7) Assignment Marks : Apart from contact session or PCP there is also a provision of assignment in ODL system. Students are asked to collect question papers from study centers or directly from homepage (Website) of the respective Open University. Afterwards they submit the answer scripts in a limited time frame. This is then evaluated by subject expert and given back to the students for checking their mistake. Writing of assignment is must for the students willing to sit in the forthcoming examination. A specified percentage (20% or 30%) of assignment marks

and rest of the percentage of the marks obtained in Term-End-Examination is added to make the total. This kind of marks distribution directly helps distance learners to secure pass marks.

1.3.4 Scope of Open and Distance Education :

After food, it is education that has posed as the second greatest challenge for modern India. It is a sector where exist contradictory pictures. On the one hand we have some of the most outstanding men in fields such as literature, software technology, engineering, management, medical, biotechnology; on the other we also substantially inhabit some of the most illiterates in the globe today. Now the question arises- "How can the problem of illiteracy be overcome?" There are many who wish to join in the mainstream of Distance Education. The fire to study and educate oneself is no doubt a healthy indication but that often gets drained due to lack of proper facilities. It was a stumbling block that was removed with the emergence of distance education. Distance education has opened a new window of opportunities for those who craved for further studies. In a way it has helped numerous professionals, dropouts (school & college), housewives, etc. to accomplish their unfinished dreams. It has immense relevance, particularly in a country like India, where pursuing education is a costly affair. Distance Education is meant for people from under privileged section of the society or for working class as they cannot go to the conventional colleges. This mode of education has helped millions of students as its fee structure is economical and there is flexibility in the system. In a developing nation like India, distance education has an enormous scope.

Distance Education has opened a new gate of opportunities for those who go for higher studies. It has assisted numerous professionals, dropouts, housewife etc. Studies established that numbers of such institutions have crossed 850 which offer more than 16,000 courses to over 15 million learners of the world.If one wishes to get the maximum benefits of distance education, and then they must get a job and work side by side because work experience counts allot. In Distance education a student is not required to be physically present to attend regular classes and can appear for exams only. In certain cases, the student can attend weekend classes (if provided by the university). In other words, Distance Learning is more like self-study, relying on course material sent from the University itself. Distance education

is basically designed keeping in mind the off-campus students, who unable to attend regular classes. Distance education comes as a boon not only for young aspiring students, but for many working professionals, housewives, school drop-outs as well. Distance education is the obvious solution for not just those mentioned above but for a whole lot of others like those with financial constraints, any kind of impediment or for those who are just plain lazy. Whether you live in a metropolis like Delhi or in a remote part of India, you can benefit immensely from Distance Education.

With advancements in communication and educational technology, and development of distance education system as a whole, there has been an enhancement in accessibility, equality and quality of education for all. Distance education at present has lot of potential and scope to provide for educational needs and demands of all those individuals:

    (i)   who do not have access to conventional education;

    (ii) who are deprived of proper educational facilities;

    (iii) who could not continue their education in conventional institutions;

    (iv) who are unemployed and want to continue their education from their homes itself;

    (v) who are employed and want to improve their educational qualifications;

    (vi) who want to undergo professional training and orientation;

    (vii) who want to pursue general, vocational or professional or technical education outside conventional system;

    (viii) who are physically, economically, geographically and socially disadvantaged and the like; and

    (ix) who are engaged in organized or unorganized sectors.

1.3.5 Need of Open and Distance Education :

Open and distance learning offers a number of advantages to both learners and providers of opportunities for learning, such as :

    ➤ **Lifelong learning** : Distance education mode has become very popular and common in India, because it is catering to a wide range of aspirants (students), who are willing to upgrade their educational qualifications for

various reasons. The Distance education system provides opportunities not only to younger students but also to those from the older age groups to achieve education throughout life. As the several restrictions and control over formal education are lenient in open and distance education (ODE), it is considered as boon to those who like to enrich their knowledge throughout their life

➤ **Education for all :** As the name suggest, ODE is open for all learners who opt for education. This form of education caters the needs of every individual. It can also meet the needs of populations affected by violence, war or displacement. It has a crucial role in the universalization of educational opportunities.

➤ **Professional development or professional upgradation :** The main reasons for increasing interest in Distance education in India lies in the need for continuing education in today's competitive world. Every people always try to add value to their competence in their bid to advance their carrier further. Those who are already employed can make their professional competency upgraded with the help of ODE. As a result, a large number of in-service persons, professionals, entrepreneurs, job-less youth, school teachers, and old aged free persons made a beeline for admission to distance education study programmes.

➤ **Acquisition of higher qualification :** Higher Education is a very powerful agent of social change and Open University Education in India is playing a vital role in catering the higher education to the needs of diversified groups of students including socially disadvantaged sections. Problems such as distance and time, which are barriers to conventional higher education, are overcome in open and distance learning.

➤ **Solution of problem of Drop-out :** The students who could not complete their education in formal mode due to some hindrance or barrier, they can get an easy opportunity to continue their education through distance mode. It offers facilities for continuing education to those who need to out of the formal system in various stages. It both broadens the access to and helps the drop outs to get back to the main stream.

➤ **Girls and women education :** Due to the conservative attitude of parents girls and women cannot get easy access to formal education, especially in remote areas of this country. So the distance education can satisfy their educational needs. It widens women's opportunities to learn. This system of education is suitable for those who want to enhance their qualifications but are not in a position to attend classes on a regular basis. Such distance courses proved a boon for the girls and women, especially housewives for pursuing higher education.

➤ **Generating skilled manpower for national development through vocational course :** It also contributes to the economic development of a country by meeting human resources as per its needs. It can cater the requirement to those who are on the job. It helps in quantitative expansion of tertiary and professional education in the country. It can raise the employment opportunities, develops the necessary skills, aptitude and motivation to fresh job seeker as well as self employment. The ODE has a contributing role in the economic development of India through imparting newly generated knowledge and training to the human resource.

➤ **Education for marginalized communities :** Marginalized communities in India are suffering with lack of access to education for generations. For a quite long time Dalits were not allowed to enter to the doorsteps of educational centers and institutions. With a delightful slogan "Education at your doorstep" the Open and Distance Learning (ODL) system in India brought education virtually to the doorsteps of several disadvantaged sections including Dalits and women. If this system has more accessible the marginalized communities especially Dalits will definitely emancipate themselves from traditional bondages, exploitations and humiliations.

➤ **Overcoming physical distance :** Open and distance education can overcome problems of physical distance for learners in remote locations who are unable or unwilling to physically attend a campus. Though learners and teachers are geographically separated, teachers in urban settings instruct learners in rural settings.

➤ **Education of physically challenged student :** The students suffering from

any physical deformities can achieve the same educational qualification with others through distance education.

➤ **Providing Bridge Course :** It can bridge up the gap of knowledge and qualification by allowing individual to acquire knowledge through bridge course.

➤ **Solving time or scheduling problems :** ODE can solve time or scheduling for those client groups unwilling or unable to assemble together frequently.

➤ **Expanding the limited number of places available :** Open and distance learning can expand the limited number of places available for campus-based institutions few in number; and stringent entrance requirements.

➤ **Making best use of the limited number of teachers available :** Open and distance learning can make the best use of the few teachers available when there is a lack of trained teaching personnel relative to demand or teachers are geographically concentrated.

1.3.6 Challenges of Open and Distance Education :

The medium has changed from pencil and paper correspondence courses to real-time Internet courses. The acceleration in distance education brought on by the development of sophisticated computer network tools is pushing discussion and action on a variety of challenges faced by distance education. The challenges faced right now are as follows :

● **Quality with Quantity :** Quality education should be provided through distance learning programmes. In case of research based higher studies or some other professional courses being run through distance education, provisions should be made for the proper library, laboratory and required study related essential equipments and materials for the students in coordination with other related universities running similar programmes or located in the same region.

● **Technological Literacy-Including Computer Literacy :** The target population will require training in the use of the tools, and so will the providers. Instructors will need focused training in order to make effective use of the technologies involved.

● **Programme Evaluation and Accreditation :** Care must be taken to ensure that distance education programmes are as well developed as their in-house counterparts. Mechanisms need to be developed for faculty evaluation of programmes originating at their institutions. There need to be standards for course evaluation and programme accreditation. Successful programs need to be reevaluated before implementing them in a different cultural environment in this increasingly global village. (Mugridge 1991)

● **Losing the Content in the Technology :** There is a need to avoid simply providing information, rather than instruction; or of simply transmitting lectures through this new medium. This would be a disservice to the learners, and a reduction in content and functionality over the intended result. Avoid focusing on the technology rather than the instructional design and support. (Douglas 1993)

● **Alienating Instructors :** Faculty should be involved in the whole process, and should understand that while one goal may be to reduce costs, this will not be at the expense of faculty jobs. Distance education technologies are not alternatives to teaching. Failing to address these issues can lead to significant faculty rejection of the proposals, and may include Union confrontation. (DeLoughry 1995)

● **Non-Native Language Instruction :** Many of the tools available, whether on the Internet or not, have severe limitations in their ability to accommodate non-native language instruction. 2-byte character systems like Chinese are especially problematic. This is slowly becoming less of an issue on the Internet as standards begin to coalesce.

● **Institutional Support for Distance Learners :** Academic institutions must remember that course content is just one element of the education they provide. If distance learners are being sought, they will need to be provided with similar support to that received by on-campus users. This includes everything from full library support to academic counseling in addition to more mundane administrative assistance. (Jacobsen 1994)

● **Increasing Regional Focus :** It is not credible to expect that learners who are a dozen time zones apart will be interested in participating in live

programs when they would normally be asleep. As interactive programs develop, we may see an increase in two alternatives. First, institutions seeking to market their educational products beyond their shores will offer sessions tailored to the needs of students in specific areas. Second, regional consortia or education hubs may begin to form. There is a danger of becoming isolated from the more global learning environment. In most cases there will be benefit in designing programs which include challenge and stimulation, and which involve the learner in discussion and collaboration with those outside their immediate circle of fellow 'classmates'.

● **Copyright Issues :** While few researchers raise the issue explicitly, all are aware that many questions of copyright in an electronic environment remain unanswered. It is important to examine the goals and intentions of the program, and make sure that the necessary clearances have been obtained as needed.

1.4 Historical Perspective of Open and Distance Education

The growth and development of distance education has been through several stages-from pure correspondence education towards multimedia distance education and maturing into open and distance learning and today moving towards online programmes of study through internet and computers. Thus the growth and development of distance education may be discussed in two phases namely-

● Correspondence education phase (1962-1982).

● Open education phase (1982-onward).

1.4.1 Correspondence education phase (1962-1982) :

Distance education in India has been started by 'Ekalavya' when he studied the art of archery from Guru Dronachariya at a distance in Mahabharata Era'. Nobel laureate Rabindranath Tagore also made use of distance education as a tool for continuing further education of the people through Loka Siksha Sambad (Council of people education) initiated in Viswa Bharati in 1937 (Mukherje, 1997). However formally distance education in India was started in 1962 in the form of correspondence

courses by Delhi University at the under graduated level which attracted a large number of student. As a follow-up measure the UGC recommended the adaption of correspondence course by other universities. As a result of which the latter half of 1960's (3 universities) particularly the 1970's show a support in the growth of correspondence institute by various universities (19 universities). Punjab University established the second correspondence course institute (1965) of the country which was also allowed to run its programme in regional language (Punjabi) in addition to English. This was the first university to establish full fledged directorate of correspondence courses in the country. In the mean time an open school was set-up in New Delhi in 1979 to provide education to out of school learners. However, the senior secondary course for class (xi-xii) was launched in 1988. By 1980, there were 25 universities which were offering correspondence courses at tertiary level and five Boards of secondary education providing correspondence course at school level (Mullick, 1986). Today more than 50 universities are offering correspondence education in the country making one of the largest dual mode systems in the world.

1.4.2 The Open Education Phase (1982 onward) :

U.K. established the first Open University in 1969 which prompted the Ministry of Education in collaboration with the ministry of information and broadcasting and the UGC to organize a seminar to consider the feasibility of starting an open university in India. The national progress towards a national Open University was slow and was overtaken by the state Government of Andhra Pradesh, which established the Andhra Pradesh Open University (APOU) in 1982. The APOU which is presently known as the Dr. B. R. Ambedkar Open University (BRAOU) was an autonomous institution, using only distance education method for providing higher education. Thus, the first autonomous single mode Open University came into existence; soon after the national Open University (IGNOU) namely Indira Gandhi National Open University (IGNOU), which is now rated as one of the best distance courses universities in the world, came into existence by an Act of Parliament in 1985. Subsequently the state government of Rajasthan, Bihar, Maharashtra, Madhya Pradesh, Gujarat, Karnataka, West Bengal and U.P. set up their own open universities namely the Kota Open University (1987). Nalanda Open University (1987),

Y.B.Chaban Maharashtra Open University (1989), Madhya Pradesh Bhoj open university (1991), Babasaheb Ambedkar Open University (1994), Karnataka State Open University (1996), Netaji Subhas Open University (1997) and U.P. Rajarshi Tandon open university (1999), Tamil Nadu Open University (Chennai-2002). Presently there are 248 conventional universities including 42 deemed universities in India (AIU, 2000). As on January2005, there are eleven Open Universities in India As many as 62 of them are imparting distance education through correspondence courses institute. A few private institutions have also started offering courses through virtual education. Recently the State Govt. of Tamil Nadu has set up a virtual university. All the state open universities have been established by Acts of the respective state legislature. The maintenance and development of the state open universities is the joint responsibility of the centre and the concerned State Govts. For the promotion and coordination of the Open University and Distance Education system and for determination of its standards in India, the Distance Education Council (DEC-1991), was constituted under the Indira Gandhi National Open University Act (1985). Its consistent with the duty of the University that takes all such steps as it may deem fit for the promotion of the Open University and distance education systems in the educational pattern of the country and for the coordination and determination of standards of teaching, evaluation & research in such systems; and in pursuance of the objects of the University to encourage greater flexibility, diversity, accessibility, mobility and innovation in education at the University level by making full use of the latest scientific knowledge and new educational technology, and to further cooperation between the existing Universities. It is considered necessary and expedient to establish a Distance Education Council as an authority of the University under Section 16 of the Act. Now distance education gets overwhelming response in India, the universities introduced many new job oriented courses according to the changing times and students requirements.

At the secondary level, the education programme through correspondence course was started by the Board of Secondary Education, MP in 1965. Delhi started 'PatracharVidyalaya' in 1968 (Manjulika and Reddy, 1996). This was followed by Rajasthan, Orissa, Tamil Nadu, and Uttar Pradesh. The first open school of the

country was established in 1978 in Delhi for secondary and higher secondary courses as a project of CBSE and later amalgamated with the National Institute of Open Schooling (NIOS) in 1989, with an objective to impart education among the interested learners through courses and programmes of general education. It commenced as an autonomous organization in pursuance of the National Policy on Education, 1986 by the Ministry of Human Resource Development, Government of India. It had a cumulative enrollment of about 1.5 million students from 2004–2009 at Secondary and Senior Secondary levels and enrolls about 350,000 students annually which makes it the largest open schooling system in the world. Now the states of Punjab, Haryana, Andhra Pradesh and West Bengal have also established their own State Open School.

1.5 Sociological Perspective of Open and Distance Education

Open and Distance Learning occupies a significant place in the Indian higher education system as it has played a major role in enhancing the gross enrollment ratio and democratization of higher education to large chunks of the Indian population. It has been successful in reaching out the unreached and provided a viable option in providing opportunities particularly for the disadvantaged groups such as those living in remote and rural areas, working people and women etc. It is helpful for lifelong learning which has become more of a necessity in the present day globalized knowledge society. It has gained wider acceptance in India as it offers college/ university level of education which is flexible and open in terms of methods and pace of learning; selection of courses and subjects, eligibility for enrollment, age of entry, conduct of examination and implementation of the programs of study. Besides providing opportunities for adding qualifications, it has remained an important source for updating knowledge and acquiring new knowledge in diverse disciplines.

Open and Distance education plays a very significant role for the social upliftment and empowerment of the women. It can foster trie effectiveness of different social skills launched for the empowerment of women. In this case we can give an instance of Mahila Shakti Kendra, ICDS and Anganwadi where the women get nonstop convergent support services for equipping themselves with opportunities for skill development, employment, digital literacy, health and nutrition. In this

direction open and distance education is playing associative role for the women because after availing the preliminary opportunities from several government schemes, they can complete their schooling and also higher education through different open universities of our country. Thus Open and Distance Learning (ODL) system can be considered as a new window through which women can be empowered and able to enjoy the equal opportunities in different social sphere with man.

Open and Distance Learning (ODL) system also provide opportunity to those women who are residing in rural areas and engaged in different household activities, m the remote areas of pur country till now women are considered to look after the family and household activities or other home based manufacturing activities. In this case the social structure and norms do not Allowed the women to go outside for their education. Hence open education can reach to this out reached women and cater the light of education into the wider areas. Girls who could not continue their education due to early marriage, they can also fulfill their desire of attaining higher education through the Open Universities. Thus ODL is playing a very significant role in Indian education system with Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan &nd Rashtriya Uchchatar Shiksha Abhiyan.

Open and distance education also bring social equity and leading towards social development. It is already known to all that our society cannot prosper without sweet wale effective education of the citizen. As open and distance education is holding the responsibility of Mass education, so it is also paving the way for desirable social development. It can also increase the employability of the deprived and diverse learners. Thus not only their economic condition but also the economic condition of the countiy are boosting up.

In a developing country like India, education is still a dream for many. Though we are living in the 21st century there are lots of barriers in the formal education system. As formal education is not so economical Non-Formal education system is gaining more popularity in recent years. Distance learning is a modern way of learning allowing students to study within their own space and time without being physically present in the school/college/university. As distance learning plays an important role in today's education system it has increased number of contribution to the society, which establishes its sociological perspective. Some of its contributions are as follows :

1. **Take up an Important Job :**

   Distance learning gives one a comparative advantage over time. Jobs that make a favourable contribution towards the nation are always a matter of priority. Distance learning helps the students with flexible studying hours which can help them to continue the job of their interest without any hindrance and can contribute towards the nation's overall development.

2. **More Skilled Individuals Lead to More Development :**

   Distance learning not only helps individuals to upgrade their skills but also helps them to earn more. This, in turn, will help them to multiply the countries skilled workforce which in the lieu makes a greater contribution to the GDP of the country.

3. **Indulge in a Sport :**

   Many drop their sports career as they have to continue their studies. Well, distance learning can help them to fulfil your dreams without any obstacle. They can practice their sport and can represent country at the international level without dropping their education. This will help the country to produce global sportsman.

4. **Convenient Education Medium for Women :**

   Some Indian families have a narrow mind-set regarding women's education. Therefore, some women are forced to drop their education in the halfway and are made to marry without completing their education. Open education gives women a golden chance to study again and achieve their dreams and contribute to the growth of the nation.

5. **Multi-Talented Professionals :**

   Open and Distance and Education helps students to take up various courses that are not accessible in the colleges from their immediate geographical vicinity. For example, a student from Chennai can apply in any Delhi colleges that provide Correspondence Education. The student can complete his course just by sitting in Chennai. This can help to create multi-talented professionals.

6. Economy Friendly Fee Structure :

Distance education is always economical in nature as it doesn't burden the students and their parents. These help the student to invest their funds into some other productive medium that could help the nation in one way or the other.

Distance Education is one of the latest educational trend helping lots of aspirants to achieve their dreams with minimum effort. Distance Education is making the life easy of many candidates by coming to their doorsteps. The open education system is helping to increase the literacy rate of the country. Thus this non-conventional system has significant social impact.

1.6 Summary

After independence, India had made tremendous progress in the field of education, though mostly quantitative in nature. Earlier, education was available only to the elites in society, and a large majority of poor and marginalized people remained illiterate. Political considerations have an important role in the expansion of higher education, especially at the state level. The central as well as different state governments experienced tremendous pressure from the public to establish more and more colleges and universities. In a democratic society, even the strong governments find it very difficult to resist such pressures and are compelled to succumb to the same. These considerations have led to fast expansion of higher education in our country, which in turn, have adverse impact upon its quality. Therefore, in order to insure access and education of a reasonably good quality, we must think of some alternative system capable of supplementing the role of conventional system, and distance education is one of such alternatives. In spite of the constraint and limitation of Open and Distance Education it will become a powerful instrument to create a knowledge society. If well-designed authentic and viable courses are delineated and offered, there would be many takers and society would benefit. In this unit we have discussed on concept, nature and scope of Open and Distance Education. Then we put our focus on Historical Perspective of Open and Distance Education. At last we looked in the sociological perspective of Open and Distance Education

1.7 Self-Assessment Questions

- Discuss the concept of Open and Distance Education.

- Explain the concept of Open Education.

- Explain the concept of Distance Education.

- Analyse the nature of Open and Distance Education.

- Discuss the scope of Open and Distance Education.

- Discuss historical perspective of Open and Distance Education.

- Discuss sociological perspective of Open and Distance Education.

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Unit - 2 ❑ Philosophical Perspectives of Distance Education

Structure

2.6 Summary

2.7 Self-Assessment Questions

2.8 References

2.1 Objectives

After the completion of the course, the learners are expected to :

● understand Philosophical Perspective of Open and Distance Education

● know about thoughts of Charles Wedemeyer and Otto Peters

● know about the New Learner in the New World

2.2 Introduction

Education is the principal instrument for development in any nation. It helps for the prosperity of human resources as well as productivity of the country. Consequently the financial condition of a nation gets improved. Education also plays a very crucial role in developing National values which is reflected in the constitution. Every nation has national values in the constitution but to comply with rules and regulation, duties and rights of constitution people of the country should be educated first. Uneducated and illiterate people are not aware about their rights. So they do not bother about their duties. Hence, entire people of the nation must be educated enough to pay proper respect to their constitution and national values. Actually the level of education of the citizen is directly related to the national development of any country. It is found that countries in the world with high educational level are progressing very fast. On the other hand countries with poor educational infrastructure are struggling in socio-economic development. For this reason, different philosophers stressed on the mass education. Swami Vivekananda, Gandhiji, Rabindranath Tagore uttered repeatedly for educating the masses. In Bengal pioneer educationist and social reformer Iswar Chandra Vidyasagar and Raja Rammohon Roy took initiatives in their time to educate society. So each nation must try to educate its entire citizen. But due to limitations of formal education system, we need to depend on open and distance education to the target. Actually this mode of education can reach very

effectively to those who are beyond the light of formal and regular education system. Early pioneers of this education, William Rainey Harper of Chicago, William H. Lightly of Wisconsin, and Hans Hermod of Malmo, wrote about the advantages of this form of education. The historian of distance education, Rudolf Manfred Delling from Tubingen, claimed in 1966 that although institutionalized distance education had existed for about a hundred years, it was only during the previous few years that the practice of distance teaching had commenced to rely on theory.

Here in this unit we will discuss on different philosophical perspectives of Open and Distance Education, thoughts of Charles Wedemeyer and Otto Peters. We will also know about the New Learner in the New World.

2.3 Philosophical Perspective of Open and Distance Education

Philosophy and education are two different fields of studies but they are closely linked together, because without any rational thinking prior to education, the whole educational process is directionless. Philosophy of education provides original ideas regarding all aspects of education particularly educational aims, method of teaching, curriculum, teacher, students etc. It is said that educational philosophy helps in providing education according to the need of the society. Philosophy of education guides the process of education by suggesting suitable aims from the diversities of life and selecting the means accordingly. Further, it is a philosophical process of solving educational problems through philosophical methods and points of view, to arrive at philosophical conclusions. According to James Ross, 'Philosophy and education are the two sides of a coin, the former is contemplative and the latter is active'. Every educational system must have some goals and objectives. These act as guides for the education in educating the child. The aims of education are determined by philosophy. It is the philosophy of the time that determines whether educational aims must be spiritual, moral, intellectual, or vocational. Thus, the specific and general aims of education as well as the immediate and ultimate aims are influenced by philosophy. In that way philosophy also influences and puts impact on distance education. As Open and Distance Learning (ODL) mode is working to the desired direction of national development, definitely it is influenced by different philosophical thoughts of national development. The concept of distance education

is primarily developed to meet the needs of the people of the developing and underdeveloped countries of the third world where illiteracy, ignorance, poverty and misery are predominant. Open and Distance Learning (ODL) mode of Education can help them to liberate themselves from its situation and develop themselves in all fields of life.

Society is not static; it changes its value, tradition, custom, culture etc. from time to time. In the process of social development the old traditions become outdated for the people. They are replaced by the new traditions. But this process of replacement is not always smooth. It is faced with lots of opposition from certain orthodox sections of the society. At the same time it must be kept in mind that every 'old' is not outdated and every 'new' is not perfect. Therefore, there is a need of co-coordinating the two in order to maintain the harmony between both. This function can be performed by philosophy of education. It tells us how the cultural tradition of the country is to be maintained. In this way the regular mode of education which is comparatively old must contribute hand in hand with ODL mode which is comparatively a new approach towards the national development.

2.3.1 National Values and Open and Distance Learning (ODL) :

National values mean some of the widely accepted beliefs, concepts and customs of a nation which are highly desired to the society. Liberty, Piece, Security, Justice, Democracy, Healthy natural environment are some examples of national values. National values represent the identity of a State or Nation to the world. Different countries have different types of national values because it is determined by the culture, civilization, pattern of life, standard of living, social system and many other factors of the respective country. For this reason it varies from nation to nation. National values can give clear idea about the constitution and administrative system of a country. Actually these disclose the main principle, motto and administrative affairs of a nation to the world. Now we can sum up some relevant points of national values.

● National values are generally accepted beliefs about what is good, desirable and useful or what is undesirable and unacceptable in a particular state or society.

● National values are values that are necessary for a nation's unity and

existence. These values are essentially important to exist in the world as a nation by and large.

● National values function as keeping people together in that nation while keeping them different from the rest in the world.

● National values become commonly held ideas about what might be reasonable, acceptable as well as beneficial.

National Values are important and lasting beliefs, standards, ethics or ideals shared by members of the same community, same culture, same society, same nation or same country. National Values are important to the society. If these are observed properly then the nation gets continuous development otherwise the progression gets hindrances. Now we can point out significance of national values as follows:

➤ National Values have a major influence on a person's behaviour and attitude and serve as broad guidelines in an individual's conduct in all situations.

➤ National Values may help in decision making as it tends to help us to take rational decision based on the importance attached to a thing.

➤ Basic National Values also promote positive or good relationship among people when they all accept such societal norms, attitudes or ways of doing things.

➤ National values play a dynamic role in making the country as one. This happens only by uniting every section of society. It provides an equal opportunity for each citizen. It also offers an equal platform in terms of social, cultural and economic development.

➤ National values also help in keeping the stability of a country and contribute to its whole development.

➤ National values support to nurture communal harmony and fights against casteism, regionalism, and linguism, etc. National Integration improves the feeling of loyalty and fraternity towards the nation. It unites the people in case of any national emergency.

➤ National values principally aim at providing a better environment for the people of a country. Thus they can develop themselves in all the aspects.

➤ National values aid to bind multi-racial and multilingual country like India, which has people with diverse culture and tradition. It also multiplies the union of brotherhood amongst communities, societies and the people.

➤ National values aid to unite people of different race, caste, creed or thoughts and make the country as a single entity. Thus strengthen the country and makes it powerful on the international platform.

Hence national values play a significant role in making and sustaining of a nation. It is a well-known fact that the country with less internal matters and problems, always prosper and develop. The country which is united will always have fewer problems as compared to the country which is socially unstable. Thus we can conclude that National values play very crucial role to the upliftment of a nation.

Education is the principal instrument for development in any nation. It helps for the prosperity of human resources as well as productivity of the country. Consequently the financial condition of a nation gets improved. Here Open and Distance Education also plays a very crucial role in developing National values which is reflected in the constitution. Every nation has national values in the constitution but to comply with rules and regulation, duties and rights of constitution people of the country should be educated first. Uneducated and illiterate people are not aware about their rights. So they do not bother about their duties. Hence, entire people of the nation must be educated enough to pay proper respect to their constitution and national values. The role of education in fostering national values is laid down as below:

➤ **Education and democracy** : Democracy is a concept which can be attained through the system of education. After coming to the educational institution the learners get habituated with democratic consciousness, rules and regulations. Thus the learners become aware about the democracy which is very essential part of national values. The ODL system is based on this democratic attitude of giving equal opportunities to all in education.

➤ **Education and fraternity** : Education brings fraternity among people. Educated people can form human values in their mind, winning over the

superstition and ignorance. Consequently people get united irrespective of caste, creed, religion and cultural issues.

➤ **Education and discipline** : Education makes individual disciplined. Educated people believe on their self-discipline. So they do like to believe in peace and harmony and always try to maintain discipline. Thus the national value of peace and discipline is maintained through the education

➤ **Education and cooperative attitude** : Education makes people cooperative through some curricular and co-curricular activities. Learners get the lesson of group activities and come to know about the strength in unity. So in social life they always try to stretch their helping hand towards other and thus cooperative society is formed.

➤ **Education and equality** : Educated people can come to know the thought of equity and equality. They understand that each individual has the equal right to share all social benefits. In this way society can sustain its equilibrium stability.

➤ **Education and morality** : Education fosters morality in the mind of learners. It is due to the Educational Philosophy human being can differentiate between good and evil, right and wrong, rational and irrational, desirable and avoidable. In this way human become ethical and rational in different social sphere and activities.

➤ **Education and peace** : Education is helpful in building peace not only in inner mind of the people but also into the Global perspective. For this reason peace education got its proper place in curriculum at different levels of education across the world.

➤ **Education and Justice** : Education can build the sense of justice in the mind of learners. So the learners always try to maintain and follow the path way of Justice. It builds judgmental ability and rational thinking among the people.

Besides the above-mentioned area, education is also helpful in inculcating the ideology of republic nation, socialism, honesty and others National values. It is true

that different issues of national values can be well established through the proper instrumentation of education. Educated people are well aware about their values and also the national values. So they try to maintain all of these and make other encouraged to follow the pathways of national values.

It is already established that both formal and non-formal education (through ODL mode) can inculcate and promote National values among the learners. There is a great impact of education on national values. At the same time National values also exert its influence in different spheres of education. Different types of national values have multiple implications on education. It can be told that National values and education go hand in hand. Both of them have mutual impact on each other. In the field of education we can easily realise the impact of National values. Some of these are analysed below.

2.3.2 Democracy and Education :

The Preamble reflects democracy as a value. As a form of government, it derives its authority from the will of the people. The people elect the rulers of the country and the elected representatives remain accountable to the people. The people of India elect them to be part of the government at different levels by a system of universal adult franchise, popularly known as 'one man one vote'. Democracy contributes to stability, continuous progress in the society and it secures peaceful political change. It allows dissent and encourages tolerance. And more importantly, it is based on the principles of rule of law, inalienable rights of citizens, independence of judiciary, free and fair elections and freedom of the press. According to the words of Aristotle democracy is the Government of many. Abraham Lincoln said that democracy is a rule of the people by the people and for the people.

In history democracy was found in the administrative system of ancient Greek. In ancient India there were different democratic states but the concept as we think in present day is relatively new. Over all democracy has four special features. These are- (1) giving worth and respect to the individual, (2) equal rights of all, (3) equal political and social freedom for all, (4) recognition of equal opportunities, right and responsibilities. The Preamble also declares India as a Republic. It means that the head of the State is elected and he/she is not a hereditary ruler as in case of the British Monarch. This value strengthens and substantiates democracy where every

citizen of India is equally eligible to be elected as the Head of the State. Political equality is the chief message of this provision. In Indian Constitution democracy is considered very essential for the development of the nation consequently there is also great impact on education system.

The Secondary Education Commission (1953) in India proposed that the principal aim of education should be to make the learner a democratic future citizen. Following this tune education tries to build tolerance, cooperation, morality, and values among the learners. At present day education system is taking several initiatives to build an ideal character of a democratic citizen among the learners. Consequently they are learning how to pay respect to all and how to be tolerant in the opposition of opinion and words. Thus learner can build mutual respect. They can understand that everyone has the equal rights and responsibilities in different social sphere of life which is the main essence of democracy. So we can tell that democracy exerts its influence in formation of aims of education in post independence India and this tradition is still continuing.

2.3.3 Socialism and Education :

Socialism is socio-political concept. Human and Society are central area of socialism. Socialism emphasis on the following areas-

● close relationship between human and Society;

● building fraternity among the people of the society;

● making people responsible towards the society;

● making all very cooperative in their attitude;

● equal distribution of social products, resources and facilities;

● giving importance on social control rather than individual control;

India has the ideal identity of socialism. Here socialism means social status, social security, social unity through which economic and overall development will reach to everyone in equal way. This is the responsibility of India. Actually through socialism India is able to drive out economic, social and other inequalities from the country. The word socialist was not there in the preamble of the constitution in its original form. In 1976, the 42nd Amendment to the Constitution incorporated

'Socialist' and 'Secular', in the Preamble. The word 'Socialism' had been used in the context of economic planning. It signifies major role in the economy. It also means commitment to attain ideals like removal of inequalities, provision of minimum basic necessities to all, equal pay for equal work, etc. It has a great influence in education system in India. This can be clearly visible through the following points.

● In India Right to Education has been given utmost respect in the constitution.

● It is the responsibility of the nation to ensure equal opportunities for all in education.

● It is the responsibility of the nation to make proper infrastructure for education.

● National curriculum has been formed and revised time to time for the development of society.

● In curriculum the great history of Indian freedom movement has been included.

● At the same time concept of Indian Constitution, the cultural heritage of India, the unity in diversity, concept of equality and equity, concept of international understanding, universalisation of education, adult education, expansion of Vocational and Technical Education, open and distance education had been included.

Development of democratic outlook, development of socialist values, ensuring equality of educational opportunity to all, expansion of educational opportunities to all areas, developing values like dignity of labour, non-violence, unselfishness, selfless service, etc., are some important aims of education as directed by socialism. The ODL system is a stepping stone in this direction.

2.3.4 Secularism and Education :

Secularism means giving equal respect to all religion. With the 42nd amendment of Indian constitution in 1976 India has been conferred as a secular nation in the world. As a result each and every religion has equal rights in this diversified country. Not only that, every individual have to pay respect to the religion of others. In this way India becomes a truly religious pluralistic country where we can observe a great

confluence of different religion in a particular piece of land. The culture of religious pluralism is not new in India. With the historical background we can easily find out this liberal attitude in ancient India. In Upanishad it is written that "Sarva Dharma sambhava", which means all religions are equal. Later on in feudalistic India the tolerance to the religion was continued. Different people from rest of the world came to India and wished to live here with peace and joy. But during the British rule this tune of liberalism got hindrance. At that time British government formulated separate regulations for Hindu, Islam, Christian, and other religions. Perhaps their main motto was to introduce "divide and rule" policy. At the time of independencein India the secularism was the principal priority of Indian leaders. Till now India expresses this liberal ideology in front of the world.

In the context of secularism in India, it is said that 'India is neither religious, nor irreligious nor anti-religious.' Now what does this imply? It implies that in India there will be no 'State' religion – the 'State' will not support any particular religion out of public funds. This has two implications, (a) every individual is free to believe in, and practice, any religion he/ she belongs to, and, (b) State will not discriminate against any individual or group on the basis of religion.

In education system this thought of secularism has been reflected in different initiatives of the government. In India everyone has the equal access in education. No one can be debarred to take education on the ground of his religion. Now with the enactment of RTE Act, 2009 all children are enjoying free and compulsory education from the age of 6 to 14 years. There is no discrimination on the grounds of religion, caste, socio-economic status of children. Secularism has a great influence in determination of goal both at secondary and higher level of education. It is one of the aims to inculcate the basic ideas of secularism among the learners. This seeks to develop India as a rational, democratic, progressive and modern welfare state. The philosophy of humanism guides such educational objectives. In simpler sense, India's educational energies are directed towards the well-being of all the citizens of the country.

2.3.5 Justice and Education :

Justice promises to give people what they are entitled to in terms of basic rights to food, clothing, and housing, participation in the decision making and living with

dignity as human beings. The Preamble covers all these dimensions of justice – social, economic and political. "Social justice" has been defined in a variety of ways. Amongst them, they incorporate concepts of basic rights, the realisation of human potential, social benefit, an equitable distribution of resources, equal opportunities and obligations, security, and freedom from discrimination. Social justice means equal rights for all, regardless of gender, race, class, ethnicity, citizenship, religion, age or sexual orientation. It implies equal rights for women and girls in workplaces, homes and public life. It implies economic justice – which means governments must take active steps to alleviate poverty and redress past injustices. Economic justice really forms a part of social justice. It seeks the equitable distribution of natural and intellectual wealth so that everyone is able to gain a fair share.

Justice in the field of education implies that every individual must have equal opportunity of upliftment, development and progress through education. As a result of which he can understand the principles or ideals incorporated in our constitution. To provide justice in the field of education, the doors of the temples of learning always remain wide-open to all the citizens. No discrimination is allowed to take place among students belonging to different states, society or different castes, creed, colour, etc.

2.3.6 Liberty and Education :

The Preamble prescribes liberty of thought, expression, belief, faith and worship as one of the core values. These have to be assured to every member of all the communities. It has been done so, because the ideals of democracy cannot be attained without the presence of certain minimal rights which are essential for a free and civilized existence of individuals.

An individual is entitled to criticize the government and the social evils. But his criticism should not go against the unity and solidarity of the country. The individual should be made free from external influence that prevents them from seeing and saying the truth. People should not ignore the national, social and even the personal interest of others. Education is the only instrument which can be used to guide the people for the scientific use of their right to speech. Similarly, it can guide people for the proper use of their other fundamental rights to belief, faith, worship, etc. Through the education system learners can come to know about their liberty and

responsibilities. They become able to exercise their liberty and rights. But before that learners should be quite able to judge between right and wrong, good and evil, ethical and unethical, etc. Then only they will be able to use their liberty effectively. So in education aims, curriculum, teaching method, environment are set in such a way which can foster the thought of liberty.

2.3.7 Equality and Education :

Equality is considered to be the essence of modern democratic ideology. Equality of opportunities implies that regardless of the socio-economic situations into which one is born, he/she will have the same chance as everybody else to develop his/her talents and choose means of livelihood. The Constitution makers placed the ideals of equality in a place of pride in the Preamble. All kinds of inequality based on the concept of rulers and the ruled or on the basis of caste and gender, are eliminated. All citizens of India are treated equally and they are availing equal protection of law without any discrimination based on caste, creed, birth, religion, sex etc. This provision of the Constitution becomes meaningless, if we do not allow equality of opportunity in the field of education. It is imperative to provide adequate facilities to children to develop their abilities to the optimum. Despite individual differences, importance of environment is very important for educational growth. In the words of Education Commission, "One of the important social objectives of education is to equalize opportunity, enabling the backward or underprivileged classes and individuals to use education as a lever, for the improvement of their education." Thus governments (both Central Govt. and State Govt.), policy makers, educational planners and educational institutions always try to provide equal opportunities to all children in the field of education. Continuous initiatives are taken to ensure equity for the backwards.

2.3.8 Lifelong learning :

Lifelong learning is the continuous building of skills and knowledge throughout the life of an individual. The first characteristic of lifelong learning is that it encompasses both formal and non-formal/informal types of education and training. Formal learning includes the hierarchically structured school system that runs from primary school to university. Whereas informal learning describes a lifelong process. And between these two ODL mode plays a crucial role as a non-formal mode. With

ever expanding economic growth and globalization the need for new skills is more prominent and lifelong learning and adult education is seen to have become a governmental response to socio-economic inequality, the financial crisis as well as the growing competition within industry both nationally and internationally. This life-long learning has several benefits like-

● Renewed self-motivation.

● Recognition of personal interests and goals.

● Improvement in other personal and professional skills.

● Improved self-confidence.

Thus, those people who would like to extend professional expertise in their in-service period, they will get it from open education. Even those who would like to restart their academic journey, ODL mode is the best choice to them. The ODL system is also used for school-age children and youth those who are unable to attend ordinary schools, or to support teaching in schools, both at primary and secondary level. However, most courses and programs are aimed at the adult population.

In developing countries particularly ODL education for primary and secondary schools is an important method of expanding educational opportunities to the semi-adult and adult population. Teacher training program is an important area where ODL learning has made a major contribution. In developing countries it is found that teacher training at a distance may reach large groups of students and have profound impact on the development of national education systems. The use of ODL system for teacher education is therefore a crucial strategy when expansion or quality improvement is needed in the public education system.

2.3.9 General Education :

Distance education can be used at primary and secondary education levels to provide both in-school and out-of-school programmes. In-school distance education programmes are used to support teaching in schools when learning materials are lacking, or where enrichment is thought to be desirable. They may also be used where teachers do not have formal qualifications, or to support subjects where the number of pupils is too small to be able to organize conventional teaching. A variety of approaches are used, including Interactive Radio Instruction (IRI), schools radio,

educational television through terrestrial and satellite networks, multimedia schemes delivered through satellite, and Web-based delivery of multimedia schemes. The materials may be designed for young children or for adolescents and adults. Distance education is used in out-of school programmes both at primary and secondary level to educate school-age children and youth who are unable to attend ordinary schools, including those who are disabled, suffering from long-term illness, or living in remote areas or living outside their own countries. In this way the goal of EFA (Education for All) is to be attained the philosophy of mass education will come into practical.

2.3.10 Teacher Education :

Teacher education is an important area where distance education has been used extensively to provide pre-service teacher preparation, upgrading of academic qualifications, and in-service continuing professional development in particular subjects, content areas and instructional methods. The use of open and distance learning for teacher education is therefore a crucial strategy expansion or quality improvement. Internet serves as the principal or supplementary means of providing both pre-service and in-service teacher education. There isa growing number of high-quality Web-based professional development resources available for educators globally. Virtual Web based environments for teachers now enable them to seek help from other teachers, locally, nationally, or globally in solving classroom problems, sharing lesson plans and materials, interacting with experts in particular fields, and in planning collaborative curriculum development projects. Distance education may also play a major role in upgrading the knowledge and skills of teacher educators both in higher education and educational agencies.

The advantage of distance education is that it makes teacher preparation and professional development programs accessible to indigenous peoples and others located in remote, rural areas who do not have convenient access to higher education institutions and where there is often a shortage of well-prepared teachers and other educational professionals.

2.3.11 Vocational and Continuing Education :

Technical and vocational education have in recent years played important roles, not only in contributing to the improvement of productivity of a national labour

market, also in assisting individuals to improve their employment prospects in rapidly changing socio-economic conditions. In this context the ODL system has the role in field of technical and vocational education to respond effectively to the growing demand of working adults or any others who have difficulties in getting training in conventional education because of lack of flexibility in the timing and location of courses. Open and distance learning in the field of technical and vocational education makes up a mixed and complex picture. It may include experimental work and hands-on training as an integral element. It has often been developed by private institutions and enterprises, and makes an important contribution to human development.

2.3.12 Non-formal Education :

The distance education has been used to considerable effect in the non-formal and community development sectors of education. The basic adult education grew in the 1960s and 1970s just as technology began to be used more widely in education. Mass communication methods, often linked with some kind of group meetings and face-to-face support, were seen as one way of delivering a wide range of educational and skill-based program to support agriculture, health and nutrition, political education and development and employment-related projects, to large numbers of adults. This approach was used in India. Radio campaigns were another early and influential model. The idea was to deliver short, highly intensive campaigns to support major development ends. Indeed, radio in particular has a powerful role to play in non-formal education.

2.3.13 UNESCO's views and initiatives in ODL system :

United Nations Educational, Scientific and Cultural Organization (UNESCO)'s initiatives in Open and Distance Learning (ODL) are based on its overall priority to ensure the right to education for all. While the use of distance education was given early support by the Organization, new developments in information and communication technologies, in particular the Internet and the World Wide Web have radically increased the demand for lifelong education. It also provided new means to meet the demand. Facing the educational challenges of the 21st century, UNESCO continues, through its support of open and distance learning, to contribute to the construction of knowledge societies in a lifelong learning context. Within its overall

priority, UNESCO focuses on fostering basic education for all to meet the commitments of the Dakar World Education Forum, encouraging and supporting action in its Member States with special emphasis on co-operative efforts to develop open and distance learning systems and programmes to the benefit of those deprived of basic learning skills. Great attention is given to open and distance learning to meet the educational needs of the adult population, with a view to provide new and alternative learning opportunities for those who were initially deprived of them, or who, for one reason or another, did not make use of them. UNESCO continues to strengthen the role of ODL in the diversification of educational delivery systems, notably, for technical and vocational education, encouraging co-operation and partnership between enterprises, professional bodies and distance teaching institutions.

Support is also given to ODL to meet the special needs of the disabled, migrants, cultural and linguistic minorities, refugees, populations in crisis situations, who cannot be efficiently reached by traditional delivery systems.

Great importance is attached to ODL in teacher education both for in-service teacher training and teacher educators. The potential contribution of ODL to the development of higher education is fully recognized and supported by UNESCO. UNESCO gives great importance to international, interregional and regional co-operation for the promotion of open and distance learning.

2.3.14 Some Philosophers' view

Philosophers and educationists have given utmost importance on Non-formal education for individual development as well as development of the nation. Roman philosopher Ivan Illich is of the opinion that Non-formal (distance mode) and Informal education are capable of meeting the needs of man adequately. He lays more stress on them than on mere teaching done in formal education.

Lovett says, "Non-formal education is being offered as an alternative to the traditional system of adult education. It is a learning network where needs and interests are defined and articulated by those involved in the learning process and the traditional methods are completely reserved."

Coombs called non-formal (distance) education as "Any organised educational activity outside the formal system whether operating separately or as an important

feature of some broad activity that is intended to serve some identifiable learning clientele and learning objectives."

Gandhiji said that an individual with a developed personality sacrifices himself for the family, the latter for the village, the village for the district, the district for the state, the state for the nation and the nation for all. On several occasions Gandhiji pointed out that the aim of non-formal education should be social reconstruction which stands for the good of all.

It was J. P. Naik who said in 1976 – "Non-formal education is to be distinguished from formal education." He said that it differs from formal education for the reason that it takes place outside the system of formal education even though some characteristics of formal education could be seen in it. According to J.P. Naik, Non-formal (distance) education-

(a) enables those who have not completed a stage of education to complete it and if they wish to proceed to the next,

(b) helps every educated person to have further education with or without formally enrolling himself in an educational institution,

(c) enables a worker to acquire knowledge, ability and vocational skill in order to be a better worker and to improve his chances of earning more and

(d) helps to refresh the knowledge of the educated person and enables him to keep pace with the new knowledge in the field of his interest.

So Open and Distance Learning (ODL) has a profound philosophical perspective. As a mode of education system it is greatly influenced by philosophical thoughts.

2.4 Thoughts of Charles Wedemeyer and Otto Peters

There are several theories on distance education. These theories to date can be classified into three groupings :

1. Theories of autonomy and independence : These contributions come mainly from the late 1960s and early 1970s and the major representatives are Rudolf Manfred Delling (Germany), Charles A. Wedemeyer (USA) and Michael G. Moore (USA).

2. Theory of industrialization : Otto Peters' work in Germany comprised comparative studies throughout the 1960s and theoretical formulation in the early 1970s.

3. Theories of interaction and communication : More contemporary views from Borje Holmberg (Sweden/Germany), John A. Baath (Sweden), David Sewart (UK), Kevin C. Smith (Australia), and John S. Daniel (Canada/UK).

From the above mentioned thoughts and theories the theory of Charles A. Wedemeyer and Otto Peters are disused bellow :

2.4.1 Independent Study of Charles Wedemeyer :

The term 'independent study' was used by Charles A. Wedemeyer (1973) to describe distance education at university level. Throughout his professional life he was a professor of Education at the University of Wisconsin, Madison and closely associated with the Independent Study Division of the National University Extension Association of the United States of America. Wedemeyer made a determined effort to establish the term 'independent study' as the umbrella term for this field of education both in the US and throughout the world. According to him, independent study consists of various forms of teaching-learning arrangements in which teachers and learners carry out their essential tasks and responsibilities apart from one another, communicating in a variety of ways. Its purposes are to free on campus or internal learners from inappropriate class placing or patterns, to provide off-campus or external learners with the opportunity to continue learning in their own environments and developing in all learners the capacity to carry on self-directed learning.

According to him 'Independent learning' is that learning, that changed behaviours, that results from activities carried on by learners in space and time, learners whose environment is different from that of the school, learners who may be guided by teachers but who are not dependent upon them, learners who accept degrees of freedom and responsibility in initiating and carrying out the activities that lead to learning. Wedemeyer's thought is generous and liberal. There are two bases for his views on independent study : a democratic social ideal and a liberal educational philosophy. He considers that nobody should be denied the opportunity to learn because he/she is poor, geographically isolated, socially disadvantaged, in poor health, institutionalized, or otherwise unable to place himself/herself within the

institution's special environment for learning. Thus he claims that independent study should be self-pacing, individualized, and offers freedom in goal selection.

Conventional teaching and learning, makes use of concepts of learning and teaching that have preserved the old mystiques, which have maintained space-time barriers to learning. In this context Wedemeyer (1968) set out a conceptual structure for an educational system that would be more akin to his views. Most of his writings emphasised on ten characteristics of the proposed system. These are as follows -

1. The system should be capable of operation at any place where there are students - or even only one student-whether or not there are teachers at the same place at the same time.

2. The system should place greater responsibility for learning on the student.

3. The system should free faculty members from custodial type duties so that more time can be given to truly educational tasks.

4. The system should offer students and adults wider choices (more opportunities) in courses, formats, methodologies.

5. The system should use, as appropriate, all the teaching media and methods that have been proved effective.

6. The system should mix and combine media and methods so that each subject or unit within a subject is taught in the best way known.

7. The system should cause the redesign and development of courses to fit into an articulated media programme.

8. The system should preserve and enhance opportunities for adaptation to individual differences.

9. The system should evaluate student achievement simply, not by raising barriers concerned with the place the student studies, the rate at which he studies, the method by which he studies or the sequence within which he studies.

10. The system should permit students to start, stop and learn at their own pace.

Wedemeyer noted instinctively that the only way to break what he called the

space-time barriers of education was by separating teaching from learning. This involved planning each as a separate activity. These early insights by Wedemeyer were later confirmed by Kaye and Rumble (1987). Based on planning of teaching and learning as separate activities Wedemeyer (1973) postulates six characteristics of distance or independent systems:

1. The student and teacher are separated.

2. The normal processes of teaching and learning are carried on in writing or through some other medium.

3. Teaching is individualized.

4. Learning takes place through the student's activity.

5. Learning is made convenient for the student in his own environment.

6. The learner takes responsibility for his progress, with freedom to start and stop at any time and to pace it himself.

For these series of developments, people got enough opportunities to continue their education in their own way. Wedemeyer has used three terms for such programmes :

1. 'Independent study',

2. 'Open learning', and

3. 'Distance education'.

He saw in the 1960s the re-emergence of the independent learner, with a new plan for independent programmes in areas where conventional group-based formal learning was less able to succeed. Wedemeyer has presented his thoughts wherein he claims that every teaching-learning situation comprises four elements :

1. A teacher;

2. A learner or learners;

3. A communications system or mode;

4. Something to be taught / learned

According to Wedemeyer the concept of distance involves more than physical

distance. There is social as well as cultural distance. All of these are present wherever teaching and learning are carried on. Wedemeyer (1973) proposes three conceptualizations of freedom for learners in all independent or distance programmes :

➤ Learning should be self-pacing that means the learner should be able to pace his studies in accordance with his circumstances and needs.

➤ Learning should be individualized and the learners should be free to follow any of several courses of learning.

➤ The learner should have freedom in selection of goals and activities.

Wedemeyer faced some criticism when he tried to suggest that these theoretical propositions about the freedom of the distance learner should be implemented in practice. These criticisms came both from those looking for a workable system and from those who feared that public monies spent on distance systems would be transferred back to conventional education if the learning in the distance system could not be accurately evaluated or if the evaluation was that the learning in the independent system was inferior. Wedemeyer in 1962 has stated five serious hurdles to success as a distance learner :

➤ Developing interest and motivation in the task among the learners.

➤ Readiness for study witnessed by the non-start, the early drop-out, the under achiever.

➤ Problems in grasping the subject to be learned at a distance.

➤ Learning by using both analytic and instructive thinking.

➤ Difficulties in evaluating progress in learning.

The secret of success in Wedemeyer's (1963) thought is placed on the shoulders of the instructor who is in a continuous tutorial relationship with the correspondence student. The teacher is the daily monitor and motivator of the distance student. The chief value of the correspondence method lies in the tutorial relationship developed between the teacher and the student.

At last we can conclude that Wedemeyer's personal dedication, generosity, and liberal vision contributed much to the growth of a consensus among distance educators throughout the world and influenced many of the writers.

2.4.2 Theory of industrialization by Otto Peters:

Much of the early research work in distance education was accomplished by Otto Peters in the early 1960s. Peters worked at the German Institute for Distance Education (DIFF) at Tubingen in the Federal Republic of Germany, then at the Berlin College of Education. In 1965 he published an authoritative analytical and comparative survey of distance teaching at higher education level. In 1973 the first major theoretical structure and to date the most comprehensive theory on distance education was suggested by him. Here distance education is considered as an industrialization of the education process. Industrialization is a feature of distance education for many years. The pioneering theorist explained when technology is used to reach students in mass; education assumes industrial characteristics, such as, standardization of services and mass production of educational products. To the extent that correspondence education relied on mass production of instructional materials (e.g. books) it was an industrial enterprise. Another manifestation of industrialization in distance education is division of labor. Peter presents a comparison of distance teaching and the industrial production of goods under the following headings:

➤ **Mass production** : Traditional forms of teaching envisage small groups and can only be applied to mass education artificially (e.g. a loudspeaker form one lecture hall to an adjoining one). Distance teaching copes confidently with mass production which is essential to it.

➤ **Division of labour** : It is the main prerequisite for the advantages of distance teaching to become effective and is thus a constituent element of it. If the number of students enrolled in a distance course is high, regular assessment of performance is not carried out by those academics who developed the course. So other elements of the teaching/ learning process are assigned to others.

➤ **Mechanization** : Conventional education proceeds at a pre-industrial level with the teacher using the tools of the trade (pictures, objects, books) without these changing the structure of teaching; in distance teaching mechanization eventually changes the nature of the teaching process.

➤ **Planning and preparation** : As in industry, distance teaching is

characterized by extensive planning by senior specialist staff in special departments and prior financial investment. Success is linked to the preparatory phase in a way that is different from conventional teaching.

➤ **Functional change and objectification** : These are further essential elements of the most industrialized form of education, especially when the functional role of teacher is split at least three ways : provider of knowledge (distance unit author), evaluator of knowledge and progress (course maker or tutor), and counsellor (subject programme adviser).

➤ **Monopolization** : Concentration and centralization are characteristics of the management of distance system and of industrial enterprise; distance teaching institutions have a tendency to monopolization within a state or national provision.

Thus Peter has justified his new theoretical basis for distance teaching as a new form of industrialized and technological education. Considering several points of view he states that the conventional, oral, group-based education is a pre-industrial form of education. In the universities of the Middle Ages the ancient theoretical form of education was replaced by the lecture, the seminar, and the lesson and these have remained permanent characteristics of traditional education ever since. Later the humanistic influence added the tutorial. These can all be regarded as pre industrialized forms of education in which the individual lecturer remains in close contact with the completely teaching process just as an artisan does with his craft.

Distance teaching, however, is recent. It could not have existed before the industrial era. It was no historical accident that correspondence education and the industrialization of society began about the same time because they are intrinsically linked. Distance education is impossible without a relatively fast and regular postal service and transport system. As a result the first railway lines and the first correspondence schools were established around the same time. Peter thought that traditional educational concepts are only of partial use in analyzing and describing this industrialized form of education hence new categories for analysis must be found and they can best be found from the sciences which analyze industrial processes.

The student in an industrialized education system finds that instruction is available in such ways that he can choose his own way. Instruction is not linked to

fixed times, to fixed persons. This throws new responsibilities on the learner that are not characteristic of pre-industrialized education systems. Peters has no desire to criticize conventional education. His view, however, is that industrialized society of today has developed so many needs for education that it is absurd to imagine that conventional systems can satisfy them. But reactions and objections to Peter's thesis have been many and there are those who deplore the introduction of industrial concepts into an educational field. Ehmann (1981) criticizes Peter's position because of its dependence on faith in the value of planning in education and faith in technical progress. Rebel complains (1983) that the basis of Otto Peters assumption – the interdependent elements that constitute each teaching – learning process could never be expressed in such a way.

Peters studies the affinities between distance education and educational technology, especially programmed learning. He had a belief that planning and technology will achieve educational success. It was felt that the application of technical categories to educational processes would achieve beneficial results. It is also helpful to achieve both educational and economic efficiency. Thus the theory and thoughts of Otto Peters in the field of Distance education is still relevant.

2.5 The New Learner in The New World

In view of the tremendous learner growth in the distance education sector, many dual-mode institutions are growing to meet the educational requirements of the society. With vast change in the education sector, the opportunities for younger generation have been increased enormously. Distance learners are categorised into manifold. They may be younger ones, middle aged and older ones. They might be belonging to literate, semiliterate, skilled, semi-skilled and unskilled categories. They also may be employed, physically challenged and differently abled. Most of the learners belong to these categories would like to continue their higher education by using appropriate technological tools. The learner group will choose the relevant programme of study to continue their studies. The main components which are to be supplied to the learners include self-instructional materials, audio-video cassettes and reference books through libraries. At present, different institutes adopted mechanical delivery system for supply of self-instructional materials and supply information

through semi-electronically. At times, learners from research category are attracted towards distance education and try to use Distance Education tools and methodologies to complete their research programmes.

Now to get success in this non-conventional system learners need to gather knowledge which involves two strongly inter-linked but different components: content and skills. Learners in this system so need to master over the following skills.

➤ **Communications skills** : We need to add social media communication skills along with traditional communication skills of reading, speaking and writing coherently and clearly. These may include the ability to use internet, download and also create different study materials, tutorial videos, e-content etc.

➤ **Ability to learn independently** : This means taking responsibility for choosing suitable courses, collecting resources and study materials, grasping meaning of subject areas, reading with own pace and interest, taking preparation for examination, etc.

➤ **Ethics and responsibility** : This is required to build mutual trust and sharing responsibilities. Here learners should have and a greater degree of reliance on others to accomplish one's own goals.

➤ **Teamwork and flexibility** : In particular, learners need to know how to work collaboratively, virtually and at a distance, with colleagues, clients and partners. The 'pooling' of collective knowledge, problem-solving and implementation requires good teamwork and flexibility in performing tasks or solving problems that may be outside of traditional thoughts.

➤ **Thinking skills** : Critical thinking, problem-solving, creativity, originality and strategizing are some of the skills needed in a knowledge-based society. These skills are essential for all types of learning and at all levels, but in case of open education these are treated as very incumbent.

➤ **Digital skills** : Most knowledge-based activities depend heavily on the use of technology. The key skill in a knowledge-based society is knowledge management: how to find, evaluate, analyze, apply and disseminate

information, within a particular context. This is a skill that graduates will need to employ long after graduation.

➤ **Knowledge management :** This is perhaps the most over-arching of all the skills that learners have to grab. Knowledge is not only rapidly changing with new research, new developments, rapid dissemination of ideas and practices over the internet, but the sources of information are increasing, with a great deal of variability in the reliability or validity of the information. So learners must be able in efficient management of knowledge.

The ability to communicate effectively is the most important attribute to success in any environment, especially distance learning environments. Active communication includes more than just when things go wrong; it is also about communicating when things go right. Communication of current activities and future endeavours keeps the university community focused and encourages all to attain the institutional goals. It gives the faculty, students, and staff a feeling of support and belonging to the institution. Thus learners in the new world of knowledge explosion need to reorient themselves in various skills. As we are highly dependent on ODL mode along with formal system of education, learners must make themselves suitable in the rapidly changing learning paradigm.

2.6 Summary

In this unit we have discussed on Philosophical Perspective of Open and Distance Education. It is already known to us that education serves as the backbone for the development of nations. Education is very helpful for us because it helps to grow in every walk of life. The importance of education cannot be explained in words. Its importance can be known after gaining the knowledge. For this reason the great philosophers can have clear views and vision of education. They have given utmost importance on education for fuller development of the nation and the individual. But this aim can't be achieved with the regular and formal mode of education only. Here they rely on Open and Distance education. Charles Wedemeyer and Otto Peters clearly advocated for ODL mode of education. Their thoughts and theories are also discussed in this unit. At last we looked in the different qualities needed for learners of this rapidly changing system of education.

2.7 Self-Assessment Questions

● Discuss on philosophical perspectives of Open and Distance Education.

● How can Open and Distance Education contribute in building national values?

● Analyse the thoughts and views of Charles Wedemeyer on Distance learning.

● Discuss on Independent Study of Charles Wedemeyer.

● Analyse the thoughts and views of Otto Peters on Distance learning.

● Explain the theory of industrialization as proposed by Otto Peters.

● Anlyse the skills needed to possess by learners in The New World of ODL.

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Unit - 3 ❑ Socio-Political Issues of Distance Education

Structure

3.1 Objectives

3.2 Introduction

3.3 Socio-political issues of Open and Distance Education

3.4 Academic issues of Open and Distance Education

3.5 Macro and Micro issues related to Open and Distance

    3.5.1 Micro Issues

    3.5.2 Measures needed

    3.5.3 Future prospects and opportunities in e-Learning

3.6 Summary

3.7 Self-Assessment Questions

3.8 References

3.1 Objectives

After the completion of the course, the learners are expected to :

● explore Socio-political issues of Open and Distance Education

● understand Academic issues of Open and Distance Education

● understand Macro and Micro issues related to Open and Distance

3.2 Introduction

A revolutionary change in the Indian education system occurred in the 1960's with the introduction of Open and Distance Learning. The establishment of Distance education Universities was stimulated by the government's intention to make learning lifelong and democratize the education system. Over the time, ODL

education system grew rapidly. Education policy and legislation in India emphasize equity of access and fair chances of success to anyone who seeks to realize their potential through opportunities. India has high level of unemployment, adult illiteracy and socio economic inequalities prevailing in the present time, which are affecting the mental status of its citizens. There are different barriers that can hinder students' access and success in higher education. In this connection this unit will focus on Socio-political, Academic, Macro and Micro issues related to Open and Distance Education.

3.3 Socio-political issues of Open and Distance Education

Open and Distance learning mode of education is a mode of delivering education that has been designed to reach learners anywhere; in their homes, in technologies, and to equip them with the learning experiences in order to qualify and obtain higher education without the requirement of attending the formal face to face mode of classes. For students who don't fit into a traditional classroom setting, distance learning provides an exceptional opportunity as it affords the flexibility they need to be successful. The students of the Open and Distance learning system are assumed to be prepared for the challenges of life with the same competence as the students of the regular mode.

Open and Distance Learning (ODL) Universities are framed with an aim to provide education to working adults who neither have the regular and formal mode of education at full time universities. But families with low socio-economic status are less likely to have academic support and they lead stressful life. Growing up in a family with low socio- economic status (SES) is associated with substantially worse health and impaired psychological well-being, and impaired cognitive and emotional development throughout the lifespan. Development of mental ability of human occurs within a socio-economic condition. Socio economic- status has a deep effect on cognition, academic achievement and mental satisfaction. Besides these some political factors also exert influence on Open and Distance Learning (ODL), especially policy formation, regulation and administration. These are discussed bellow.

● **Stress of Life :** Stress affects the family as well as social relationships. Inequalities in distribution of wealth, resources and economic condition or busy scheduled of life, can lead to chronic stress and thereby effect overall development.

● **Social Barrier :** Some customs and traditions of the country do not allow the female population of the country to attend the regular classes with opposite gender. This creates the feeling of social injustice. It makes them mentally disturbed and unable to stand on equal footings with their male counterpart.

● **Poor Economic Status :** Low daily wage earner faces the challenges to make their ends meet. They do not get the opportunity to acquire necessary skills and knowledge in both regular mode and ODL mode of education.

● **Early Marriage :** From early days, the women of the rural villages of India get married at young age. These women opt for various ODL or life-long programmes. But due to huge household burden they suffer from mental stress and discontinue their courses.

● **Employment and other Professional activities :** In this competitive world, everyone is trying hard to get employed in a better position. The working people sometimes feel stressful and wearied with the existing job and position. They always aim to get better incentives and a respectable position by improving their knowledge and degree, which lead them to go for the non-formal mode of education. But due to huge pressure in their work place they often cannot continue the courses, even after enrolment in ODL system.

● **Religious and Cultural Barriers :** ODL has nothing to do with any candidate's cultural background. Sometimes cultural background affects the mental status. Consequently there can be a negative effect on learners' progress in ODL mode.

● **Professional Barriers :** Students may drop out in higher education because of those employers who may prevent them from studying, such as forcing them to work overtime, and students having no time for study. In such cases, the students' own motivation is not sufficient to prevent them from dropping out. Being a busy worker and a student at the same time, some students may

not be permitted to join a course, or an employer may not let them learn for higher degrees, and develop their competences. Family responsibilities may also prevent adult learners from actively participating in higher education.

● **Technological Barriers :** The higher education landscape is undergoing significant change because of technological innovations. In addition, the use of various educational technologies became advanced significantly over the past few decades. It is now a common practice to find technology-enhanced learning in many higher learning institutions all over the world. But the high cost of information and communication infrastructure, and the dearth of technical expertise are another challenges in distance learning.

● **Administrative Indifference :** Administrative indifference is a significant issue in Open and Distance learning. Through studies it is found that administration, policy making bodies and social planners are giving more attention towards the regular mode of education. Consequently there is lack of proper planning and supervision in day to day running and functioning of open and distance learning. In that cases the learners are not able to avail proper assistance from the stakeholders.

● **Differential Attitudes :** At present there is no qualitative difference between the degrees obtained from ODL mode and degrees obtained from regular mode. As both the degrees are given by the higher education institutions affiliated to the apex body, UGC, they are equally accepted in all academic and professional fields. But till now the some people of the society cannot accept the truth and they undermine the degrees obtained from ODL mode. This issue is detrimental and demoralizing to the learners of ODL mode.

These are some socio-economic and political issues which put hindrances to the success of this widely spreading and flexible mode of education.

3.4 Academic issues of Open and Distance Education

Like all learning models, distance learning does have some inherent problems, especially in the areas of isolation, support, technology and discipline. Different studies have identified some academic areas, which are as follows :

● **Nature of Study Material :** This problem is common with newer distance students. Study materials must take into account the significant proportion of students who enroll with little or no experience of distance study. The background of the learner is important in the preparation of the learning materials but it is true that similar materials are provided to rural and urban students having different needs, experiences and learning environment. Because it is very difficult to prepare lessons according to the individual differences of the learners in distance learning as the teachers and content writers are not fully able to get ideas about learners' individual characteristics beforehand. At the same time teachers are not getting enough opportunity to know about learners through regular interactions which is possible in regular mode. Not only that here number of learners is huge and they diversified in nature. So it is a daunting task to teachers or content writers to give importance on individual difference. Moreover as per the system materials are prepared before the admission of the learners. So there is no scope of judging learners individual nature in time of preparing learning materials. This is a significant academic issue in distance learning.

● **Language in Instruction and Material :** India is a multicultural and multi linguistic country.There is no particular uniform language which is used as a medium of instruction and learning throughout the nation.Different provinces use their regional language in providing education to the learner. Thisis an important factor in case of distance education. In formaleducation system learners are coming from the nearby localities but in case of distance education students from all over the country are getting access to the education with the wish to obtain degrees.But there is a problem in selection of a particular language as a medium of instruction and learning material.If English language is taken as uniform language for all learners then the learners who are not efficient in this language they may face some problem.On the other hand if the learning material is written in the local language then the learners from the other provinces or region also face problems. Thus the language barrier poses a severe problem in distance education program in all universities.

● **Technological Issues :** There is more stress on sending of printed materials.

But there is a dearth of facilities of multi-media instruction. The variety in the learning materials and methodologies can improve the quality of learning. Using of multimedia is very helpful in teaching learning process. It enhances the learners understanding and perception on the subject matter. It is also attractive and keeps the attention of the learners in the matter of teaching. But due to some constraints efficient use of multimedia is not possible in distance learning. For proper use of multimedia cost or financial burden is a factor. Not only that, teacher or instructor must be efficient enough in preparing and using multimedia. At the same time learners should also be technically sound for proper use of multimedia. Otherwise information will not be properly disseminated to the learners and aim of education will be in vain. But in our country most of the learners are coming from the remote places with technological barrier like lack of internet accessibility, lack of orientation about internet and websites. Moreover, most of them are from very poor families where there is no such device through which they can get access into the multimedia teaching learning process. For this reason this innovative and interesting way of instruction are not in proper use till now.

● **Insecurities about Learning :** Distance learners are more likely to have insecurities about learning than traditional students. These insecurities are like financial costs of study, disruption of family life, perceived irrelevance of their studies and lack of support from family members and employers. Many of the learners are first generation learners. So they always have to cope up with different hurdles of family and society. They often get proper support from their family members. Moreover there are many individuals who demoralize the learners in many ways. Sometimes they spread the misconception about the qualities and acceptance of degrees from open education. Some words and opinion from these ignorant people make learners unsecured in their study areas. These pressures often result in higher dropout rates than among traditional students.

● **Irregular Feedback or Contact with the Teacher :** Physical distance between the teacher and learner is another problem in distance learning because there is no daily or weekly face to face contact with teachers. For this reason students may have trouble in self-evaluation and consequently,

such students would be more likely to drop out. In few universities most of the classes are being taken in online, so learners are not always in touch with the teacher. Though in some interactive and Personal Contact Program (PCP) are organized to support the learners but this is not sufficient for regular interaction between teacher and learners as in regular mode where students are getting regular opportunities to meet up their queries from the teachers. There is also some problem to the learners to reach in Learner Support Centre (LCS) or PCP centres on regular system as most of the learners are employed or engaged in some household activities. This lack of interaction between learner and teacher pose a serious problem in case of distance learning mode. The isolation that results from the distance learning process can complicate the learning process for adult students.

● **Less Opportunity of Social Interaction :** Students can get diversified knowledge and social message, relevant to his life, from the social interaction with others. In regular system learners get wide opportunity to mix with their friends and peer groups but in case of distance education students are not aware about their friends and co-learners. There is also less opportunity to meet or know about their friends because occasionally they are getting assembled in a particular place. So most of the learners are unknown about the others. Thus the social developments of the learners are getting hindrance. Ultimately mutual sharing of academic thoughts, ideas and matters are less or even absent in distance mode of education.

● **Lack of other Facilities :** In distance learning students are missing some very important infrastructural facilities of learning campus. In regular mode students are enjoying the infrastructural facilities of library, playground, auditorium and able to participate in co-curricular activities. But these are not available to the learners in distance education. As students in distance education are not coming to the institution on regular basis so they are not able to use library facilities. There is also lack of coordination among the learners. So they are not in a position to organise any social event in the academic institution. Moreover in some cases they are deprived from different types of scholarship and financial aid which are provided to the learner in regular mode. This academic issue is really embarrassing to the learner.

● **Feelings of Isolation :** In distance education program students feel isolation from their teacher and peers. Regular presence and interaction with the friends and teacher is very encouraging to the learners and these have direct and indirect effect on efforts of the learner. In regular mode that students, teacher and other stakeholders work together like a family but here in distance mode due to physical distance learners feel isolation from education system. This leads to discontinuation of the courses in future.

● **Lack of Motivation :** Self-motivation is an essential requirement for ODL learners; however, many students lack it. After enrolling in ODL courses, many students face difficulties in handling a technological environment. It seems extremely challenging. Many learners fall behind and feel like giving up. Learners in distance education are suffering from lack of motivation as they are not in regular touch with the teacher. So they are not getting direct motivation and inspirational talk from the teachers. Consequently there is a great possibility that they may feel disappointed and can give up all the hopes when they are facing some challenges. There is a high chance that these students may drop out in future. As they are not coming to the institution on regular basis, there is a great possibility that they may be diverted from their learning goals. Here a positive attitude will help them to overcome the challenges in an ODL environment. This is hard to practice but perseverance is the key and learners need to have the tenacity to go on in order to reap the benefits in the future.

● **Procrastination and the Temptation to quit :** In distance education program students easily get more time to complete their courses than that of the regular system. This leads to the procrastination in their activities. As many of the students are employed and many are busy with their profession and household activities, so frequently they make plan to appear for the examination in the next year rather than the relevant year. This leads to huge academic burden on them as they have to appear for all the papers in a particular year. Here some students at able to complete their courses but many students being unable discontinue their course. These attitudinal problems pose serious threat to distance education program.

● **Problems of Adaptability :** Switching from traditional classroom setting to

a virtual one is a totally different experience. Learners need to accept the new learning circumstances with an open mind and heart. But sometimes learners fail to adapt with new system of distance education after coming from regular mode. Thus they become reluctant to study.

● **Problems with Equipment :** Equipment and hardware malfunctions can be a great detriment to the effectiveness of distance learning. When a problem occurs in a class everything comes to a standstill and the learning environment is interrupted. If there are too many instances, the entire course can be affected. For instance, if an overhead projector goes out during an instructor's presentation, an alternate way of delivering that information can easily be found. However, if a compressed video presentation has problems, the entire class must be stopped until the problem is resolved. The failure of the hardware can be a very frustrating thing for all involved in distance learning. For the instructor, it means they can be well prepared for the class only to have a bad connection or camera failure cause the entire lesson to go bad. For the technician, the frustration and inability to keep the class running smoothly may affect the instructor's view of their competency, causing friction. Those students used to the traditional face-to-face instruction and who do not have a tolerance for ambiguity will have a difficult time.

● **Issue relating to Effective Instruction :** Despite problems with hardware that may or may not get worked out with new advances in technology, we must come back to instructors and their attitudes towards teaching in a distance-learning environment as a major potential roadblock to effective distance education. As in any educational situation, the instructor can set the tone for learning in the educational environment. That instructor must be properly trained and motivated to be effective. An instructor must have technological skills and confidence to use all of the various electronic devices in order to be truly effective in the electronic classroom. Instructors must also change the manner in which information is delivered. While lecture does not work well, multimedia presentations are successful (Weber 1996). Of course this means more preparation time for the instructor and the motivation must be there. The idea of learning as a collaborative process is very important when students are separated by distance. It is up to the

instructor to be aware of this in the distance learning environment and to encourage collaborative learning and a sense of community among the students.

● **Student Concerns :** Finally, there are the students and their concerns with distance learning classes. Not all students are suited to this type of learning and not all subjects are best taught via this medium. More mature students are the most likely to find success with distance learning. The successful student needs to have a number of characteristics such as tolerance for ambiguity, a need for autonomy, and an ability to be flexible (Threkeld & Brzoska, 1994). Hardy and Boaz (1997) found that "compared to most face-to-face learning environments, distance learning requires students to be more focused, better time managers, and to be able to work independently and with group members". Many distance learners are different from traditional undergraduates in that they are already in professions. They have well defined goals and are more motivated (Dibiase, 2000). Actually distance education students need to feel a part of a virtual learning community.

These are some relevant and burning academic issues and challenges of distance education. All of these are not completely removable, but some measures can be taken to alleviate the current situation.

3.5 Macro and Micro issues related to Open and Distance

Open and Distance Learning (ODL) has grown into an important global strategy in fbsolving problems of access to education (UNESCO, 2004). Nonetheless, ODL programmes |ave their own unique problems. It faces new challenges in information dissemination, especially in developing countries. In India the open and distance education system is expanding very rapidly specially in recent time. But the pathways of progression are not smooth and free from impediments. Rather the system is facing several challenges and issues. These are classified as micro issues and macro issues.

3.5.1 Micro Issues :

There are some basic features of open and distance learning system. Though there are variation at certain level but generally all the open and distance education

system uses three basic components relating to teaching learning process. These include giving assignments to the learners, providing personal contract program and catering course materials. The problems relating to these components are treated as micro issues. In other words Micro issues are those which are specifically related to the learners, i.e. teaching-learners process or academic aspects. In ODL system we can identify some of such issues like-

(i) Assignments to learners,

(ii) Course Materials (print, and electronic), and

(iii) Personal Contact Programmes (PCPs).

These are discussed below.

❖ **Assignments to learners :**

Usually in all distance education centres or institutions give their learners specific assignments which are to be completed by the learners and to be submitted to the institution. The jftiain objective of the assignments are making perfect communication with the learners, evaluating learners knowledge and comprehension, motivating learners for wider study, building problem solving ability among the learner, evaluating effectiveness of Personal Contact Programmes.

Earlier assignments were given in offline basis where some problems or questions were set for the learneis and they had to write down the answers or the solutions within stipulated time. Thereafter they had to submit it to the learner support centre. But now different universities are conducting online assignments that are paperless assignment. Here learners can complete their assignments through the internet and electronic gadgets. In open and distance learning education system there is enough physical distance between the learner and the teacher. Here the, assignments can play a pivotal role to build effective relationships between the both ends, i.e., learners and teachers. Through these assignments teachers can also get feedback about his teaching efficiency, comprehension and achievement of the learners. There is another reason for assignment. As most of the learners are engaged in different activities in their life, it is found that they are getting detached from the institutions and their academic process. So to bring these learners into the desired way of teaching- learning process, assignments can play a very crucial role. Assignments

can also give a proper sensitivity to the learners. But here are some problems for which the assignments cannot get its desired effectiveness. Some of the reasons are as below.

● There is a trend among the learners to take assignments very casually. They do not give proper importance on the assignments. Since it is the home based practice, they think that it is quite easy to collect the material and to give answer of the related questions from the assignments. So they do not go for the deeper study. Rather they are trying to make it with an easiest way.

● The next is improper communication among the teachers, the centres and learners. Sometimes learners make themselves detached from the learner support centre. Consequently they cannot get timely information from the centre and miss assignments submission.

● Next reason is that unnecessary delay relating to sxibmission of assignment. It is found that lots of students cannot submit their assignment in due course of time as they are engaged to different type of activities, so it is a common phenomenon in open and distance education system. In most of the cases learners starts to write assignments at the last resort. Consequently they cannot submit it in due time.

● The next reason is the non availability of related materials. That means in time of writing the answers or completion of assignments the learners do not have required study material for assignments at their hand. There are several cases where the learners are residing in a very distant place from the learners support centre for his employment and he cannot communicate to the centre for collecting the study material before writing the assignment.

● There are also some systematic limitations of institutions, directorate or learners support centre to distribute the study materials among the learners due to some unavoidable circumstances. Though the institutions are taking very crucial initiatives for distributing study materials in time. Several institutions are also providing online supports. They have uploaded the PDF version of their study material and different tutorial in their website wherefrom learners can download with their ease and comfort.

● In some cases learners are not aware about their curriculum and syllabus in

that respective area. So they feel it is tough to complete the assignments in due time and leaving it for the next year.

● There is also another growing trend among the learners to get the assignment done by some other experts or organisation. In some cases they are taking the help of their friends and making the copy from the assignments prepared by another person. In that case the achievement of the learner becomes very low and they cannot achieve the desired goal. Thus the effectiveness of assignments is reducing. In that cases the institutions are taking different precautionary measures to stop these malpractices.

❖ **Course materials :**

Another significant micro level issue relating-to open and distance learning education is the course material. Presently institutions are preparing both print and non print course materials for their learners. These are very essential in their learning. But some issues are arising for which the effectiveness of course materials are reducing. These are as follows.

● **Insufficient materials :** Course materials are prepared for the learners so that they can continue their learning taking the necessary helps from the course materials. But sometime it is found that course materials made by the institutes for the learners cannot satisfy them due to insufficiency in the writing materials. Some areas of the syllabus are not discussed elaborately to give proper understanding among the learners. This problem is aggravated specially in the case of newly added curricular areas for which no alternative materials are readily available to the learners. At that time they are bound to depend on the course material supplied by the institutions. But due to insufficient coverage of the materials learners cannot attain their complete knowledge.

● **Language barrier :** India is a multicultural and multilingual country. Consequently different languages are in practice here. Thus learners are readily accustomed with their native languages. But the directorate or institutions prepares the materials in English, which is not easily understood by the learners. Especially the learners of the remote areas are facing this problem. Most of the learners have been brought up in that education system where they could read and give answer in their native language. But

when they are coming to the Open and Distance Education Centre then they are given the course material which is prepared in English language. Consequently it is a big problem to them. Though different institutions are trying to make the study material both in English and in native language.

● **Time constraint :** There is also a problem relating to the timely distribution of the course materials among the learners due to some unavoidable circumstances. It is found that students are not getting their course materials in time. A big issue relating to the open and distance learning system is separation of the learners from the institution. In some eases learners are residing at a far distance place from the learner support centre and they are making very less communication to the institutions. For this reason they cannot collect the printed study materials in due time. Beside this the directorate and learner support centre cannot distribute the course materials well in advance. So the learners cannot get sufficient time to be prepared for their coming examination.

● **Technological problem :** As the feeding areas of open and distance learning Institutions are increasing, the most of the Institutions are preparing e-content and online materials for their learners. Due to the technological advancement this facilities can be proven as a great help for the aspirants. But in India lots of learners are coming from the rural areas where technological advancement could not put its focus till now. As a result learners are not efficient enough to download, read and use e-content from the websites using internet. Beside this financial stringency is also related to it. The people were coming from the poor families. There are also problems in buying technological gadgets through which they can use e-content and website materials.

❖ **Personal contact programs :**

To facilitate learning in open and distance learning system learners can get the advantages from Personal Contact Program (PCP) where they can meet queries from the Counsellor or expert of the concerned subject. But in practice there are some issues and impediments faced by the learners. These are presented below.

● **Lack of time :** In open and distance education system most of the learners are engaged to different activities, including professional, business, household

activities or other activities. For this reason they cannot attend the personal contact program organised by the institution or learner support centre. Though the schedule is fixed on Saturday, Sunday or other holidays so that learners can attend the PCP within their available time, but it is found that the attendances of the learner are not satisfactory. In some cases only few learners are coming on regular basis.

● **Less number of counseling session :** There is some prefix criteria depending on which the counseling session is provided subject wise to the learners. But it is not sufficient comparing to the regular teaching learning system. Since only few hours are available to complete the queries of the learners relating to the learning area, the counselors are always in a hurry due to the time constraint. For this reason they cannot explain the entire concept in details in front of the learners. Not only that if the learners can't attend the PCP on the prescheduled day, it is not possible for them to get the repeat lecture of that class on the next day.

● **Improper communication :** In personal contact programs different counselors are taking responsibility to meet up the queries of the learners in different ways. So a teacher can attend the same learners only for few days. Even in some cases the learners can meet up the teachers only once during the session. As a result the queries which are coming in their mind in future remain unresolved.

● **Lack of awareness :** It is a common problem in majority of the distance learning institution. Most of the learners are not aware about the concept of PCP (personal contact programs). They are considering it as regular teaching learning session. But in PCP leamersiwarteimly satisfy their queries. Here teacher is not supposed to teach all the content areas elaborately like the regular teaching learning system. It is the responsibility of the learners to read out the specified areas of module so that they can ask from their problem areas to the councilors for clarifications. But it is found that without reading the study material the learners are coming with the expectation that the teacher will present everything in front of them like regular classroom.

● **Technological inefficiency :** Presently to meet the needs of the learners, academic institutions are providing online lectures to the learners, so that

they can attend those lectures with ease and comfort. Sometimes these lectures are put into the archive in the website of the respective institution. So these lectures and tutorials can be readily available in the website. But those who are coming from the remote areas cannot use this opportunity due to improper internet connectivity or lack of knowledge or not having the technological gadgets. Thus many learners are missed out from this online support.

3.5.2 Macro Issues :

Beside the micro level issues, open and distance learning system in India is also facing some macro level issues. These are not specific to any institutions in particular, but it is in general and more or less affecting all the ODL institutions which are catering the needs of the learners in this vast country. These issues are discussed below.

➤ **Differential attitude** : It is found that there is lack of consensus among the general people regarding open and distance education system. Most of the people till now believe that this system of education is inferior to the conventional or regular teaching learning system. People also think that the acceptability and value of the certificates obtained from distance learning institutions are quite less than that of the conventional system. For this reason most of the students with high intellectual qualities try to make themselves admitted to the conventional teaching learning institution and only those who are not getting opportunity to continue their study in regular mode they only opt for open and distance learning system. Moreover as they are confused about the acceptability of their certificate they cannot devote themselves completely to their study. Consequently they are not able to capitalise their full potentials.

➤ **Lack of freedom and autonomy** : Initially the journey of open and distance education system in India was started with Open Universities but with the passage of time due to the huge demand from the learners of remote areas the conventional universities also started to cater the needs of the learners through Open and distance learning (ODL) mode and they established a separate wings with their conventional teaching learning system. Presently different state level universities are providing these

opportunities to the learners so that learners from vast areas can complete their education. In this case ODL system attached to the conventional universities are suffering from lack of freedom and autonomy. In most of the cases they are to follow the curriculum of conventional system, They have very minimum liberty to frame their own curriculum. Their examination system is also influenced by their conventional system. Actually in all respect they are considered as a separate wing of conventional system. As result the directorate has to follow the curriculum and examination pattern of conventional system and thus suffering from lack of autonomy.

➤ **Lack of financial assistance :** It is true that all the open and distance learning institutions are not financially sound and independent to make them developed to the desired level. Due to this lack of financial independence open and distance education directorate and institutions cannot take needed measures for the development of the system. It is true that the most of the funds released for the development of higher education is going to the conventional system and very minimum amount is coming for the development of open education system. It is also true for the dual mode universities. The conventional system is always getting the priorities in the respect of financial assistance. Consequently the per capita expenses on students are quite higher in conventional system than that of the ODL system. That means ODL system cannot enjoy the financial or economic freedom like the conventional system.

➤ **Lack of manpower :** There is another issue relating to the manpower. With increasing social demand of Higher Education lots of students are coming under the purview of open and distance education system in recent years. So the number of enrolment is increasing day by day. Consequently the institutions providing this opportunity are suffering from lack of manpower for day to day functioning or maintain official formalities. In most of the cases they are not able to appoint a large number of employees to facilitate the entire system; There are different consideration and approval before appointing manpower. Due to the lack of finance in most of the cases there are only few employees who are to look after large number of learners across a wide geographical area. For this reason in some cases there is unnecessary delay relating to the regular transactions.

Besides the above issues researchers also identified some other issues and they made categories according to them, though these categories are not mutually exclusive, but overlapping in nature. Some of these are presented bellow.

Cross (1981) identified three distinct categories of challenges facing ODL students: Situational, institutional and dispositional. According to Cross, situational challenges include job and home responsibilities that reduce time for study. Institutional related challenges include poor logistics system or a lack of appropriate advising (Kruger and Casey, 2000). Dispositional challenges are related to learners' own attitudes and feelings. Berge et al (2002) classified challenges to distance learners as situational, epistemological, philosophical, psychological, pedagogical, technical, social, and/or cultural related challenges. Zirnkle (2001) identified specific challenges facing distance learners as programme costs, lack of equipment and infrastructure, instructional concerns and poor technical assistance. Other challenges documented by Zirnkle are inadequate feedback and poor teacher contact, alienation and isolation, and poor student support services. Garland (2007) identified some situational challenges for students to be persistence in distance learning. These include poor learning environment and lack of time. For example, students felt that the course took more time than anticipated because they failed to judge the demands of work, home and school. Kember (1989) argued that poor time management leads to challenges such as learners' inability to integrate the demands of off campus study with family, work and social commitments.

Different studies showed that learners had challenges in working with information and communication technologies. The implication is that most of these students could not access information on the Internet. The use of electronic media is therefore likely to exclude the majority of distance learners. This concurs with several studies in developing countries that established that ODL students in developing countries are challenged with both lack of experience in the application of technology and absence of these technologies.

Nonetheless, ICT is the major ingredient in the effectiveness of ODL. In the modern digital world application of ICT in ODL is not a matter of choice, but a must (Cosmas and Mbwete, 2009). If the majority of students cannot operate these gadgets and systems, then they are completely out of the purview of many instructions from the end of university and Learners Support Centres (LCS).

Few studies revealed that lack of support from employers is a challenge which is being faced by the adult and employer learners in ODL mode. Studies also showed that they were denied permission to attend examinations. The fact that they still persisted even under this hostile environment shows that they were highly committed to advancement of their education. This was clear indication of self-motivation in learning. These self-motivated distance learners are more likely to persist, even more under the most adverse circumstances, such as lack of support from employers and financial constraints. Similarly, Knowles (1997) described the need for self motivation and self-direction as important attributes for overcoming obstacles and successful course completion.

Against this backdrop, it can be reasonably said that the ODL mode of education system provides the space and opportunities for lifelong learning. So it is a time to rethink on the issues related to the ODL and take needed measurers so that learners can get effective assistance in continuing their education with self-pacing through this flexible and easily available mode of education.

3.5.2 Measures Needed :

In the twenty-first century, technological learning is expected to include digital literacies, collaboration, complex communication, and systems-thinking skills, among others. In order to be in line with online learning, higher education institutions are expected to offer courses and platforms that support the use of multidimensional abilities and skills and the use of media and technology as supportive systems in higher education. In general, there are three formats that ought to be followed in delivering courses, namely distance learning (DL), face-to-face (F2F), and hybrid (H) learning. Among these distance learning is quite flexible, time saving and self pacing. It is believed that learning at a distance mode in higher education can be as effective as traditional face-to-face mode learning. Distance learning students can be able to care for their families and incorporate instruction on online courses and this can afford them the opportunity to work while they are raising their family and pursuing their full-time jobs. Distance learning can also benefits students because of flexibility about when and where they can engage in their learning. So this mode is gaining popularity and huge acceptance among the learners of different age group. But for effective practice in distance learning for higher education some principles must be followed. These principles are :

(i)   Encouraging student-faculty contact;

(ii) Motivating cooperation among students;

(iii) Inspiring for active learning;

(iv) Providing prompt feedback;

(v)   Praising diverse talents and ways of learning.

These guidelines represent a philosophy of quality distance-learning education that can be widely used for distance learning. It can benefit universities with element of flexibility in the learning process by the use of technologies, and interdisciplinary approaches to teaching and learning. The use of technologies and interdisciplinary approaches are key factors in distance education in higher education. The advantage of technology in distance learning is that students can watch lectures before coming to class and engage in more interactive activities in the class.

They can also collaborate with other students and rely on the instructor as a facilitator rather than a lecturer. It also allows for a consistent delivery of content, because online videos can be pre-recorded and shared with the rest of the class online. Here mobile technology can play a pivotal role, because it is widely accessible among the learners. Though the effective integration of mobile technology into learning practices depends on aspects that are related to humans (i.e. learners and instructors), design (content and technologies), and institutions (policies and strategies).

3.5.3 Future Prospects and Opportunities in e-Learning :

Distance-learning system provides wide opportunities to undertake continuing professional development. The use of modern communications technology in distance learning can easily attract a younger generation than traditional forms of training. Distance education via e-Learning can be able to offer a solution, providing opportunities for distance-learning students to further their education while applying new knowledge and skills directly to their practice. The e-Learning is a relatively new phenomenon and relates to the use of electronic media for a variety of learning purposes.

Therefore, distance is not a defining characteristic of e-Learning. If students'

ICT competencies are improved and their attitude to online learning are more positive, distance mode in higher education can easily get success. It is presumed that students may prefer online courses owing to their distinctive advantages, such as lower tuition fees and adjustable speed of study.

ICTs can create opportunities for distance-learning institutions to provide distance-learning platforms, which can make it possible for many students situated far from the centers of learning to educate themselves. The e-Learning is very important in recent years because it can enable e-Learning opportunities that have not been previously available to distance-learning students. Moreover, the use of e-Learning systems can provide great opportunities of learning for individual students globally.

Generally, it is believed that e-Learning was designed for purposeful and disciplined students, because there is no direct contact with the lecturer, which may increase the demand for them to work independently. Distance learning in higher education can teach students skills and competencies of developing professional skills such as the skill of self-study, the ability to plan and organize, time management skills, the ability to solve problems, to take responsibility, to work under pressure, and to be creative. Understanding that distance learning gives everybody an opportunity to develop these social qualities, which are undoubtedly necessary for modern professionals, e-Learning is key for students' success in distance learning.

So the e-Learning is becoming more important in recent years because it can enable e-Learning opportunities that have not been previously available to distance-learning students. Moreover, the use of e-Learning systems can provide great benefits for individuals worldwide, especially in helping to educate and provide training on different topics from focused educational programs, to general hobbies.

Distance learning institutions can apply technologies to allow human interactions through the web and promote a self-regulated learning process. Using technology in distance learning can help in crossing boundaries of space and time for lifelong learning. Distance learning can enable flexible ways of education for every learner despite constraints.

The structure of distance learning can give adult learners the maximum possible control over the time and "pace" of their education. It is one of the most financially

affordable and viable forms of education. Adult students generally have many responsibilities relating to profession and family. There are also different constraints in their personal life. These responsibilities significantly reduce their opportunity to study. Distance education allows them to mitigate these challenges. Distant students suffer to a much lesser extent from cultural, psychological, social, and economic difficulties connected with learning. Another advantage that can be associated with distance learning in higher education is academic mobility. Distance learning institutions must know that adult students can have many responsibilities connected with their work or families. Therefore, the provision of distance education must be able to allow them to fulfil their responsibilities with ease.

Here a key issue to the successful use of e-Learning is the development of required competencies among the learners and the teachers or instructors. If the stake holders are not technically sound then they will not be able to generate positive outcomes from this revolutionary system of learning. So efficiency in online technology must be developed to increase opportunities for students in access to higher education with increase retention rates, increase learning quality and good outcomes for students.

Advent of MOOCs :

The emergence of Massive Open Online Courses (MOOCs) in the 21st century represented a major shift in direction for distance learning. MOOCs are characterized by extremely large enrolments and based on the use of short videotaped lectures, and peer assessments. The open-online-course format had been used early on by some universities, but it did not become widely popular until the emergence of MOOC providers. The initial purpose of MOOCs was to provide informal learning opportunities. But now all the higher educational institutions are giving utmost importance on these courses and there have been experiments in using this format for higher degree courses from universities.

3.6 Summary

In this unit we have identified and analyzed some social, political, economic and academic issues in Distance and Open Education. This is critically important to

understand that education as a social process must have some social issues, challenges and barriers in education. As the open and distance learning (ODL) is a very essential part of present education system, there is also some social, political, economic and other related issues which exert significant impact on the outcomes of this mode of education. Some of these issues are related to the learners, some are related to the institution and some are related to the society and the system. Then we have presented some micro and macro issues of ODL mode. Present day education is not confined to a particular place, rather with the help of technological advancement learners can get access to the education system of a far distant place through the mode of open and distance learning. Hence we should put our sincerest looks to these burning issues so that we can take needed measures and make this mode of learning more effective and learners friendly. So we have discussed on some measures and initiatives important to curb out the impediments. We also need to explore new areas, ways and opportunities for ODL through which this mode of education can get widest accessibility for the learners. These are also presented here. Thus the entire society will be illuminated with the cosmic light of education.

3.7 Self-Assessment Questions

- Discuss on socio-political issues of Open and Distance Education.

- Explain different academic issues of Open and Distance Education.

- Analyse the Macro and Micro issues related to Open and Distance

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Module - 2

(Support services to Open & Distance Education)

Unit - 4 ❑ Support Services for Open and Distance Education

Structure

4.1 Objectives

After the completion of the course, the learners are expected to :

● Understand Concept and Scope Student Support Services.

● Know about Printed Self-Learning Material and Study Skill of Learners.

● Know about Non-Print Instructional Materials and Role of Learners.

4.2 Introduction

If education is considered as four polar process, then learner is one pole to complete the entire process. Actually, without learner noeducational process could be planned or even imagined. Rather in 21st century all sorts of planning and initiatives are taken keeping the learners at the central place. For all round development of the learners/students we society should arrange for all sorts of assistance to them. Comprehensive and coordinated student support services are critically important for the social, emotional and character development of students and the development of learning climates that are conducive to student achievement of high academic standards. Student support services foster positive relationships among educators and students, thereby increasing students' attachment to school, and serve as an essential link between students and their families and school resources and community-based health and social services. Universities should also arrange for printed self-learning material and build Study Skill among the Learners. There is also significant importance of non-print instructional materials to ensure the success of learners. In this unit we will discuss on the student support services, printed self-learning material, study skill of learners, non-print instructional materials and role of learners.

4.3 Student Support Services : Concept and Scope

4.3.1 Concept

Student Support Services (SSS) is an academic support program that provides opportunities for academic development, assists students with basic academic requirements, and serves to motivate students toward the successful completion of

their education. In some countries the Student Support Services program is used to provide academic assistance and encouragement to academically disadvantaged populations.

The student services value needs greater recognition, support and development in the interests of all students. Student services contribute to the quality of students learning experience and their academic success, contribute as well at university dropout rate decrease and to the increase of students' life diversity, encouraging and establishing open method of making rational decisions and also resolving conflicts and prepare students for active involvement in society. For the development of theseaspects, it is required that there is a focus on fostering student involvement as both users and beneficiaries. The role of student services is influenced by relation with higher education institution and students. The composition of the student group, the knowledge and beliefs of academic staff and administrative staff influences the manner and responsibility in which the student programs and services are delivered. The World Declaration on Higher Education (UNESCO, 1999) highlights the need to develop student services worldwide. It is imperative that higher education institutions provide services and programs that promote the quality of student life, to meet its needs and to improve learning and success achievements.

4.3.2 Scope of Student Support Services (SSS)

Comprehensive and coordinated student support services are critically important for the social, emotional and character development of students and the development of learning climates that are conducive to student achievement of high academic standards. Student support services foster positive relationships among educators and students, thereby increasing students' attachment to educational institutions, and serve as an essential link between students and, their families and institutional resources and community-based health and social services.

The program provides students with a variety of educational services and places an emphasis on academic success. All services are designed to give students the academic skills and confidence that are necessary for success in higher education. According to Eisner (1992) the program is committed to helping students learn subject matter through activities such as supplemental instruction, course instruction, computer-assisted instructional laboratories, study groups, and tutoring.

The student services concept is used to describe the divisions or departments which provide services and student support in higher education. Its purpose is to ensure the students growth and development during the academic experience. As per the information of the National Association of Student Personnel Administrators (NASPA, 2102), a U.S.-based student affairs organization, student services originated in Athenian education and universities but in the modern era is generally recognized as an American phenomenon. Delimiting a division of student services professionals is very well defined in some countries, but in others remains an emergent phenomenon. But now it is taken by the educational institutions of different countries.

These support services have contributed to the academic and personal development of students, including academic skills development programs and specific support to students who have difficulty in learning or adapting to university life. Such services contribute to the quality of the academic experience and help students to achieve learning potential. The functioning and organization pattern of student services varies from country to country. In some countries these services are part of university management (integrated into a student services department) in others, such as France, they are outsourced to specialized organizations. In some cases, training is provided through various courses and specific programs but is not mandatory. An intense concern for training professionals in student services is common in Great Britain and the United States, countries in which the diversity of such services is higher. The more universities are able to invest in a wide range of services the better they will be able to meet the needs of student development and learning, managing, among other things, therefore to maintain a high index of student satisfaction and to reduce the level of university dropout rate. Student services are seen as key components of many academic systems. These services cover the following :

- **Study skills unit :** This service gives students advice on everything academic, from tips for taking notes during lectures and researching effectively to referencing correctly and producing high-quality assignments.

- **Peer support and tutoring programs :** Adjusting to student life isn't always easy, so it's worth looking out for peer support and mentoring programs at all universities. Authority should run peer-assisted study sessions, which are designed for students who want to improve their academic performance. Here

students who have previously studied the relevant unit can also guide the new learners.

● **Disability liaison office :** Students with disability can access support services like, note takers, specialised computer programs and other equipment. The disability service can also act as liaison between staff and students to discuss a student's requirements and arrange alterations to assessments, such as using a scribe or computer in an exam.

● **Counselling :** Trained counsellors can give confidential advice to students struggling with their studies, relationships or problems at home. Learners can also make an appointment to have a chat if they are having trouble adjusting to the changing situation and environment.

● **Careers service :** Student services also provide counselling and guidance to students who are unsure of what field they want to enter after completion of the current courses and need some guidance in choosing subjects. Final-year students looking for their first job can also get valuable suggestions. Student services may also provide advice and assistance to students seeking part-time work or work experience during their course. Most institutions offer a combination of group workshops (such as those for resume writing and interview skills) and one-on-one sessions.

● **Financial assistance :** The financial services team at higher education institution can provide advice about budgeting, employment rights, taxation, government allowances and other financial questions or problems. Financial advisers can also assist students to obtain student loans, whether this is through the institution or a bank.

● **Accommodation service :** Housing service staff usually gives information about on- and off-campus accommodation options for students and maintains a database or notice board of available rooms and properties. They may also be able to advise learners about their rights as a tenant and provide required assistance.

● **Student health clinic :** On-campus nurses can provide first-aid treatment and information and referrals on general medical and family planning matters. Students may also be able to make an appointment with a doctor.

● **Libraries and computer labs :** Access to a well-stocked library makes it a lot easier to complete students' assignments and get some quiet study done between classes. Some institutions also house faculty-specific libraries (such as for business or law) or subject-specific libraries (such as for cinema studies). Most facilities also stock plenty of fiction, magazines and even DVDs, and most allow personal internet use.

● **Computer Labs :** Institutions may even offer secure 24-hour computer labs for learners. There can be special computer labs set aside for certain students who require specific software (design students, for instance).

● **Networking training and events :** To increase your employability, it's useful to start building a professional network as soon as possible. Through student support services this assistance can be provided to the learner.

● **Anti-Ragging :** Every student at the time of admission has to sign a declaration that he/she will not indulge in any form of ragging and any other unlawful activities. The University has zero tolerance to ragging and any violation which is a punishable offense. Through the support services environment can be made ragging free.

● **Sexual Harassment Complaint Committee :** Not only to stop raging but support services is also effective to stop sexual harassment. The Universities recognize that sexual harassment is a serious offence and take appropriate steps to prevent and deal firmly with sexual harassment related issues. A Sexual Harassment Complaint Committee is constituted in educational institutions as per the Supreme Court of India guidelines toensure that there is no hostile environment for women at work / study place.

4.3.3 Importance of Student Support Services (SSS)

A strong correlation has been determined between the dynamic nature of learning, consistent academic achievement, and a corresponding need for support services to facilitate the development of intelligences and abilities (Chambers, 2004; Oliaro, 1996; Thorpe, 2002; Yalama & Aydin, 2004). Student Support Services aims to help its academically disadvantaged students make a smooth educational transition into college life and increase the graduation rates of the program participants and institution (Tri-County Technical College Student Support Services Brochure, 2005).

The Student Support Services program seeks to further the academic opportunities of academically disadvantaged students. The program engages these students with a variety of services and activities that will allow them to obtain degrees and be successful in today's global environment. According to Andrepont-Warren (2005), academically disadvantaged students can be just as successful in college as any other student population. Their study confirmed that if students are offered and inquire about advising services, they can be successful in college. These services are very essential for all, especially to the students of following categories.

- **First Generation College Students :**

  The students, who are first generation learner, face some challenging areas in educational institution as their parents and family members cannot make them aware about the educational system before coming to the institution. Not only that in case of urgent need these learners cannot get suitable suggestions and advice from family members as they all are not aware about the education system. In these circumstances student support services played a very crucial role to guide the students who are first generation learner. With the support service the learners can get advice and guidance from the end of support team. Moreover, as the students are coming from poor economic background, they may feel with inferiority complex. Here, need cooperation, cordial attitude, motivation and proper counselling. So, the student support services provide emotional guidance and adjustment to the learners.

- **Ethnic Minorities :**

  In some religious predominant countries, the learners of minority community face some serious issues in their academic institution. Thisexerts negative influence into the proper mindset and confidence of the learner. Consequently, they think about withdrawal from the educational institution. This increases the dropout rate. Student support services are highly needed so that they cannot feel alone and isolated from the other. Different boost up services can rejuvenate and buildup confidence and morality. These services give encouragement to the learner for taking several initiatives.

- **Low Socioeconomic Status :**

  Another population of students that the Student Support Services (SSS)

program serves is students from a low socioeconomic background. According to King (2005), students of lower socioeconomic status are disadvantaged in the competition for academic rewards because their social environment may not provide the types of cultural capital required for success in educational institution, such as academic attention, certain linguistic patterns, behavioral traits, orientation towards schooling, high expectations, or encouragement of college aspirations. Individuals from low socioeconomic backgrounds are often less likely to attend college and those who do attend college are less likely to graduate than their higher income peers (King, 2005).

4.3.4 The role of the student support services :

Student support and services contribute to the quality of their learning experience and their academic success. Studies show that the most important factors in education quality assurance are: quality of teaching / learning and service systems and support for students (Hill et al, 2003). Therefore, the importance of support activities for the students is obvious but also presents the management of services with difficulties due to the increasing number of students and their needs. They help to decrease the university dropout rate and increase the diversity of students' experience (Tinto, 1993). Without effective student services, students that do not have an academic, emotional and social connection with the institution at cultural level are more likely to give up their studies.

An important role of student services is to prepare students for active participation in society. Along with teachers and non-governmental organizations they contribute to increased learning opportunities and community involvement by organizing or promoting internships, experiential units or short-term experiences, integrated into the curricula (UNESCO, 2002). These services take a major role in encouraging and establishing open methods of making decisions and rationally resolving conflicts. The manner in which the policies are created, with which the decisions are made and controversial topics are addressed, is as important as the results. The institution gives students a series of values by the way of addressing policies, decisions and problems.

Among the services available to students, the most important are those which meet their academic, personal development and emotional needs (McInnis, 2004). Studies reveal that in the institutions which encourage active student participation,

the implementation of reforms is more effective than in the ones where the student participation involvement has a low level. UNESCO (2009) states that while student service functionality differs from one institution to another, certain expectations and responsibilities are common to most university campuses. Some address the institution as a whole (student services-academic institution), others are specific to students needs and interests (student services-students). According to the UNESCO manual some student support services are-

- Providing support and explain the values, mission and policies of the institution

- Providing opportunities to participates in leadership and take responsible decisions

- Evaluating the social experiences of students in order to improve programs efficiency

- Establishing policies and programs that contribute to campus safety

- Supporting the institution's values by developing and imposing student's standards

- Supporting the student's participation in institutional governance

- Providing essential services such as admissions, registration, counselling, financial aid, health, boarding and so on, in accordance with the mission and objectives of the institution.

- Representing the institutional resource to work with students individually or in groups.

- Encouraging student-university / college interaction through programs and activities

- Supporting and contributing to the creation of ethnic and cultural diversity

- Inspiring to take a leadership role in crisis situations

- Establishing and maintaining effective working relationships with the local community on relationship with students

- Assisting students in transition to university life

● Helping students to explore and clarify their values

● Encouraging in development of relationships of friendship and a sense of belonging to a campus community

● Assisting in identifying financial aid resources in further education

● Creating opportunities to expand the cultural and aesthetic horizons of students

● Helping to learn how to solve personal and group conflicts

● Providing special programs and services for students who have learning difficulties

● Contributing to the understanding and appreciation of ethnic differences, racial or otherwise.

● Creating opportunities for leadership development

● Establishing programs that encourage a healthy lifestyle and reduces misbehaviour

● Providing opportunities for recreation and leisure

● Providing counselling and career guidance, helping to clarify professional goals, exploring options for further study or employment.

The purpose of the Student Support Services Program (SSS) is to assist disadvantaged low-income college students, first-generation college students, and college students with disabilities at the postsecondary level. There are several services which be provided under this umbrella terminology. Few services are essential part of it, whereas some services can be included for increased assistance and support. These are presented below-

Compulsory services under Student Support Services project :

● Academic tutoring, directly or through other services provided by the institution, to enable students to complete post-secondary courses, which may include instruction in reading, writing, study skills, mathematics, science, and other subjects.

- Advice and assistance in postsecondary course selection.

- Providing information on both the full range of student financial aid programs and benefits and resources for locating public and private scholarships; and assistance in completing financial aid applications,

- Education or counselling services designed to improve the financial and economic literacy of students, including financial planning for postsecondary education.

Optional services under Student Support Services project :

- Individualized counselling for personal, career, and academic matters provided by assigned counselors.

- Information, activities, and instruction designed to acquaint students participating in the project with the range of career options available to the students.

- Exposure to cultural events and academic programs not usually available to disadvantaged students.

- Mentoring programs involving faculty or higher-class students, or a combination thereof.

- Programs and activities specially designed for students who are limited English proficient, students from groups that are traditionally underrepresented in postsecondary education, students who are individuals with disabilities or other disconnected students.

According to Haugen (1999), to be effective student services require integrated solutions. Here he pointed out the following areas :

- ❖ Strategies must be based on executive vision, commitment, planning and performance. This requires reorganization and a rethinking of institutional culture and functioning.

- ❖ Possibilities of modern technology should be utilised in a consistent manner with the strategies, mentioned above, and implemented in a coordinated, targeted, practical and cost.

4.4 Printed Self-Learning Materials and Study Skill of Learners

4.4.1 Printed Self-Learning Materials

The original form of distance learning was correspondence courses, in which printed self-learning materials (SLM) were mailed to students. Even though there are numerous new options for distance learning, printed self-learning materials (SLM) remain a significant component of most courses. Literature defines self-learning materials (SLM) as "any learning resource that can be used by a learner without the physical presence of a teacher". Printed SLM consists of all written material, excluding non-print resources, which should convey planned course information.

The SLM involves the learner actively through various experience-based activities and assignments. The learner gets the clear information about the structure of the programme and the course. The content of the SLM is developed with personal system of writing method which creates a nature of interactivity in the SLM. The SLM encourages the learner to apply new knowledge and skills. Here learning objectives and outcomes are defined. The content is divided into small sections (blocks) and sub-sections (units & sub-units) for effective learning. Activities are included in each unit of the SLM.

Self-Learning Material (SLM) is developed with the approach of self-explanatory, self-contained, self-directed, self - motivating and self-evaluating. Proper planning has been done prior to development of the learning material. During the development of SLM, backgrounds of learner and learning needs, learning experiences, support and preparation in adapting to flexible learning were considered. That means Self-learning materials are designed where the learner is free to choose what to learn, how to learn, when to learn and where to learn. This flexibility is an importance characteristic in open learning process. The major ingredients considered while developing the learning material by authors are :

● learning objectives,

● assessment of prior knowledge,

● learning activities,

● feedback of learning activities,

- examples and illustrations,

- self-assessment tests,

- Summaries and key points.

- level of literacy

- language proficiency,

- age group,

- information communication technology skills,

- aim of study,

- personal background and home situation,

- prior knowledge, prior skills,

- learning situations

The learning material is developed with the constructivist approach and laid emphasis on real world tasks, learner's choice of tasks or situations, case studies, collaborative learning tasks, and self-evaluation.

Thesemay serve as the primary source of instruction, or they may be supplemental. As a primary source, distance students might use SLM and read various units on a specific timetable. Other technologies, such as Goggle Meet, Zoom or other virtual platform, could then be used to ask questions or send assignments back to the teacher. As a supplement to instruction, printed self-learning materials (SLM) may take the form of worksheets or study guides that are used in conjunction with video or voice technologies. It is important to note that the supplemental print materials may be disseminated via regular mail or over the Internet.

4.4.1.1 Sources used to prepare printed SLM :

There are mainly three sources in writing self-learning materials (SLM).These are primary sources, secondary sources and tertiary sources. Though there are three sources available, it depends on the writer of SLM to use which sources and to what extent. Now we will discuss on these three different sources.

➤ **Primary sources :**

Primary sources used to prepare SLMs, include documents created by a

witness to or participant in an event. These are first hand testimony or evidence created during the collection of documents. Primary sources are the evidence of original records or objects created by participants or observers at the time of events occurred or even well after events. Primary sources include letters, manuscripts, diaries, journals, newspapers, maps, speeches, interviews, documents produced by government agencies, photographs, audio or video recordings, born-digital items, research data, and objects. While there are many digital primary resources are also available. These sources serve as the raw materials for the teachers use to interpret and analyze the data. Primary sources are original sources of information that have not yet been filtered through analysis, examination or interpretation. The collection and analysis of primary sources is central to the preparation of SLM.

➤ **Secondary sources :**

Secondary sources include books and articles about a topic. They may include lists of sources, i.e. bibliographies that may lead to other primary or secondary sources. Databases help here to identify articles in scholarly journals or books on a particular topic. Secondary sources value, discuss or comment on the primary source, or on sources analogous to the primary source that is being analysed. Secondary sources are research articles, biographies, monographs. These are very important sources forwriting SMLs.

➤ **Tertiary sources :**

A tertiary source is a source that summarises or compiles facts and knowledge produced by someone else. Tertiary sources are often some kinds of assemblage of primary and secondary sources. They are convenient for quick access to summarised facts, but not all sources that belong to this category are considered suitable for scholarly writing. For instance, it is usually not acceptable to use compilations of facts instead of reading the original sources. Therefore, students writing essays are recommended to consult their teachers on the suitability of using tertiary sources in their writing. Sources that would be regarded as tertiary sources include: textbooks, study guides, encyclopaedias and wikis, indexes and other classification systems.

4.4.1.2 Advantages and disadvantages of printed SLMs :

Printed self-learning materials have several advantages which make these very effective to the learners. At the same time, it also suffers with different limitations and disadvantages. Here we will try to analyse some of these advantages and limitations of printed self-learning materials.

Advantages of printed self-learning materials (SLM) :

Printed self-learning materials have several advantages for students. It is extremely portable, cost effective, readily available, and comfortable to use. Students don't need special equipment to use it, and with adequate light, print materials can be used anywhere at any time. Students can review the materials at their own speed. These advantages are presented point wise below.

● **Extremely portable :**

Print materials can be used in any location. There are also ease and comfort in sending these materials to the learners' location or learning support centre (LCS). Learners can also carry it anywhere with him and can read it whenever they will get free time. In this respect printed self-learning materials have great usability to the learners. As most of the students in open and distance learning mode are engaged with different household activities or to their profession, so time to devote for their study is very limited. In this limited time they need to prepare themselves for the examination. In this issue printed self-learning materials give them wide opportunity to use it in their convenient time.

● **High comfort level :**

Most students feel very comfortable using print materials to learn. In open and distance learning learners are getting enrolled from different remote areas wherefrom they cannot get any opportunity to use electronic media and internet facilities. Many of them are not able to utilise technology in their study. Many students are there who are residing in rural areas and have very poor economic condition. So, they cannot afford electrical and technical gadgets through which they can continue their study. In this issue printed self-learning material can give wide accessibility to the learners in preparing themselves for the examination.

● **Cost effective :**

Print materials can be created and duplicated with little expense. In most of the universities printed study materials are distributed among the learners without taking any extra charge. These are being given as a complimentary to the learners. Since SLMs are centrally created by the Universities so effective measures are taken for the cost reduction in production.

● **Readily available :**

Self-learning materials once prepared are continued for several years until the reformation of the curriculum. For this reason, these are readily available to the university as well as to the learners. Students can get SLMs just after the admission to a particular course. They need not to wait for a long to be prepared for the examination. Many distance learning courses can take advantage of existing textbooks, thus saving the time and expense of creating custom materials.

Disadvantages of printed self-learning materials (SLM)

Despite of having several advantages, printed self-learning materials also have some disadvantages. Text materials are static, and less appropriate for teaching languages and visual concepts. If oneuses exclusively print materials, he may find it difficult to interact with students and explain some concepts such as those involving motion (i.e., blood circulation system, respiratory system, digestive system, work flow system, processing, etc.). It may take days or weeks to distribute printed matter, and it may be difficult to update the materials once the class has started. Also, students with visual impairments may need the material in another format (i.e., in Braille). Some of these advantages are presented below.

● **No interactions :** Print materials do not generally provide built-in interaction facilities to the learners. Students here do not get direct opportunity to interact to their teachers. Additional technologies, such as e-mail, must be supplemented.

● **No audio/visual elements :** Print materials are static and are not appropriate for teaching languages and visual concepts.

● **Require reading skills :** If the learners do not have required language, then printed self-learningmaterials is not appropriate to them.

● **Time delay :** It may take days or weeks for printed matter to travel between student and distribution centre of Universities.

4.4.1.3 Guidelines for incorporating printed SLM :

Printed self-learning material is very effective and acceptable to the learners. Hence, proper initiatives to be taken for preparation and distribution of these resources among the learners. Here some guidelines are presented which should be maintained to facilitate learners in open and distance mode of education.

● **Ability Judgement :** Learners' reading and language ability must be considered when selecting materials.

● **Distribution of materials well in advance :** Although the mail system is generally quite reliable, issues may arise if the print materials are not distributed well enough in advance.

● **Inclusion of clear directions :** Students need to know exactly which activities and home assignments they have to perform after going through the self-learning material (SLMs).

● **Specific timeline :** units in self-learning material (SLMs) must be of specific size so that learners can complete it within the specified time limit.

4.4.2 Study skill of learners :

According to Wikipedia Study skills are an array of skills which tackle the process of organizing and taking in new information, retaining information, or dealing with assessments. They include mnemonics, which aid the retention of lists of information; effective reading; concentration techniques; and efficient note taking. Thereare several importance of study skill in the life of learners. These are as follows :

● Learning study skills will not only help learners in university, but also help them succeed in life.

● Good study skills can increase their confidence, competence, and self-esteem. These can also reduce anxiety about tests and deadlines.

● By developing effective study skills, learners may be able to cut down on the numbers of hours spend studying, leaving more time for other things in your life.

- Good study skills can improve their ability to learn and retain knowledge.

- Students who use effective study skills may feel their work and effort is more worthwhile.

Different study skills :

University of Lynchburg has identified some of the study skills must be acquired and used by the learners to get success in the study. These are presented below.

- Daily to-do list or weekly least of coming activities must be prepared.

- Proper planning should be chalked out depending on the calendar.

- All the activities and assignments must be completed before the specified time limit.

- Learners should try to reward themselves after successful completion of their activities.

- Learner should prepare specific plan for the leisure time so that it cannot hinder the study time of them.

- They should first of all go to the entire syllabus and make a proper planning before going to the module or text.

- They should be realistic and they should prioritise their activities depending on their urgency.

- Study or class work hours must be set aside in each day.

- If it is possible then learners should try to join in a study group or a group of peers where they can go to the collaborative learning.

- Learners should be attentive in time of taking notes from the board of classroom or with the dictation from the professor.

- They should try to paraphrase professor words.

- After completion of the class learner should review their notes in every time.

- For fast note taking learners can make their own abbreviation.

- Learners should jot down all the ideas that the professor repeat.

- They should be attentive to the verbal cues given by the teacher like "now it is important."

- Learners must write down all the examples given by the professor or teacher so that through these examples they can clarify their ideas.

- Learner should try to write their notes after completion of the class in a fresh way.

- They should read the content for more than once.

- Learner should identify the important areas and that should be highlighted.

- Learner should try to review the principal concept after completion of the reading.

- They should try to understand the captions and figures.

- Lana should meet a glossary of new and specified terms.

- Learner should pay special attention to the key concept in each chapter.

- Cramming is not the most effective way to study. So they should start to study weeks in advance, then they will have more time to reach their academic goals. Learners will also have time to ask questions about everything they do not fully understand.

- Learners should find an area where they can spread out your notes, your computer, and your books. They should try to find somewhere that is well-lit, comfortable, and where there is little distraction. There are good options for study spaces in all the libraries across campus.

- Paraphrasing is a great technique to help them really understand material. They should try reading over a page or paragraph of information, covering it up, and then repeating the information in their own words.

- Learners should find someone who does not understand the material and teach it to them. Doing this can help them understand concepts in less time than studying by yourself.

- They should start with the most challenging sections and move on from there. Here only a little time to be spent in reviewing the material well known to them.

- Learners should give themselves time in the morning to go through your regular routine, eat a good breakfast, and plan their study strategy for the day.

- Exams are among the most important and stressful parts of university life. Exam anxiety is a common and normal reaction. It can become problematic when it is intense, persists over time, or interferes with academic performance. So proper planning to be taken beforehand.

- Before appearing for the test or examination the learner must know the test format properly.

- They should try hard to get all of the questions answered.

- They should try to verbalize their knowledge and predispositions into the proper writings.

- They should try to identify the problem areas of the test where they can express or show their special efficiencies.

- It is recommended to quit studying at least half an hour prior to the test.

- They should read each question slowly, twice. They need to underline or highlight key words and phrases. It is recommended to reword the question in a way that makes sense to them.

- If they cannot answer a question, a deep breath to be taken before going to the next one and return to the questions they are unsure about later.

- They should get an adequate amount of sleep the night before.

- They should use strategies to ease tension and anxiety if they start becoming too much.

- They should not betheir own worst enemy. They should not talk to themselves in a way that discourages them or makes them doubtful on their abilities.

4.5 Non-Print Instructional Materials and Role of Learners

4.5.1 Non-print instructional material :

Non-print instructional materials are rapidly becoming important information and learning resource materials for the learners in 21st century. Non-print materials

differ from printed materials in several ways. One of the most important differences is that a machine must serve as mediator between the information and the user of non-print materials. Wall (1985) has provided a threefold definition for defining non-print material. According to him the non-print material should satisfy the following aspects :

● The item must appeal to the sight and/or hearing of the library user.

● Under normal conditions, the item must require additional equipment for usage.

● The printed word must not represent the essence of the medium.

These three criteria set the parameter for distinguishing non-print material in a library collection. On the basis of the above definition the materials that are grouped under non-print material will include: film strips, slides, audio tapes, video tapes, transparencies, etc. Some of these are discussed below.

❖ **Film Strips :**

According to Wikipedia the filmstrip is a form of still image instructional multimedia, commonly used by educators. Filmstrip is a continuous strip of 35 mm or 16mm or 8mm film consisting of individual frames or pictures arranged in sequence, usually with exploratory titles. From the 1940s to 1980s, filmstrips provided an easy and inexpensive alternative to 16 mm educational films, requiring very little storage space and being very quick to rewind for the next use. Filmstrips were large and durable, and rarely needed splicing. They are still being used in some areas. Filmstrips can be prepared either by employing photographic methods or by drawing picture by hand on the film itself. Here the materials are presented in correct sequence. The teacher only needs to tap the right type of strip for his teaching purpose. A large number of subjects come within the range of filmstrips. Film strip can be projected on the screen or wall or paper screen as the convenience and the teaching situation demands. It provides a logical sequence to the teaching procedure and the individual picture on the strip can be kept before the student for a length of time. It also takes up little space and can be easily stored. It is easy to make and convenient to handle and carry. It is an economical visual material and can be used afterward. Some of its advantages and limitations are presented here.

Advantages :

Filmstrip can play a vital role in classroom communication. It has made the communication to happen very easily and also it has brought people closer. In many areas learners can get educated through this media. Some of the advantages are listed as follows :

- It is easily accessible to the learners and can be distributed to the learners after completion of instruction by the teacher.

- It can be used faster than the ordinary print media.

- Through filmstrip learners can see, read and even listen if sound is incorporated there with the use of multimedia.

- It serves both the literates and illiterate people as lots of nonverbal contents are presented here.

- It provides wide range of information, entertainment and knowledge to the learners and teachers.

- It encourages foractive participationof the learners.

- Filmstrip inspirein individual study with self-pacing.

Disadvantages :

- Limited volume of data can be presented through a particular series of strips.

- The initial cost of development of film strips is relatively high.

- All types of data cannot be delivered through this media.

- Its successful construction and application is dependent on specified skills of the teacher.

- New slides or strips can be added or deleted easily.

❖ **Slides :**

Slides frequently serve as the foundation for lectures and lesson plans. They can either complement an instructor's verbal message. The secondary role of slides is to capture and hold attention. With the goal of optimizing memorization, it is vital to maintain an optimal listening level. But slides are more often created to carry the notes of the speaker. The advantage of using slides is that -

- Students can spend a small amount of their time on writing (additional notes) and most of their time thinking about the content.

- It allows learners to connect and understand the information they hear and to ask interesting questions.

- It conveys visual ideas, graphs, tables, etc. and makes learning effective and interesting.

- It helps to summarize facts or readings.

- Slides can present questions for discussion.

Principles of preparation :

Berk (2012) describes ten evidence-based practices for slide use in the classroom. These points can provide a visual cohesion necessary to support a strong presentation.

- Background should be simple templates, themes, or solid colours

- Clear and simple fonts to be chosen.

- High-contrast colours, with "cool-coloured" backgrounds such as greens and blues to be selected.

- Short, full-sentence headings written as assertions to be used.

- Text should be kept short.

- Important points will be highlighted with bold, italics, and underline

- Active learning strategies (i.e., multiple choice questions) should be thoroughly incorporated.

- High-quality, dynamic images to be pasted.

- Words to be used sparingly to provide context.

- If animations help in highlighting a process or a concept then it will be used across slides.

- "Fly-in" bullets to be avoided if they are distracting.

- Embed sound clips and music to be used if they support discipline-specific learning outcomes

- Edited clips can be embedded into slideshow

- Avoid leaving the slideshow to scroll to the selected video

❖ **Cine films :**

Wikipedia states that Cine film is the term commonly used in the UK to refer to the 8 mm, Super 8, 9.5 mm, and 16 mm motion picture film formats used for home movies. Cine film literally means "moving" film; deriving from the Greek "kine" for motion; it also has roots in the Anglo-French word cinematograph, meaning moving picture.

Cine films have sequence of images arranged vertically. When these images are projected on the screen at an appropriate speed, they give the appearance of a continuous movement. Cine films are usually stored on open reels. Cine films are great resource for visual learners because they enable them to understand concepts without the barriers that hinder learning. Just like books, movies allow students insight into the lives of different characters, how their perspective differs and how they handle certain situations.

Using movies or Cine film in teaching is an effective way to reach people's affective domain, promote reflective attitudes. Teaching with movies is effective to disclose emotions, allows questions, and drives out dilemmas from the mend of both learner and teacher.

Advantages :

There are a variety of benefits that students can derive through watching educational Cine film. Some of them are as highlighted below :

- Cine films are highly effective in extending education beyond classroom lectures and textbooks. Movies can, at times, assist students in getting the feel of a real-world event.

- Cine films are useful as an interest-building or pre-learning exercise. Use of cine films within a lesson assists in sustaining students' interest and at the same time, offering a break from the routine tasks.

- Using cine films in class is a useful means for catering to different learning approaches. Disseminating information in varied ways could be the key to assisting students in understanding a given subject.

- Cine films might enable a tutor to offer more insight into a topic. It will further enhance a student's comprehension of the subject. As the learners are closely attached to the films, they can get insight on the relevant topic.

- On days when learners feel fatigued and cannot focus adequately, a cine films can come in handy. In the everyday learning process, there are times when pupils are excited about an upcoming event or holiday instead of the topic at hand, and thencine film would be complementary to the day's topic.

Disadvantages :

Not everything about cine films is suitable for students. There are some disadvantages of using cine film in education. These are as follows :

- Lengthy cine films consume much time which may not be available in all the occasions.

- It is less informative compared to lectures. As only few things can be represented through the cine films so learners may not get all required information from the cine films.

- Cine films are not always self-explanatory. Playing a film without placing it in its appropriate context could prove to be futile. The tutor must, therefore, give constant feedback and explanations throughout the film.

- Ifcine films should form part of the curriculum, it should be carefully chosen. So there is need of careful selection of the contents.

❖ **Microforms :**

Microforms is a generic term indicating any form of micro record, on flat or roll film, paper or other material. According to Alan Horder, the word microform has been adopted in recent years as a generic term to embrace the wide variety of forms in which microfilms (and micro texts on other types of bases) now proliferate. Although the word microform is comparatively new, the photographic recording of images at a greatly reduced scale is by no means a recent invention, but as old as photography itself. Actually, Microforms are scaled-down reproductions of documents, typically either films or paper, made for the purposes of transmission, storage, reading, and printing.

Advantages :

It helps to cost savings in terms of reproduction & distribution. It is compact, with far smaller storage costs than paper documents. Normally 98 document size pages fit on one fiche, reducing to about 0.25% original material. When compared to filing paper, microforms can reduce space storage requirements by up to 95%. Thus, it saves up to 95% space. It is cheaper to distribute than paper copy. It is analog and information can be recovered from the medium with a magnifying glass.

Disadvantages :

The disadvantages are the retrieval rate is slow, it's very hard to update, and only one person at a time can see the images covered by the roll of film.

❖ **Audio tape :**

Audio tape is a tape recording of sound. There is a thin magnetic strip, usually made of plastic, on which sound is recorded. It is a storing of analog sound for later playback on a tape player. The obvious advantage of audio-recording is that it frees up the learners from note-taking thereby allowing them to concentrate on the leaning. It has several benefits to the teachers and learners. Some of these are presented below.

● A classroom audio tape can enhance a speaker's pronunciation, tone and inflection, which enables the students to better comprehend.

● It is very effective in increased classroom participation.

● Enhanced audio can cause less stress in the classroom and fewer discipline issues.

● Audio tape is helpful in repeated listening of the class by the students and thus can improve academic success.

❖ **Video tape :**

Video tape is a magnetic tape for recording and reproducing visual images and sound. The magnetic tape is used for making video tape with recording of visual and soundmode. It helps in development of individual and group. It can leads to better understanding than ordinary print materials. Since dual mode (auditory and Visual) is used, the learners feel interested in content.

When using video clips in the classroom, shorter clips (around five to 10 minutes) help students learn the information without being overloaded or losing their focus. Longer videos are also effective -however, their total length should typically be limited depending on the feasibility.

Video tape is very effective to engage viewers with more complex themes, and to facilitate further engagement with the content. A teacher must ensure that a student is authorized to use the video and he or she has the right equipment to use during class. There is a massive amount of content for teachers to choose from. So, they should take a bit of time to view several videos to find the right one.

Besides performing as complementary to print material, video tape has also several benefits in teaching learning process. These are as follows.

- Visual stimulation encourages student interaction with content or a concept. It also creates a bigger memory imprint in a student's mind, making teaching with videos perfect for information retention.

- Using classroom videos is effective when accompanied by the right equipment. This encourages teachers to use the videos on different platforms, depending on the video quality and type of equipment available.

- The online course market is booming. More institutions are capitalizing on this trend by using videos available online. Not only does this prove to reach more students, it also increases the overall capacity of the institution.

- Teachers can use videos as an introduction to a concept. A good video is a great hook to get students interested. For older students, using videos will greatly-prepare them for intense study.

- The use of videos stimulates the cognitive processes of thinking, reasoning, problem-solving, decision-making, and creating. Videos take the student beyond recall-and-relate activities. Use videos to engage viewers with more complex themes, and to facilitate further engagement with the content.

- When a teacher uses videos in their classroom, they briefly step out their own role and adopt one of a facilitator. This provides a teacher with better insights regarding their students, their learning styles and capacities, and what stimulates them.

❖ **Plastic Materials :**

Along with the above discussed non-print materials, plastic materials also plays very significant role as a non-print media. There are mainly three types of plastic materials. These are -

1. **Transparent plastic :**

   In the overhead projector, the source of the image is a page-sized sheet of transparent plastic film (also known as 'foils' or 'transparencies') with the image to be projected either printed or hand-written/drawn. They were widely used in education and business before the advent of video projectors. Transparency sheets are typically acetate or sometimes polyester (Mylar), and they are found in many common document dimensions. They are printed on through an electrostatic toner process (e.g. laser printer or Xerox copier). Plastic transparency sheets contain no cellulose fibres, which means that they are not technically paper.

2. **Vinyl Disc :**

   Vinyl discs (gramophone record or only album) areelectronic format for recording and playing audio. Vinyl discs are marketed in 17.8 cm, 25.4 cm and 30.5 cm diameter sizes. The disc has a central hole which fits with the spindle of the turn-table. These discs are played through Vinyl record players which are electromagnetic devices that change sound vibrations into electrical signals. When a record spins, it creates sound vibrations that get converted into electrical signals. Electric amps vibrate and feed the resulting sound into speakers, which amplify it and make it louder.

3. **Optical storage system :**

   According to Britannica, Optical storage is electronic storage medium that uses low-power laser beams to record and retrieve digital (binary) data. Optical storage is any storage type in which data is written and read with a laser. Typically, data is written to optical media, such as compact discs (CDs) and DVDs. Optical media is more durable than tape, HDDs and flash drives and less vulnerable to environmental conditions. However, it tends to be slower than typical HDD speeds and offers lower storage

capacities. According to the Optical Storage Technology Association (OSTA), current optical speeds are approaching those of HDDs.The current standard optical format is Blu-ray, which uses a blue laser to dramatically increase capacities.

4.5.2 Role of learners :

Learners have a diversified role in non-print instructional material. Actually, the effectiveness of these innovative materials in 21st century depends on the efficient role of the learners. So, to play desired role in this area, learners must possess some basic qualities. These are as follows -

- **Technical or digital efficiency** : Learners in the digital era must have sound technological knowledge. They should be tech-savvy to attain their online education through different non- print educational media.

- **Dynamic** : Learners must be dynamic, not static. They should possess innovative thinking and try to explore new ways of learning always. They should not be contended with their existing knowledge.

- **Independent** : An independent learner takes responsibility for their own learning. They are self-motivated and accept that frustration in the present is worthwhile to achieve future success.

- **Spontaneous learner** : They are intentional with their study and choose the right methods to fit their course. They manage their time and are dedicated to self-improvement. Ultimately, an active learner understands that they are responsible for their own education

- **Creative thinker** : Creative thinking can be stimulated both by an unstructured process such as brainstorming and by a structured process such as lateral thinking. A Creative learner has the ability to devise new ways to carry out tasks, solve problems, and meet challenges.

- **Problem solver** : Problem solving is the ability to handle difficult or unexpected situations in the classroom as well as complex study challenges. Learners as problem solvers make the impossible possible because they have increased confidence

● **Social learners :** They know that there is an abundance of information just waiting for them on the internet, so they won't waste their time with an online course that doesn't cater to their needs.

● **Empowered learners :** They are being motivated to perform tasks, and more specifically an empowered learner finds the tasks meaningful and feels competent to perform them.

4.6 Summary

In 21st century we are giving utmost importance on learner in education system. So, it is called Lerner centric or students centric or child centric education. Consequently, all the educational institutions and initiatives must provide some support services to their students. This will enhance the effectiveness of learning. Print material occupies a significant role in the teaching learning process. Learners can get lots of information through these materials. But in 21st century due to technological explosion lots of other non-print materials have been evolved. They are also very effective in open and distance learning. In this unit we have discussed on concept and scope of Student Support Services in Open and Distance Education. We have also analysed the Macro and Micro issues related to Open and Distance. Then we put our focus on Printed Self-Learning Material and Study Skill of Learners. At last, we explained Non-Print Instructional Materials and analysed the role of Learners in Non-Print Instructional Materials.

4.7 Self-Assessment Questions

● Discuss on concept of Student Support Services.

● Explain the scope of Student Support Services.

● Analyse the Macro and Micro issues related to Open and Distance.

● Discuss on Printed Self-Learning Material.

● Explain Study Skill of Learners.

● Explain Non-Print Instructional Materials.

● Analyse the role of Learners in Non-Print Instructional Materials.

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Unit - 5 ❑ Principles of Text Design for Open & Distance Education

Structure

5.6   Summary

5.7   Self-Assessment Questions

5.8   References

5.1 Objectives

After the completion of the course, the learners are expected to :

● Identify Factors related to Course Design in Open and Distance Education.

● Know theories of Learning and Communication;

● Understand the principles of Text Design: Modular Format-Objectives, Blocks, Units and Content;

● Understand the Process of Producing Text: Text Development, Editing and Quality Maintenance.

5.2 Introduction

The success and effectiveness of distance education systems largely depends on the study materials and texts. Writing for distance education is a more challenging task and quite different from that face-to-face teaching or writing for a book or a journal. Self-learning materials can perform the functions of a live teacher. It must be prepared in such a way that a distance learner may have all the learning experiences which a student may have in a classroom situation. Texts include all the material prepared to stimulate independent study/learning.

The learners in distance education have less contact with either the institution or the tutor, and depend heavily on these specially prepared teaching materials. Revision of texts or Self-learning materials is as important as the development of the materials for the first time because of two reasons. Every distance teaching course needs to be updated from time to time to incorporate the developments in the field of study or discipline. The other reason is to review the performance of the courses in the light of the feedback that the authorities get from the students, tutors, counselors, experts and others in order to make the course more relevant, learner

friendly and academically rich. So, in this unit different factor, principle and process of designing texts or Self-learning materials are discussed.

5.3 Factors related to Course Design in Open and Distance Education : Theories of Learning and Communication

Designing self-instructional material is not so easy task as it appears. There are different factors involved in these literary activities. There are few learning approaches and theories, communication theories which are functioning as deciding factor to the writers, authors and designers in preparing effective self-instructional materials. Course designers must be well aware about these theories and approaches. They should also try to collect more and more information on individual characteristics of the learners, their needs and their learning abilities. Course designers should have enough knowledge about the ways to present materials. They must be able in systematic organisation of the printed course material and other non-print materials. Now some determining factors are presented below.

5.3.1 Approaches to learning :

Approaches to learning are closely related to the learning styles, leaning conditions and leaning process of learners. Actually it explains the conditions which are conducive to learning and also the conditions detrimental to learning, so that the teacher and planer can get clear view in designing the curriculum and content materials. In simple words Approaches to Learning focuses on *how* children learn. It refers to the skills and behaviours that children use to engage in learning. Approaches to learning are concerned mainly with the modus operandi, procedure, style or technique of learning. These approaches apply to all learning tasks. These also consider cognitive, emotional and behavioural aspects, initiative, curiosity, creativity and self-regulation of the learners. A course developer should be aware of the approaches to learning while designing and developing self-learning materials. It helps him to identify whether materials require memorisation or understanding or intended to develop skills and then to work with the materials appropriately.

Approaches to learning are broadly classified in to two types, viz,

A. Deep Approach and

B. Surface Approach.

A learner who adopts a deep approach-has .the following characteristics :

1. Interested in the academic task and derives enjoyment from carrying it out;

2. Searches for the meaning inherent in the task;

3. Personalises the task, making it meaningful to his/her experience and to the real world;

4. Integrates aspects or parts of the task into a whole (for example, relates evidence to a conclusion);

5. Sees relationships between content and previous knowledge;

6. Tries to understand the; theories of the task;

7. Forms hypotheses.

In other words, if learners want to attain greater understanding, they will adopt a deep level strategy. On the other hand, when a learner adopts a surface approach, he reflects the following characteristics,

1. Observes the task as a demand to be met, or as a necessary imposition if some other goal is to be reached;

2. Sees the different aspects or parts of the task as unrelated to other tasks;

3. Considers the time required to complete the task without searching for the meaning inherent in the task;

4. Relies on memorisation, ties to reproduce the surface aspects of the task.

In other words, if a learner wants to display symptoms of having learned something, she will adopt a surface level approach,;

Besides-the above-mentioned approaches, relevant learning theories and communication Heories can also play a significant role in designing self-learning or self-instructional materials. Now various theories of learning and communication are presented below.

5.3.2 Theories of learning :

During the early part of the twentieth century, a number of psychologists became increasingly interested in turning psychology into a more scientific endeavour. To be more scientific, they argued, psychology needed to study only those things that could be measured and quantified. Consequently, a number of different learning theories emerged to explain how and why people behave the way that they do. The learning theories of development are cantered on the environmental influences on the learning process. Such environmental influences include associations, reinforcements, punishments, and observations. Aspiring teachers need to be educated to be prepared for teaching students every day, and an important part of teacher education is to understand different ways of learning. There are many solidified learning theories that teachers can learn from as they prepare to help students in the classroom. Teachers who understand learning theories can use different techniques in their classrooms to cater to different kinds of learning. This can help all students find success in learning.

There are five main educational learning theories that educators can utilize to enhance learners learning efficiencies and to provide better learning environments for all students. These are presented briefly.

● **Cognitive Learning Theory**

Cognitive learning theory looks at the way people think. Mental processes are an important part in understanding how we learn. The cognitive theory understands that learners can be influenced by both internal and external elements.

Plato and Descartes are two of the first philosophers that focused on cognition and how we as human beings think. Many other researchers looked deeper into the idea of how we think. Jean Piaget is a highly important contributor in the field of cognitive psychology, and his work focuses on environments and internal structures and how they impact learning.

Cognitive theory has developed over time, breaking off into sub-theories that focus on unique elements of learning and understanding. At the most basic level, the cognitive theory suggests that internal thoughts and external forces are both an important part of the cognitive process. And as students understand how their

thinking impacts their learning and behaviour, they are able to have more control over it.

Cognitive learning theory impacts students because their understanding of their thought process can help them learn. Teachers can give students opportunities to ask questions. These strategies can help students understand how their thought process works, and utilize this knowledge to construct better learning opportunities.

● **Behaviouristic Learning Theory**

Behaviourism learning theory puts focus on how a student behaves and their interaction with their environment. It suggests that behaviours are influenced and learned from external forces rather than internal forces.

Psychologists have been developing the idea of behaviourism since the 19th century. Behavioural learning theory is the basis for psychology that can be observed and quantified. Positive reinforcement is a popular element of behaviourism. Classical conditioning observed in Pavlov's experiments suggests that behaviours are directly motivated by the reward. Renowned psychologist B.F.Skinner also has significant contribution in the field of behaviourism. In his theory he stressed on reinforcement to increase learners' achievement.

Teachers in a classroom can utilize positive reinforcement to help students better learn a concept. Students who receive positive reinforcement are more likely to retain information and to perform ion the desired direction.

● **Constructivist Learning Theory**

Constructivism learning theory is based on the idea that students actually create their own learning based on their previous experiences. Students take what they're being taught and add it to their previous knowledge and experiences, creating a reality that's unique to them. This learning theory focuses on learning as an active process, which is personal and individual for each student.

Teachers can utilize constructivism as each student brings his own past to the classroom every day. Teachers in constructivist classrooms act more as a guide to help students in creating their own learning and understanding. Thus, learner can create their own process and reality based on their own past. This is very crucial theory of learning.

● **Humanistic Learning Theory**

Humanism is very closely related to constructivism. Humanism directly focuses on the idea of self-actualization. Everyone functions under a hierarchy of needs. Self-actualization is at the top of the hierarchy of needs. It is the brief moments where a person feels all of his needs are met and that he is the best possible version of himself. Everyone is striving for this, and learning environments can either move toward meeting needs or away from meeting needs.

So, teachers must create classroom environments that help students get closer to their self-actualization. Learner centered environment is the most conducive to follow hierarchy of needs by the learners. Teachers should help to fulfil students' emotional and physical needs. Giving them a safe and comfortable place to learn, plenty of food, and the support they need to succeed will act as significant factors to this end.

● **Connectivism Learning Theory**

Connectivism is one of the newest educational learning theories. It focuses on the idea that people learn and grow when they form connections. This can be connections with each other or connections with their roles and obligations in their lives. Hobbies, goals, and people can all be connections that influence learning.

Teachers can utilize connectivism in their classrooms to help students make connections to things that excite them, helping them to learn. Teachers can use digital media to make good, positive connections to learning. They can help create connections and relationships with their students and with their peer groups to help students feel motivated about learning.

Other Learning Theories

While five above mentioned learning theories are the main educational learning theories for teachers who want to support their students' learning, there are additional theories they may assist them. Some may work as good supplemental theories for teachers to bolster their educational support with a new approach. These theories are presented below.

● **Transformative Learning Theory**

Transformative learning theory is a great approach for adult education and young adult learning. Also referred to as transformation learning, transformative

learning theory focuses on the idea that learners can adjust their thinking based on new information.

This learning theory was founded by Jack Mezirow, who discovered it after doing studies on adult women who went back to school. His initial research found that adults don't apply their old understanding to new situations and that having a new perspective helped them gain a new understanding of things as they change. Mezirow also believed that students had important teaching and learning opportunities connected to their past experiences and that critical reflection and review could lead to a transformation of their understanding.

This approach works well for adult students, as children don't have the same kind of transformation with their learning experiences and with life experience. Adult students could draw on childhood experiences and transforming those beliefs and understandings using critical reflection, leading them to an understanding of what they should believe and understand as adults.

Overall, the theory states that our worldview is changed. That means learning more will help us in grasping new concepts and ideas. By getting new information that helps evaluate past ideas, students are able to make a dramatic educational shift beyond standard learning. Teachers can employ this learning theory by encouraging their students to learn new perspectives through questioning and open discussion.

● **Social Learning Theory**

Using social learning theory can be a valuable tool for dealing with difficult students who like to disrupt the classroom and cause trouble. This theory focuses on the concept of children learning from observing others by acting on or not acting on what they see exhibited by their classmates. For example, they may see a classmate politely asking for a treat and getting one, or maybe they hear another classmate talking about something new they've learned, which teaches the student something new even if it's not something they try themselves.

This learning theory was founded by Albert Bandura. He conducted an experiment called the Bobo doll experiment in the early '60s, during which he studied children's behaviour after they watched an adult act aggressively with a doll-like toy. He noted how the children reacted when the adult got rewarded, punished, or suffered no consequences after they attacked the doll. Bandura wrote about his findings in 1977,

detailing social learning theory and how it affected the behavioural development of students.

There are four elements to social learning theory :

● Attention, which calls upon different or unique lessons or activities from children.

● Retention, focusing on how the student will internalize information and recall it later on.

● Reproduction, drawing on previously learned behavior and when it's appropriate to use it.

● Motivation, which can extend from seeing other classmates being rewarded or punished for their actions.

By using social modelling based on these elements, teachers have a very powerful tool that can effectively guide their students to be more active in their learning, pay more attention, and channel their energy into their schooling.

● **Experiential Learning Theory**

Experiential learning theory focuses on learning by doing. Using this theory, students are encouraged to learn through experiences that can help them retain information and recall facts.

Experiential learning theory, or ELT, was identified by David Kolb in 1984. Though his thought came from other theorists such as John Dewey, Kurt Lewin, and Jean Piaget, Kolb was able to identify four stages of ELT. The first two stages, concrete learning and reflective observation, focus on grasping an experience. The latter two, abstract conceptualization and active experimentation are about transforming an experience. To Kolb, effective learning is seen as the learner goes through the cycle of experiential learning theory. Students can enter the cycle in any way and at any point.

Some examples of this form of learning include taking students to the zoo to learn about animals instead of just reading about them or growing a garden to learn about photosynthesis instead of watching a video about it. By creating environments where students can learn and experience at the same time, teachers offer students the

opportunity to immediately apply their knowledge and get real-world experiences. This approach also encourages teamwork and is shown to improve motivation.

Some remarkable learning theories by the psychologists :

Some renowned psychologists and educationalists proposed their learning theories which come under the above-mentioned broader classifications. Now some of these theories are discussed below.

5.3.2.1 Theory of Robert Gagne

Robert Gagne was an experimental psychologist who was concerned with learning and instruction for several decades. His earlier work was in a behaviorist tradition, but later he was influenced by the information-processing view of learning and memory. He is well known for his synthesis of research on learning and the identification of internal and external conditions of learning.

Gagne stressed that different variables influence the learning of different types of tasks. There are three elements in Gagne's theory : taxonomy or categories of Learning; internal and external factors necessary to achieve learning and nine events of instruction.

Taxonomy or categories of Learning :

He identified five taxonomy or categories of Learning.

1. Intellectual skills : Create individual competence and ability to respond to stimuli.

2. Cognitive strategies : Capability to learn, think, and remember.

3. Verbal information : Rote memorization of names, faces, dates, phone numbers, etc.

4. Motor skills : Capability to learn to drive, ride a bike, draw a straight line, etc.

5. Attitudes : Approach to ideas, people, or situations that affects how one acts towards these things.

Each category requires different methods in order for the particular skill set to be learned. Gagne suggests that learning tasks for intellectual skills can be organized in a hierarchy according to complexity:

- Stimulus recognition,

- Response generation,

- Procedure following,

- Use of terminology,

- Discriminations,

- Concept formation,

- Rule application, and

- Problem solving.

The primary significance of the hierarchy is to identify prerequisites that should be completed to facilitate learning at each level. Prerequisites are identified by doing a task analysis of a learning/training task. Learning hierarchies provide a basis for the sequencing of instruction.

Internal and external factors

Different internal and external conditions are necessary for each type of learning. For example, in verbal information to be learned there must be a chance to practice in different situations and environments. In cognitive strategies to be learned there must be the opportunity to practice new solutions to problems.

Instructional events

In addition, the theory outlines nine instructional events, which should be found in any instructional context, and the corresponding cognitive processes.

- **Gain attention** : Present a good problem or new situation in a stimulating and engaging way. (Reception)

- **Inform learner of objectives** : Describe the learning outcomes, the aims and objectives of the session, what skills will be accomplished and how they will be able to use the knowledge, give a demonstration if appropriate. (Expectancy)

- **Stimulate recall of prior learning** : Remind students of prior knowledge relevant to the current lesson (facts, rules, procedures or skills). Show how the sessions are connected. Provide the student with a framework that helps learning and remembering. Tests can be included. (Retrieval)

- **Present stimulus material to be learned** : Use a mixture of media e.g. text,

graphics, simulations, figures, pictures, sound, etc. e.g. follow a consistent presentation style, chunking of information (avoid memory overload, recall information) (Selective Perception)

● **Provide learner guidance :** Show examples and demonstrate the relevance of the materials. Use different approaches to demonstrate the same information. (Semantic Encoding)

● **Elicit performance :** Let the student do something with the newly acquired behaviour, practice skills or apply knowledge. (Response)

● **Provide informative feedback :** Show correctness of the learner's response, analyse their behaviour (or let him do it), maybe present a good (step-by-step) solution of the problem - model answer. (Reinforcement)

● **Assess performance :** Test if the lesson has been learned. Also give sometimes general progress information in the context of the whole course. (Retrieval)

● **Enhance retention and transfer :** Give examples of similar problems or situations, provide additional practice. Put the learner in a transfer situation and get them to review the training materials. (Generalisation)

Gagne's Nine Events of Instruction provide the framework or guidelines with which to prepare and deliver instructional content. Course goals and learning objectives should be created before implementing the nine events. These objectives must then be categorized into one of the five domains of learning outcomes. Each of the objectives must be stated in performance terms using one of the standard verbs (i.e. states, discriminates, classifies, etc.) associated with the particular learning outcome. The instructor then uses the conditions of learning for the particular learning outcome to determine the conditions necessary for learning. And finally, the events of instruction necessary to promote the internal process of learning are chosen and put into the lesson plan.

Educational implications :

While Gagne's theoretical framework covers all aspects of learning, the focus of the theory is on intellectual skills. The theory has been applied to the design of instruction in all domains (Gagner & Driscoll, 1988). This theory helps teachers in a various way.

● It helps the teacher to select appropriate teaching technique.

● It helps the teacher in selecting suitable content or unit for teaching.

● It helps the teacher to decide what lower behaviours or subordinate skills should be taught before teaching Higher Learning types.

● It helps the teacher to break a complex task into components skills and teach those skills only that the students are lacking.

● It helps in preparing textbook on the basis of task analysis of learning objectives.

Thus, we can say that learning theory of Gagne has numerous implications in the field of education.

5.3.2.2 Constructivist theory by Bruner

A major theme in the theoretical framework of Bruner is that learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge. The learner selects and transforms information, constructs hypotheses, and makes decisions, relying on a cognitive structure to do so. Cognitive structure (i.e., schema, mental models) provides meaning and organization to experiences and allows the individual to "go beyond the information given".

Bruner believed that when children start to learn new concepts, they need help from teachers and other adults in the form of active support. To begin with, they are dependent on their adult support, but as they become more independent in their thinking and acquire new skills and knowledge, the support can be gradually faded. This form of structured interaction between the child and the adult is like the thought of the scaffolding. In a very specific way, scaffolding represents a reduction in the many choices a child might face, so that they become focused only on acquiring the skill or knowledge that is required. That means scaffolding can be applied across all sectors, for all ages and for all topics of learning. Some principles of the learning process have been derived from his theory:

1. Instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness).

2. Instruction must be structured so that it can be easily grasped by the student (spiral organization).

3. Instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given).

4. The progression of rewards as well as punishments

In time of selecting resources the teacher used should be focused on that of encouragement, aiding and allowing the student to uncover the main principles on their own. Communication between the learner and teacher is the key concept. Socratic learning is suggested as the best method of communication in this theoretical framework, as it allows the teacher to actively note any study skills the learner verbalizes, their progression, their frustrations, and form a rubric of their current learning state based on the dialogue. So the teacher or instructor should try and encourage students to discover principles by themselves. The instructor and student should engage in an active dialog (i.e., Socratic learning). The task of the instructor is to translate information to be learned into a format appropriate to the learner's current state of understanding. Curriculum should be organized in a spiral manner so that the student continually builds upon what they have already learned.

Implication in education :

Bruner is poignant about language and how this affects cognition within this theory of learning development. It is pertinent to any success of a child to identify the differences between adult language and the language used by children. With the child being younger, they need time to advance not only their conceptual learning but their language as well. Thus, teachers and parents alike are encouraged to envelop the scaffolding method of communication which is a strategy aimed to simplifying tasks within learning by making smaller steps, all leading to the final outcome. This aids in maintaining any frustration while keeping in mind what is important throughout the learning process.

When evaluating study skills of the child, Bruner's theory suggests that the teachers be explicit regarding organization, help the learner to focus on the larger task at hand as well as the goals, instead of getting caught on minor details or frustrations. They are encouraged to praise the efforts put out by the learners while reminding them, helping them focus on relevant items, and encouraging them to practice and rehearse what they have learned. In his more recent work, Bruner (1986, 1990, 1996) has expanded his theoretical framework to encompass the social and cultural aspects of learning as well as the practice of law.

5.3.2.3 Bandura's social learning theory :

Learning is a remarkably complex process that is influenced by a wide variety of factors. As most parents are probably very much aware, observation can play a critical role in determining how and what children learn. As the saying goes, kids are very much like sponges, soaking up the experiences they have each and every day.

It was Albert Bandura's intention to explain how children learn in social environments by observing and then imitating the behaviour of others. In essence, be believed that learning could not be fully explained simply through reinforcement, but that the presence of others was also an influence.

Bandura's theory moves beyond behavioural theories, which suggest that all behaviours are learned through conditioning, and cognitive theories, which take into account psychological influences such as attention and memory.

During the first half of the 20th-century, the behavioral school of psychology became a dominant force. The behaviorists proposed that all learning was a result of direct experience with the environment through the processes of association and reinforcement. Bandura's theory believed that direct reinforcement could not account for all types of learning. His theory added a social element, arguing that people can learn new information and behaviours by watching other people. Known as observational learning, this type of learning can be used to explain a wide variety of behaviours, including those that often cannot be accounted for by other learning theories.

There are three core concepts at the heart of social learning theory. First is the idea that people can learn through observation. Next is the notion that internal mental states are an essential part of this process. Finally, this theory recognizes that just because something has been learned, it does not mean that it will result in a change in behavior. Now these three concepts have been described.

● **People can learn through observation :** One of the best-known experiments in the history of psychology involved a doll named Bobo. Bandura demonstrated that children learn and imitate behaviours they have observed in other surroundings. The children in Bandura's studies observed an adult acting violently toward a Bobo doll. When the children were later allowed to play in a room with the Bobo doll, they began to imitate the aggressive actions they had previously observed.

● **Mental states are important to learning** : Bandura identified that external reinforcement coming from the environment was not the only factor to inference learning and behaviour of the learners. He realised that reinforcement does not always come from the outside sources, but one's own mental state and motivation can play an important role in determining learning outcome and behaviour. So, he described intrinsic reinforcement as a form of internal rewards such as pride, satisfaction, and a sense of accomplishment. This emphasis on internal thoughts and cognitions leads to connect learning theories to cognitive development theories. For this reason, Bandura himself describes his approach as a social cognitive theory.

● **Learning does not necessarily lead to change** : In many cases, learning can be seen immediately when the new behaviour is displayed. When a child is learning to ride a bicycle, it can be quickly observed if learning has occurred by having the child ride his or her bike unassisted. But sometimes we are able to learn things even though that learning might not be immediately observable through behaviour. While behaviourists believed that learning led to a permanent change in behaviour, observational learning demonstrates that people can learn new information without demonstrating new behaviours.

Key Factors for Success :

It is important to note that not all observed behaviours are effectively learned. Certain requirements and steps must also be followed for effective learning. From his research Bandura formulated four principles of social learning. The following principles are involved in the observational learning and modelling process:

1. **Attention** : We cannot learn if we are not focused on the task. In order to learn, learners need to pay attention. Anything that distracts their attention is going to have a negative effect on observational learning. If the model is interesting or there is a novel aspect of the situation, learners are far more likely to dedicate their full attention to learning.

2. **Retention** : The ability to store information is also an important part of the learning process. Retention can be affected by a number of factors, but the ability to pull up information later and act on it is vital to observational learning. We learn by internalizing information in our memories. We recall

that information later when we are required to respond to a situation that is similar the situation within which we first learned the information.

3. **Reproduction** : We reproduce previously learned information (behaviour, skills, knowledge) when required. Once learners have paid attention to the model and retained the information, it is time to actually perform the behaviour they observed. However, practice through mental and physical rehearsal often improves our responses. Further practice of the learned behaviour leads to improvement and skill advancement.

4. **Motivation** : We need to be motivated to do anything. Often that motivation originates from our observation of someone else being rewarded or punished for something they have done or said. This usually motivates us later to do, or avoid doing, the same thing. So in order for observational learning to be successful, learners have to be motivated to imitate the behaviour that has been modelled. Reinforcement and punishment play an important role in motivation.

Educational implications :

Social learning theory can have a number of real-world applications. For example, it can be used to help teachers and researchers understand how aggression and violence might be transmitted through observational learning. By studying media violence, they can gain a better understanding of the factors that might lead children to act out the aggressive actions they see portrayed on television and in the movies.

Social modelling is a very powerful method of education. If children see positive consequences from a particular type of behaviour, they are more likely to repeat that behaviour themselves. Conversely, if negative consequences are the result, they are less likely to perform that behaviour. Novel and unique contexts often capture students' attention, and can stand out in the memory.

Students are more motivated to pay attention if they see others around them also paying attention. Another application of this theory is to encourage students to develop their individual self-efficacy through confidence building and constructive feedback, a concept that is rooted in social learning theory.

Social learning can also be utilized to teach people positive behaviours. Teachers can use social learning theory to investigate and understand ways that

positive role models can be used to encourage desirable behaviours and to facilitate social change.

5.3.2.4 Carroll's Minimalist Theory :

Professor John M. Carroll is the professor of Information sciences and technology and known for the theory of minimalism in communication. J.M. Carroll based his theory on the idea of gaining knowledge through self-understanding than imposing the ideas on to the learners and has concentrated his works on analysing how people responded to a new technology. In other words the Minimalist Theory is based on constructivism. Carroll stated that "Adult learners are not blank slates; they don't have funnels in their heads; they have little patience for being treated as 'don't know'." Adult learners already have a wealth of experience and prior knowledge tucked away in their memory, which should be regarded as invaluable assets. So he suggests for the e-Learning professionals to use instructional activities and materials that support online learners and give them control over their personal learning path. In other words, teachers must minimize the usage of e-Learning resources that hinder the way of learners' progression.

The Minimalist Theory Framework

According to J. M. Carroll, the Minimalist Theory consists of a basic framework that combines self-directed learning activities with technology. Under this approach, e-Learning course design should have these 6 basic components :

1. e-learning tasks should be self-guided and meaningful. Online learners must be able to progress at their own pace, determine their course of action, and relate to the subject matter on a more profound level.

2. Online learners should be offered realistic e-Learning activities, content, and projects immediately following the lesson. This gives them the opportunity to apply what they have learned as soon as possible, which increases information retention and recall.

3. e-Learning courses should encourage self-directed improvisation, problem solving, and reasoning. This is typically achieved by integrating active e-Learning activities that prompt online learners to put their knowledge into practice.

4. All e-Learning materials and activities should focus on "error recognition and recovery". Thus, every e-Learning course should encourage learners to learn from their mistakes and determine how they can overcome them.

5. e-Learning content should emphasize the relationship between the subject matter and real-world applications. Online learners should be aware of how they can use the information or skills in real world environments.

6. e-Learning materials and activities should consider the prior knowledge and experience of online learners, such as their pre-existing knowledge base, background, and skill sets.

Greg Kearsley's principles in Minimalist Theory :

Greg Kearsley is one of the most notable proponents of the Minimalist Theory. He recommended some tips that can be a great help in e-Learning course design. These are as follows :

1. Online learners must be able to apply knowledge as soon as they have completed an online module or lesson. An immersive e-Learning activity is one of the most effective ways to accomplish this. More importantly, the proceeding eLearning activity must offer them the chance to reinforce ideas and commit the information to the long-term memory.

2. e-Learning courses that are designed based on the Minimalist Theory focus more on technology and interactivity than passive e-Learning activities. For example, drag-and-drop interactions would be chosen over reading a passage or listening to a lecture. Every piece of eLearning content should allow the online learner to solve problems using the online resources that are available and arrive at their own conclusions. Instead of simply asking the online learner a series of questions, encourage them to take it to the next level by creating a blog that centers on a sub-topic. This prompts them to put the information into their own words and builds creative thinking skills.

3. One of the core principles of Minimalist Theory is "error recognition and recovery". In other words, online learners must have the scope to identify mistakes, acknowledge them, and then figure out how they can recover from them and move forward. Simulations and branching scenarios are two of the most effective activities for mistake-driven learning. They help online learners

to explore the repercussions of their decisions in a safe environment, so that they can identify what they did incorrectly and then modify their performance behaviours.

4. The Minimalist Theory relies heavily on self-contained and self-directed learning. Therefore, online learners should be given the power to develop a personal learning path that allows them to achieve their specific goals. This path should include their preferred delivery methods. Ideally, these learning paths should build upon their existing knowledge and the existing mental schema. This helps to expand their knowledge base and reinforce ideas and concepts they have already learned.

Educational implications :

The Minimalist Theory by J.M. Carroll can help teachers and instructors to create more powerful and concise e-Learning content. The key is to identify the online learners need and then create realistic, self-guided e-Learning materials that give them control over the process. This can also empower and motivate distracted online learners who require more incentive for active participation. Thus, this theory has a great help in designing e-learning content and online course materials. It helps the course designer to understand and give proper stress on learners' individual needs, their characteristics and skills. Consequently, perfect and precise content can be prepared. So, learners will be closely attached and motivated to their learning according to their own pace, skill and abilities.

5.3.3 Communication :

Communication is one of the important processes needed for human survival. Communication is a medium of transferring our ideas, needs, wishes and denial to the others. Without communication human existence is of no value. Communication plays an important role in the classroom process because it is due to communication a teacher comes to know about various needs of children and through this effective teaching learning process takes place. Thus, we can say that communication is a process of conveying a message or messages from one person to other or many. Classroom communication is the interactive language and responses between teacher and learner. Role of communication in education is considered an important aspect of the survival of human being and for obtaining knowledge or education.

Communication is an important element. Communication helps to transmit the knowledge from the teacher to the student besides the sharing of other ideas, thoughts and opinions.

5.3.3.1 Categories of communication :

There are three categories of classroom communication. These are-

● Verbal communication- It is a communication in which teacher and students convey the message orally.

● Non-verbal communication- It refers to the body language of the teacher and student.

● Written communication- It exists in the form of writing. For example, giving comment on the report card and assignments.

5.3.3.2 Elements of communication :

There are six elements of communication. These all are mutually depended and form the communication cycle or process.

● **Sender** - Sender is a person who sends the message. A sender makes use of symbols (words or graphic or visual aids) to convey the message and produce the required response. The views, background, approach, skills, competencies, and knowledge of the sender have a great impact on the message. The verbal and non-verbal symbols chosen are essential in ascertaining interpretation of the message by the recipient in the same terms as intended by the sender.

● **Message** - Message is a key idea that the sender wants to communicate. Communication process begins with deciding about the message to be conveyed. It must be ensured that the main objective of the message is clear.

● **Encoding** - Since the subject matter of communication is theoretical and intangible, its further passing requires use of certain symbols such as words, actions or pictures etc. Conversion of subject matter into these symbols is the process of encoding.

● **Medium** - Medium is a means used to exchange / transmit the message.

The sender must choose an appropriate medium for transmitting the message else the message might not be conveyed to the desired recipients. The choice of appropriate medium of communication is essential for making the message effective and correctly interpreted by the recipient. This choice of communication medium varies depending upon the features of communication. For instance - Written medium is chosen when a message has to be conveyed to a small group of people, while an oral medium is chosen when spontaneous feedback is required from the recipient as misunderstandings are cleared then and there.

● **Recipient** - Recipient is a person for whom the message is intended / aimed / targeted. The degree to which the decoder understands the message is dependent upon various factors such as knowledge of recipient, their responsiveness to the message, and the reliance of encoder on decoder.

● **Decoding** - The person who receives the message or symbol from the communicator tries to convert the same in such a way so that he may extract its meaning to his complete understanding.

● **Feedback** - Feedback is the main component of communication process as it permits the sender to analyze the efficacy of the message. It helps the sender in confirming the correct interpretation of message by the decoder. Feedback may be verbal (through words) or non-verbal (in form of smiles, sighs, etc.). It may take written form also in form of memos, reports, etc.

5.3.3.3 Classroom communication process :

Communication is a process of exchanging verbal and nonverbal messages. It is a continuous process. Prerequisite of communication is a message. This message must be conveyed through some medium to the recipient. It is essential that this message must be understood by the recipient in the same terms as intended by the sender. He must respond within a time frame. Thus, communication is a two-way process and is incomplete without a feedback from the recipient to the sender on how well the message is understood by him or them. So it is a cyclical process which is presented in the Figure-1 below.
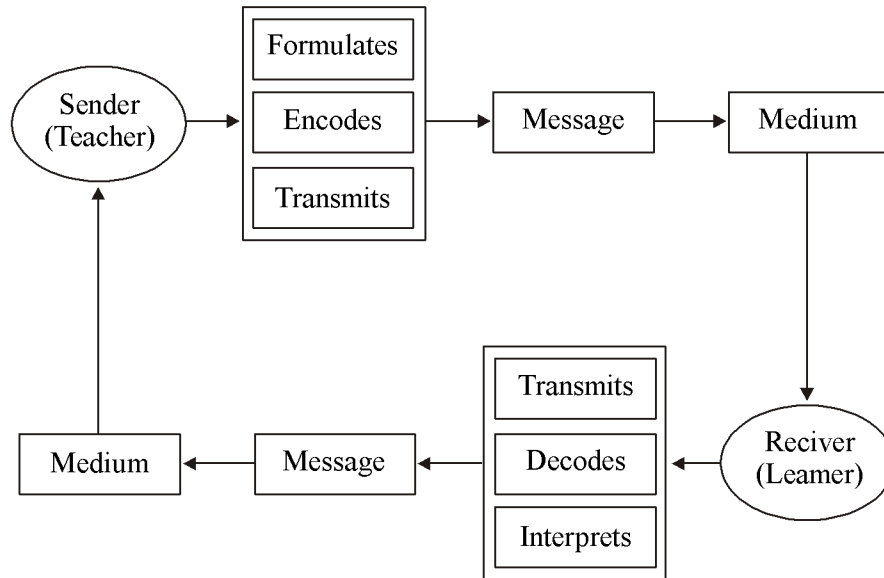
Figure-1: Process of classroom communication

5.3.3.4 Factors affecting communication :

The factors influencing classroom communication can be listed in various ways. Some of these are presented here.

● **Factors related to the sender :** These factors are mainly the features of the sender who is sending the message to the recipient. Some of these factors are-

   ➤ How he perceives his world and himself

   ➤ Language competency

   ➤ Voice

   ➤ Facial expression

   ➤ Emotion

   ➤ Energy level

   ➤ Age and experiences

   ➤ Attitude, believes, values

● **Factors related to the message :** These are the features of the message sent by the sender to the recipient.

➤ Accuracy and Precision of words

➤ Simplicity and clarity

➤ Appropriateness

➤ Imagination and originality

➤ Choice of medium

➤ Length of communication

● **Factors related to the receiver :** These are the essential characteristics of the recipient. These factors act as determinant in the process of communication. These are

➤ Intelligence

➤ Attitude towards the subject or sender

➤ Age and experiences

➤ Self-esteem

➤ Motivational level

➤ Believes and values

➤ Previous experiences

➤ Listening skills

5.3.3.5 Barriers to effective classroom communication :

There are some factors, existing in the communication process, which reduce the effectiveness or hinder the communication process.

● **Noise :** This is one of the most important barriers in the classroom communication process. Noise can interrupt the entire teaching learning process in the classroom.

● **Lack of listening :** Lack of effective listening is also a barrier in the teaching learning process. Different students have different perception which results in conveying inappropriate information by the students.

● **Language :** If the language of teacher and student does not match then it results in creating a barrier in the teaching learning process.

● **Physical or psychological issues** : Physical or psychological issues are also an important barrier to effective communication. If the child is not mentally sound due to any physical or psychological reason then it creates a barrier or disturbance in the teaching learning process.

5.4 Principles of Text Design : Modular Format – Objectives, Blocks, Units and Content

5.4.1 Principles of Text Design :

Text designing is an important part in open and distance learning as the learners is physically separated from the teacher or instructor. Learners are not getting frequent opportunities to satisfy their clarification and meet up their queries with the help of teachers. Here perfectly designed self-learning material can lead to effective learning in Open and Distance Learning (ODL). So, text should be designed in such a way that it can give pertinent and relevant information to the learner without making any confusion in the mind. It is a significant and crucial area in ODL system. Here texts do not mean only printed texts, but it is an encompassing term which include printed texts, audio and video materials, contact lessons, laboratory work, project work, etc. Here it is necessity of maintaining some principles in designing a text. These principles are as follows.

● **Clarity :** Presentation should be clear to the learners. It should not be clumsy and it should not evoke any ambiguity, rather it should be properly planned and give a clear look to the learners.

● **Simplicity :** Content and presentation should be made simple as far as possible. Different complex content should be presented in a lucid way so that learner can easily comprehend the content. Designer must take into consideration that the matter should not make any confusion in the mind of the learner.

● **Precision :** Content should be precise and to the point. There should not be any extra content in the self-learning material. Learners should be free from burden. So, it should be taken into consideration that no extra load to be imposed to the learner.

- **Interesting :** Content should be presented in such a way so that it can drag the attention of the learners. Planning to be taken to make the Self learning materials (SLM) interesting and attractive. Learners should not feel any monotony while going through the content areas.

- **Correlation :** In designing text focus must be there to make contents correlated. Here the principle of contiguity must be followed.

- **Pictorial presentation :** Relevant picture and diagram to be presented along with suitable example so that learner can easily grab the meaning and attain concept effortlessly.

- **Self-pacing :** In open and distance learning learner have the opportunity to study according to his own will and skill. So, the principle of self-facing must be maintained in time of preparing text.

- **Providing feedback :** After going through each content area, there should be sufficient scope of evaluation so that learner can assess their progress on the basis of provided feedback.

- **Uniformity :** There should be uniform presentation in each unit. That means the structure of all units should be same so that learner cannot get any confusion relating to the arrangements and structure.

- **Systematic presentation :** Content matters should be presented systematically. Proper sequence should be maintained. Matters should not be presented in a haphazard way.

- **Compliance :** Text should be designed keeping proper compliance with the specified syllabus and curriculum. There should not be any deviation from the suggested areas of the paper or course.

- **Nurturing creativity :** Text and content should nurture the creativity of the learner. It should be prepared in such a way so that learner will be inspired to contribute something according to his own thought.

- **Conversational style :** Texts should be made conversational wherever it will be possible. This will be a great help to engage learners actively in their learning. It will increase their comprehension.

● **Further study** : There should be a proper guidance and suggestion for further readings. Open link or sources should be presented under the heading of reference. Thus, the advanced learners will be able to quench their thirst.

5.4.2 Important parameters in designing text :

Here are some important parameters of text designing in Open and Distance learning (ODL).

1. **Need analysis** : It is very important to define the needs before developing the text. Needs can be identified from the perspective of different stakeholders like learners, teachers, subject experts, practitioners, policy makers etc. It can also be based on the findings of primary and secondary research studies and can be inferred from the current scenario of the educational setup. Here following tasks to be performed :

● Capture needs from multiple stakeholders using appropriate method.

● Identify the suitability of text for the proposed topic.

● Review existing texts and identify the gaps.

● Refer multiple sources of literature and capture the need.

● Prioritise needs based on stakeholders' requirement.

2. **Context analysis** : It is the collection of data to understand the physical, technical and socio-cultural contexts in which the texts will be used. Here the following tasks to be performed.

● Identify the constraints and opportunities in the physical aspects of the learner and learning environment i.e., infrastructure available to learner, learning spaces, etc.

● Identify the constraints and opportunities in the socio-cultural aspects of learner and learning environment such as language, socio-economic status, belief system etc.

3. **Learner analysis (Target Audience)** : It refers to capturing data with respect to the target audience. The tasks here include-

● Identify and specify the user as students, teachers, educators, trainers, parents, professionals etc.

● Capture target audience profile including aspects of demographic, cognitive, physiological and socio-cultural like previous knowledge, learning styles, level of motivation, interests, cognitive, sensory and physical disabilities, socio-demographic background etc.

4. **Content Analysis :** Content analysis defines the scope, appropriateness and nature of the texts. Good content comprehension is required before designing and developing content. Here following tasks should be taken.

● Identify key ideas and prepare a mind map.

● Identify the nature of the content as facts, concepts, generalisation, principles, processes etc. so that the appropriate media and presentation format can be selected at later stage.

● Check quality of raw content for cognitive appropriateness, factual accuracy, inclusiveness and accessibility.

● Identify the skills and values, if any.

5. **Instructional Strategy Design :**

    (a) Learning Objectives : Learning objectives describe what the learner will be able to do after completion of the texts. Specification of objectives is the first step of design stage. Objectives should be stated clearly such that they are realistic, relevant, achievable and measurable Objectives should be aligned to national / state curriculum frameworks and specific learning outcomes (national / state).

    (b) Content Structure : Contents to be organised logically in chunks and to be aligned to previous knowledge of the learners. Structure of the content should be Simple to Complex, Known to Unknown, Concrete to Abstract, and Specific to General. A content map to be prepared to represent the structure of the content.

    (c) Learning Strategies : Learning strategies to be designed with reference to learners' characteristics, content, learning objectives, etc. So appropriate learning strategies to be identified and designed corresponding to the learning outcomes. Content will be motivating

and interesting to ensure active participation of learners. Aligning with the curriculum framework and learning objectives learning experiences to be designed to facilitate the meta-cognition process wherever possible.

(d) Evaluation Strategies : Immediate and constructive feedback mechanisms should be there in the texts and to ensure assessment of the learning outcomes. Wherever possible multiple formats to be used to maintain motivation and engagement. Assessment will be with flexibility in terms of pace, time, frequency, media etc. to address the diversity of the learners. Design must include alternative assessment strategies such as peer assessment. Design should also include mechanisms to maintain and track progress reports of learners.

(e) Selecting suitable media : Appropriate media or an integration of audio, video, graphics, animation, simulation models etc to be selected to make content accessible to all learners, including those with cognitive, sensory or physical disabilities. Appropriate presentation format to be selected based on the nature of content.

5.4.3 Modular Format-Objectives, Blocks, Units and Content :

Proper organisation of content in open and distance learning plays a very significant role in the teaching learning process. It is previously mentioned that open and distance learning cannot give frequent opportunities to the learner to meet up their regular queries, which is possible in formal or regular mode of education. So, content should be organised properly. Sound and suitably planned content can reduce lots of confusion and ambiguity from the mind of the learners. There are several models of organising content for the learners, but it is suitable to use a modular format in preparing text or content in ODL mode. At first the learning objectives should be identified or determined by the text designer or content writer. These will give a clear vision to the designer in preparation of the content after complying with the existing guideline and curriculum framework. Content should be written to fulfil the desired objective or learning goals. Following the objectives, the entire course should be divided into separate blocks. In dividing the entire course into blocks correlation about the content should be considered. Designer should also follow the

principle of 'simple to complex', 'concrete to abstract', 'known to unknown', 'easy to hard'. There is no specific limit in number of blocks but it should be based on diversification and volume of the content areas. Within a block there can be different units. The content within the block should be equally distributed among the units following the principle of contiguity and correlation within each unit. In this way the entire content of the course will be quite sufficient to attain the learning objectives determined at the initial stage. At last, the designer will again judge the suitability of the content in respect of learning objectives. So, there should be a modular and systematic approach where designing will start from the top and proceed to the bottom followed by the cross verification through bottom to top. This modular approach is presented in the following Figure-2.
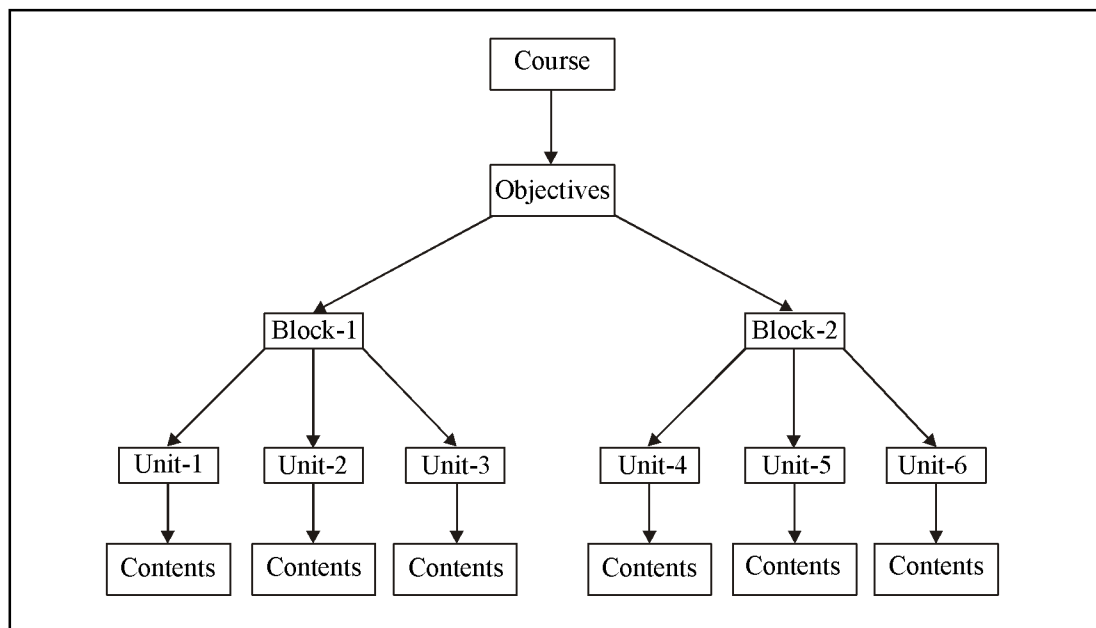

Figure-2 : Modular format of Text Design

5.5 The Process of Producing Text : Text Development, Editing and Quality Maintenance

Producing text in open and distance learning include production of both print material and non-print material that is audio video material. In producing a suitable text there is a dire need of proper coordination and teamwork among the course

designers, content writers, academic mediators, editors, video audio producers, scriptwriters, graphic designers and others who are related to the production of text. It is due to the joint and collaborative efforts of all a good quality of text can be produced. There are several stages of producing text. These are presented below though there is a deviation of these stages depending on the content, target audience and socio-cultural perspective of the country

1. **Planning or Prewriting :**

   This is probably the most primary part of the writing process. In the very first step decisions are taken on several issues and overall planning is made as per the syllabus or curriculum. Volume that is number of expected pages in each unit, overall layout, and structural design these all are determined in the planning stage.

2. **Drafting (or Writing the First Draft) :**

   In the second stage contents are drafted initially following the specified guideline laid down by the course designer. Here language, presentation and over a layout are kept simple and learner friendly. Text designer must consider the mental ability and other characteristics of the target audience to whom this material will be catered.

3. **Evaluating Draft :**

   Here is need of full evaluation of the first draft. If allowed by the authority, drafted materials can be sent to the other experts for perfect evaluation. Taking into account the feedback received from them, as well as what text designers have noticed, the next step will come where revising and editing will be done.

4. **Revising and editing :**

   Editing the text is one of the most important stages of text production. Language in distance education courses should be clear and simple. With revising, changes are made to the content based on the feedback received and own evaluation of the previous draft. Designers will revise the draft to create a new one that comes closer to achieving earning objectives. Here stress is given on the following areas.

- Grammatical errors

- Punctuation/mechanical and spelling errors

- Misquoted content

- Missing (necessary) source info

- Factual errors

- Awkward phrasing

- Unnecessary repetition

5. **Publishing and uploading :**

After making necessary corrections, addition and alteration texts will be finalised for to present among the learners. In case of print material, it will be sent for publication. On the other hand, non-print materials will be uploaded to the respective portal or website for the learners.

5.6 Summary

Self-learning materials and texts perform the functions of an effective teacher who guides, motivates, explains, discusses, asks questions, assesses progress, suggests appropriate remedial measures, and provides advice to learners. Self-learning materials emphasize pedagogical dialogues with the learner. While reading the course units, the learners interact with an invisible teacher (in a simulation situation since the teacher is simulated in the materials) and feel as if they are being taught by him/ her. The materials also provide questions for self-check and thus increase curiosity of the learners. The success of self-learning depends on the quality of the learning materials. Self-learning materials follow learner-centred approaches. They are designed and developed as per the needs of the learners. In this chapter we first discussed on several factors related to course design in open and distance education. Here we have discussed different approaches of learning and presented some important theories of learning and communication. Then we have analysed the principles of text design. At last, we put our focus on the process of producing text.

5.7 Self-Assessment Questions

● Discuss on some factors related to course design in Open and Distance Education.

● Explain some theories of learning which act as factors to course design in Open and Distance Education.

● Explain some principles of text design.

● Discuss on Modular Format of text design.

● Explain the process of producing text.

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Unit - 6 ❑ Blended Learning

Structure

6.1 Objectives

After the completion of the course, the learners are expected to :

● Know about factors related to Non-Print Instructional Materials

● Understand the uses of Medium, Multi-Media and OER.

● Understand the designing online courses and MOOCS

● Know about Blended Learning which is the teaching-learning process for future.

6.2 Introduction

In 21st century online learning is getting utmost priorities from all stake holders. As educational technologies, instructional design, online learning and content delivery platforms keep evolving, more learners with more needs and motives are grabbing the opportunities to take online courses. On the other hand, this growing demand in turn gives impetus for further improvements in technology and delivery. From this, it seems that future online learning options will need to focus on improving technologies to create personalized learning experiences that meet diverse student needs instead of simply looking toward content delivery. In this chapter we have discussed on several aspects of online learning.

6.3 Factors related to Non-Print Instructional Materials: Uses of Medium, Multi-Media and OER

6.3.1 Medium of Non-Print Instructional Materials and uses :

Medium of instruction is very essential in teaching learning process. This can be basically divided into two categories : 1. Print Media 2. Non-Print Media.

Non-Print Media are now largely dependent on electronic media which has a good number of inherent advantages like-

● It reduces the burden of the teacher.

● It can cater to individual needs.

● It can involve the learner in the teaching learning process.

● It keeps the concentration going.

● Through the variety and newness, it can motivate the learner, stimulate imagination, create and sustain interest.

● It facilitates diverse learning objectives.

With the technological development the medium of non-print instruction has been advancing in a rapid space. This medium has a great influence on the learners. Some of the widely used mediums are discussed below with their relative advantages.

6.3.1.1 Educational Radio :

Radio has been playing a vital role in the field of communication since its origin. Even though it works with sound only, it has the power to stimulate values and to increase knowledge and understanding. At one given time, radio can simultaneously arrest the attention of thousands of people. In some places of the world, it is the only medium of education for children who live in remote areas. This device suited to help in the development of the art of listening and the knowledge and command of language. This media can be widely used in the following areas:

- Adult Education

- School Broadcasting

- Community Development Projects

- Language Learning Projects

- University Broadcasts

- Panel discussion

- Programs for special audiences

- Youth programs

- News service

- Dramatization

- Quiz

In this way the educational radio has several advantages in education if it is properly used as a non-print medium of instruction. Some of these benefits are presented below.

- **Low capital investment :** Radio is one of the cheapest media. Price of radio is also comparatively lower than other electronic equipment. So, learners can easily procure this media for their learning. The spare parts are available and relatively cheaper. So, it is easily repairable.

● **Wide coverage** : Using radio as media can give Wi-Fi coverage to the broadcaster because it can be used in those areas where electricity is not connected till now. Thus, instruction transmitted through radio can be received in different remote areas

● **Easy accessibility** : Radio can give easy access to the learners in the information transmitted through radio. Here learners need not to have huge technological skill. Just switching on the required channel, they can receive the messages sent by the institution to the learners. Thus increases the acceptability to the learners.

● **Motivation for learner** : In this media learners get easy access and they feel motivated in their learning. It does not cause huge expenses. So, there is a mental peace in the mind of learners and they can set up their mind for their learning.

● **Effective means of thought promotion** : Through this media voice of a great scientist, inventor and outstanding writer, poet, musician, can be heard by the learners. Thus, giving direct experience to them and make them thoughtful.

● **Feasible mode of learner enrichment** : Almost every subject can be taught through radio, but the radio is more suitable for certain subjects such as languages and music. So, it is very significant medium in enjoyment and enrichment.

● **Operating Costs** : It consumes less electricity and can be operated using battery also. Very less amount is needed for broadcasting information in this medium. Learners need not to incur huge amount for getting the information through this media.

● **Nurturing creativity** : Since radio works with voice and sound only, it helps the students in their imagination when exposed to broadcasting. It also acts in stimulating interests of children and extracting creativity in them.

● **Language development** : Radio specifically can provide opportunities for developing listening comprehension as well as improvement of vocabulary. As only the audio is used, the listeners need to pay rapt attention to their listening. Thus, their language efficiency increases.

In spite of having huge benefits, the radio has some certain limitations as a media of instruction. Some of these are :

● No face-to-face interaction and one way communication.

● It cannot be used effectively for all subjects especially Sciences.

● It is only an auditory presentation and very little of what we hear, we can remember.

● Production of radio programs requires expertise.

6.3.1.2 Educational TV

Educational TV is a system that presents learning content in various subjects produced by an agency or institutions. It is a means of providing formal education as well as non-formal. Wayne Coy calls Educational TV or ETV as the "Electronic blackboard of the future".

ETV combines both sensory and auditory experiences. It offers uniformity of communication. It is a versatile educational vehicle. It stimulates and reinforces ideas. It provides live broadcasts of 'on the spot' events. It is also a means for leisure time activities. Different types of educational programme can be arranged and telecasted through ETV, like-

● Monologue which means a narrator narrates the aspects, interlacing it with visuals and illustrations.

● Dialogue which means conversation between two people.

● Interviews where some questions or query relating to education are placed before an expert of the respective field.

● Panel discussion where a group of experts take parts in a common discussion.

● Quiz which is very interesting and attractive to the learners.

● Educational Dramas through which different social and educational message can be given to the society.

Thus, in the field of education ETV can play a very dynamic role. As both audio and visual media are used simultaneously, learners can get wide understanding of the subject matters. So, it is a means of extending children's experience. It is also helpful

● To provide background material for a lesson the teacher will deliver.

● To provide salient illustration that will stimulate class discussion.

● To reinforce and review ideas already covered in class.

But it has some limitations when used as a medium of instructions. Most of these are inherent in the system, where some can be eradicated with careful interventions. Some of these are mentioned here.

● It is mainly one-way communications though some live and interactive programme are conducted presently.

● It has relatively low and poor accessibility than radio. Due to its price and mandatory need of electricity it is not widely accepted like radio.

● It is a costly affair both production and receiving the programme on television.

● It is also difficult to integrate TV and classroom teaching.

● Sometimes visuals become a source of distraction, especially it cannot nurture creativity.

The ultimate user of the ETV programme is the teacher. The teachers' role in making decisions regarding the content, matter and sequence is of utmost importance. Here presentation requires some extra skills other than classroom teaching skills. So, a teacher should be competent to present a lesson in the studio. The teacher has to get the pupil ready to watch a program by providing necessary background information and later on conclude based on observations after viewing of the program. He should be in a position to clarify doubts and elaborate certain missing links. So, the teacher should be trained to evaluate all aspects of the program so that he can be in a position to suggest modifications both in content and style of presentation.

6.3.1.3 Educational Film :

Motion pictures or films present an abstracted version of the real events omitting unnecessary and unimportant details. Educational films are one such means of indirect experience. A film is a multiple media communication which presents facts in a realistic way, dramatizes human relations, arouses emotions and transmits attitudes. It may be used for the communication of ideas, attitudes and experiences

to a large number of people. Mainly two types of educational films are produced. These are instructional film and documentary film.

Instructional films are specially planned to achieve certain educational objectives and are made in specific subject areas or teaching purposes. These films can be background films or direct teaching films. They help to promote to achieve a skill, an attitude or to convey certain facts, information, phenomena or theory.

Documentary films are made on specific topics or aspects and highlight them. Documentaries with relevance to a curriculum can be used as supplementary material for classroom teaching.

Educational films have several advantages as a medium of instruction, like-

● Motion pictures motivate students and compel attention.

● They do provide recreation

● It can bring in past and distant present into the classrooms.

● They are vivid and hence good motivators and help to develop good study habits.

The teacher selects the film. He should take care to select a film which would help to realize his objectives. For that he should know the best films available and the source of these films. He should also be familiar with the content. So here are some considerations which can assist teacher to achieve his goal through the medium of educational film.

● The teacher should organise the filming in a systematic manner by making proper seating arrangements, check lighting, check ventilation and test projector and trial run the film.

● The teacher should go through the instructional manual and he should prepare the students by providing the necessary background information.

● If necessary, the screening should be stopped to just recapitulate in between. That will integrate them to the content and make them attentive to the message.

● The film should be presented at the right moment integrating it with

classroom teaching. At the end of the film a brief conclusion with students' interaction should be conducted on the spot.

● In the light of information obtained, the teacher should immediately correct misconceptions or errors, if any, from the learner's comprehension.

● There should be immediate evaluation, either oral or written for feedback.

In spite of having numerous advantages of educational film, it is not free from certain limitations, like

● There is a time lag between screening of lesson and feedback session, hence some important doubts cannot be cleared.

● The teachers are also not trained in the use and maintenance of equipment.

● It is a costly affair to procure hardware and it is a dream for most of our ill-equipped educational institution.

● The teachers are also not trained in the use and maintenance of equipment.

6.3.2 Multimedia :

Multimedia is all about communicating in several ways. It is an advanced technology that facilitates integration of text, data, image, graphics, audio, video animation in digital form. It provides new ways to enhance the delivery of information and its impact on the user. Here messages are displayed in picture-sound form and it does not include plain text exclusively. Thus, it includes pictures, audio and video which are captured and digitized by input devices to get the information ready for manipulation by the computer.

In other words we can say that Multimedia is a combination of text, graphics, audio and video. It is a new trend in computer science because it combines different media in one computer application, it is called multimedia. This enables the computer to be used as an entertainment and educational tool besides just a business tool. Computer stores multimedia information in a variety of standard formats. We can display multimedia information on output devices. The components of multimedia are presented in the following Figure-3.
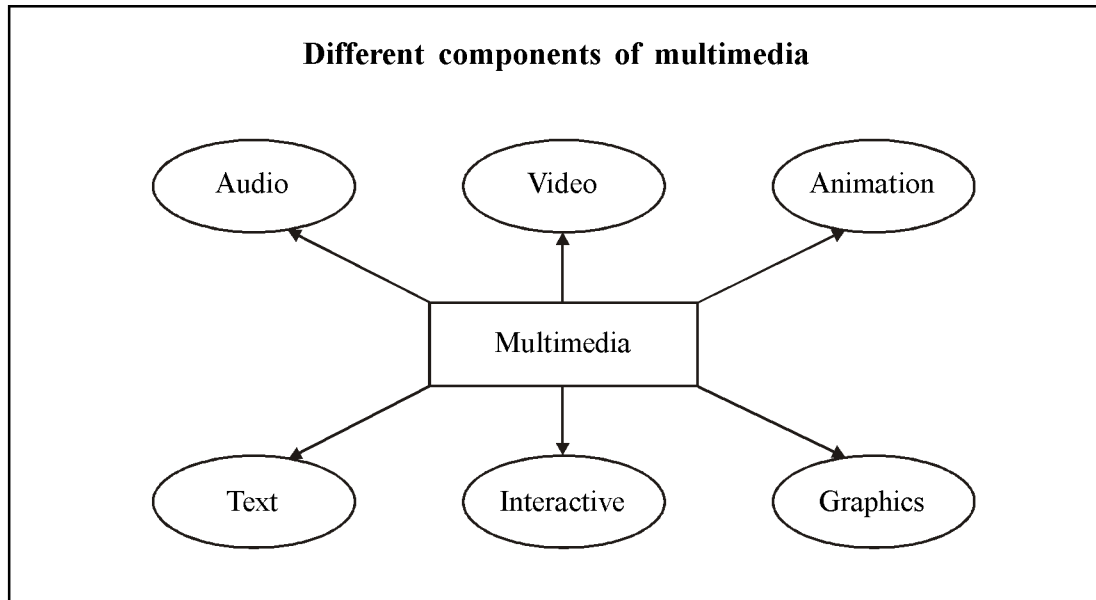
Different components of multimedia

Figure-3 : Different components of Multimedia

There is no fixed number or combination of components used in multimedia. It depends on the availability of technology, feasibility and the expertise knowledge of the instructor. But in general, the following components are found in multimedia.

● **Text :** Text is one of the most important parts of multimedia. The design and content of multimedia text are different from other types of texts like newspaper and book text.

● **Graphics :** Pictures, photographic, images and other artwork are called graphics. Computer graphics deal with the generation, representation, manipulation and display of pictures with the help of a computer. Graphics is one of the most important components of multimedia because by it we can illustrate information in picture form. There are two types of graphics, line drawing and images.

> ➤ **Line Drawing Graphics :** Line drawing graphics lie in the form of 2D and 3D pictures using mathematical representation of simple objects like lines, circles, arcs etc. The area of computer graphics that deals with this type of picture is known as generative graphics.

➤ **Images Graphics** : In this graphics photographs composed of a collection of pixels, which are arranged in 2 D matrix. The area of computer graphics that deals with this type of pictures is called cognitive graphics.

● **Animation** : Animation is one of the most dynamic forms of multimedia. An animation is created by recording a series of still image of drawings, objects, people etc. Animation consists of a series of drawings or photographs on paper that viewed with a mechanical device through a hand-held sequence of images.

● **Audio** : Audio is speech, music and other types of sounds. Audio element is used to improve the normal multimedia environment.

● **Video** : Video is display with the sequence of images with recording. Each human being image in sequence is called a frame.

Benefits of using multimedia in learning :

Due to its effectiveness in imparting education and instruction, the use of multimedia is increasing day by day. Now it became an essential feature of any advanced educational institution. The benefits of using multimedia are as follows.

1. **Deeper understanding** : According to research, a benefit of multimedia learning is that it takes advantage of the brain's ability to make connections between verbal and visual representations of content, leading to a deeper understanding, which in turn supports the transfer of learning to other situations. All of this is important in today's 21st century classrooms, as we are preparing students for a future where higher-level thinking, problem solving and collaborative skills will be required.

2. **Improved problem solving** : A large percentage of the human brain dedicates itself to visual processing. Thus, using images, video and animations alongside a text stimulates the brain. Student attention and retention increase. Under these circumstances, in a multimedia learning environment, students can identify and solve problems more easily compared to the scenario where teaching is made possible only by textbooks.

3. **Increased positive emotions** : According to psychologists, experiencing positive emotions makes people see more possibilities in their lives. Using

multimedia during instructions impacts student's mood during the learning process. With a positive attitude they learn better and tend to be more proactive.

4. **Access to a vast variety of information :** With computers, tablets, smart phones and the internet, students are today better equipped than ever to search and find the information they need. A study revealed that 95% of students, who have access to internet, use it to search for online information. Sharing the information and participating in class discussions is done in a more confident way when access to information is as easy as today.

5. **World exploration :** With the help of multimedia learner can explore and learn about places they would never been to. In a geography class, students can explore different cities of the world, the tallest mountains and the most dangerous jungles. In a science class, space and planets exploration is now possible. In a biology class, the dissection of rare animals and different habitats exploration are like a walk in a park for students. This is the benefit of a multimedia learning environment.

Altogether, multimedia learning environments have a direct effect on learning and even on growing as a person. Therefore, it is no wonder the use of multimedia is increasing and academic institutions desire more and more to create multimedia learning environments for their students. It is also helpful to the teacher in the following way.

● Teachers can develop simple effective presentation for small group, a class or web-based presentation.

● It enhances collaboration among teachers.

● They are freed from physical proximity to the blackboard.

● They can annotate existing files live while lecturing.

● They can lecture better using slide presentations.

Steps involved in multimedia production :

Usually there are some steps in preparing multimedia for instructions and uploading or publishing thereon. These steps are as follows.

1. **Planning :** Here the model, schedule, media plan and focus group are determined. It also involves with planning and scheduling the resources for the application. Materials and equipment for making the application are also determined here.

2. **Design :** This step includes conceptual overview, storyboard, layout, interface design and information design. So here initiatives are taken for creating a detailed blueprint for the multimedia application.

3. **Development :** All the contents and media for the application are integrated to become one complete application. Thus, all the contents are created and processed.

4. **Testing :** If there is any error or bug, the application should be revised and be tested again until the application is free from bug. Thus, it should be ensured that the application is free from bug and will be accepted by the user.

5. **Publishing :** Once the application is tested and revised, it could be burned into a CD-ROM or published on the internet as a website of the academic institution so that learners can get required instructions relating to their learning.

6.3.3 Open Educational Resources (OER) :

OERs are teaching resources that have an open-copyright licence (such as one from Creative Commons), or they are part of the public domain and have no copyright. Depending on the licence used, OER can be freely accessed, used, re-mixed, improved, and shared.

According to Wikipedia Open Educational Resources (OER) are freely accessible, openly licensed text, media, and other digital assets that are useful for teaching, learning, and assessing as well as for research purposes. The term OER describes publicly accessible materials and resources for any user to use, re-mix, improve and redistribute under some licenses. The development and promotion of open educational resources is often motivated by a desire to provide an alternate or enhanced educational paradigm.

Types of open educational resources include full courses, course materials, modules, learning objects, open textbooks, openly licensed (often streamed) videos, tests, software, and other tools, materials, or techniques used to support access to

knowledge. OER may be freely and openly available static resources, dynamic resources which change over time in the course of having knowledge seekers interacting with and updating them (such as this Wikipedia article), or a course or module with a combination of these resources.

UNESCO states that Open Educational Resources (OER) are teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. UNESCO also recommended for action in the following five areas.

1. Building the capacity of stakeholders to create, access, re-use, adapt and redistribute OER;

2. Developing supportive policy for OER;

3. Encouraging inclusive and equitable quality OER;

4. Nurturing the creation of sustainability models for OER; and

5. Promoting and reinforcing international cooperation in OER.

Advantages of using OER :

In the field of education OER has several advantages. These are as follows.

● **Expanded access to learning :** Students anywhere in the world can access OER at any time, and they can access the material repeatedly. This accelerates learning by providing educational resources for just-in-time directly. So, it has wide accessibility for the learners.

● **Scalability :** OERs are easy to distribute widely with little or no cost. So, it has cost efficiency. Learners can also save their valuable time by getting ready materials in their hand.

● **Supplementary :** OERs can supplement textbooks and lectures where deficiencies in information are evident. Thus, it assists learners in their learning by providing needed information and contents.

● **Enhancement in learning :** Presenting information in multiple formats may help students to more easily learn the material being taught. For example, multimedia material such as videos can accompany text.

● **Quick circulation** : Information may be disseminated rapidly (especially when compared to information published in textbooks or journals, which may take months or even years to become available). Quick availability of material may increase the timeliness and/or relevance of the material being presented.

● **Continuous improvement** : Unlike textbooks and other static sources of information, OERs can be improved quickly through direct editing by users or through solicitation and incorporation of user feedback. Instructors can take an existing OER, adapt it for a class, and make the modified OER available for others to use.

Beside the above-mentioned advantages OER also provides the following opportunities.

● It provides students with an opportunity to assess and plan their education choices.

● It adds value to knowledge production.

● It reduces faculty preparation time.

● It generates innovation through collaboration.

Disadvantages of using OER :

OER has huge advantages in the field of education, though it faces some issues and challenges. Among these two are presented below.

● **Quality and reliability concerns** : Some online material can be edited by anyone at any time, which results in irrelevant or inaccurate information.

● **Technology issues** : Some students may have difficulty accessing online resources because of slow internet connection, or may not have access to the software required to use the materials.

6.4 Designing Online Courses and MOOCS

Online courses :

Online courses are the modern version of courses. It is the delivery of a series of lessons on a web browser or mobile device, which can be accessed anytime and

anyplace. It is designed as an online environment for convenient learning asynchronously.

Actually, it is a set of instructional experiences using the digital network for interaction, learning and dialogue. An online course does not require any face-to-face meetings in a physical location. Similar courses such as web-centric courses (also called hybrid or blended courses) are similar to online courses, but require regular scheduled face-to-face classes or meetings.

Advantages of Online Courses :

Online courses are providing wide opportunities to the masses to attain their degrees or courses. Here learners can enjoy numerous benefits. Some of these are as follows.

● **Convenient :** The biggest advantage of an online course is that classroom and instructor (theoretically) are available 24 hours a day, seven days a week.

● **Flexible :** Learners can study any time they want. They can study with whomever they want.

● **Individual attention :** Because learners have a direct pipeline to the instructor via e-mail, they can get questions answered directly.

● **Lifelong learning :** It is the main vehicle of lifelong learning as learners can obtain.

● **Self-disciplined :** The online student takes responsibility for their course of studies and matures into an individual for whom learning and accomplishment are highly valued.

● **Connection to global village :** No technological invention in the history of man has connected the people of the world like the internet through which online courses are carried on.

6.4.1 Designing online courses :

One major difference in teaching an online course versus a face-to-face course is the audience. While students in a face-to-face course are generally of similar age and circumstance, those that take online courses tend to be much more varied. So before starting the designing process, designer need to take some time to think on

them, who might be taking respective course using the resources provided. Here he should also consider the following.

- **The working professionals :** Many students taking online courses are not full-time students. They have full-time jobs, families, and assignments outside of course that can impact how long and when they can commit time to the course.

- **Time zones :** In online courses it is possible that students from all over the country or even all over the world can get enrolment. So, time zone should be considered.

- **Language barriers :** Online courses enable students from all over the world to learn from course. Because of this, it is important to consider that there may be language barriers between course designer and the students.

Principles of designing online course :

Online course design is rooted in the same solid principles of face-to-face teaching, but requires additional considerations. That means even though the course topic and goals may be the same as a face-to-face course, the course layout, pacing, content delivery and assignments will all be tailored for online delivery. Here some principles are laid down for effective design of online courses.

- Information gathered about the students should be used to narrow such things as topics to cover, assignments to use, and assessments to administer.

- Overall, less content will be presented with a variety of methods.

- Emphasis will be given on projects, case studies, experiential learning and other forms of engaging assignments.

- Course will be set in such a way to create a community. This includes the use of discussions, blogs, teamwork, and opportunities to share personal narratives and photos.

- All instructions for the course have to be written in great detail, before the course starts, in language that is simple yet unambiguous.

- Written instructions can be supplemented with video instructions and backed up by quick assessments like a quiz.

- The entire course must be designed and built before the beginning of the semester.

- Goals of course should be considered and plan to be set very early on in the process.

- Assessments should be designed from the start of working up on course design. This allows the assignments to be integrated within the course.

- Questions that lead to directed reading and writing should be set, such as well-framed discussion questions or essay questions within written assignments.

- Overall flexibility should be maintained so that learners can find it convenient to continue the course.

6.4.2 Massive Online Open Courses (MOOCs) :

Massive Open Online Courses (MOOCs) are open, large-scale, web-based courses designed and delivered by accredited higher education institutions and organisations in which anyone with a smart device and internet connection can participate, regardless of age, gender, geographic location, or education background. In other words, MOOCs represent an instructional approach that permits thousands of students to access online courses anywhere around the world and typically free of charge. MOOCs offer a wide range of courses in many different subjects for individuals to be able to evolve their knowledge and education in an affordable and easy manner. Many famous higher education institutions deliver these online courses on a variety of topics and at a variety of educational levels. So, we can sum up some salient features of MOOCs.

- MOOCs are online courses without entrance requirements other than internet access.

- MOOCs are free for the learners and do not set a maximum number of participants.

- MOOCs offer people the opportunity to study a variety of courses for a variety of reasons, including personal interest, professional development, and social networking.

● MOOCs offer accessible and affordable remote learning opportunities to students all over the world.

● MOOCs themselves vary in intended purpose, in terms of how designers intend their MOOC to serve the needs of prospective students, especially in addressing intrinsic goals (e.g., general interest), or extrinsic goals (e.g., professional development).

In India 'Swayam' is very renowned and massive MOOCs platform. The UGC has made it mandatory for all universities to bring amendments to their respective ordinances and rules to facilitate transfer of credits of their students for the degree programmes to be offered under Swayam. The programme seeks to fill the gap created by the acute shortage of quality teachers in the country's higher educational institutions. The Swayam offers a virtual class room to students with structured lectures by subject experts.

The UGC regulation stipulates "An institution can only allow up to 20% of the total courses being offered in a particular programme in a semester through the online learning courses provided through Swayam platform". Students, registered with the Swayam, can complete their entire programme by attending classes online and take proctored examinations at the end of each semester to move to the next stage. For the proctored examinations, centers with adequate facilities will be opened in universities.

Advantages of MOOCs :

MOOCs offer a strong starting point for a number of reasons, including:

● **Lack of entry requirements :** MOOCs can be taken by anyone who is interested in the subject matter and able to access the course, regardless of age, background, or location. Most of the MOOCs are free and all are accessible to any learner with an internet connection and basic computer equipment.

● **Repetition :** MOOCs will often run two or three times a year, ensuring that students won't miss their chance. It can be used as a tool in a blended learning program, where students can access more information than what is provided in the class.

● **High quality** : MOOCs are led by subject matter experts (SMEs) and supported by teaching assistants so that students have access to first-rate educational resources. That means access to courses offered by professors at the top institutions. Here both professors and learners get world-wide exposure, thus improving pedagogical techniques and knowledge sharing.

● **Feasibility** : MOOCs usually necessitates around 1-2 hours of study a week for about 5 weeks, making learning feasible for students with busy lives. Courses are available to a vast and diverse audience across the globe.

● **Self-paced and supported learning** : MOOCs enablestudents to work through the course materials and assessments at their own rates while also interacting with a global learning community.

● **Decreasing burdens** : Dropping out of a MOOC also carries fewer penalties than it would for a traditional college-level class. Here student is marked by peer review and/or automatically-marked tests, thus decreasing stress and burdens.

Disadvantages of MOOCs :

MOOCs are very significant platform in 21st century to attain online courses. But these have some limitations. These are as follows.

● **High attrition rates** : One of the biggest disadvantages is that students are not interested in completing the course. This is because they don't have the inclination to do so because they have not paid any fees. When the attrition rate was studied in some Massive Open Online Courses, it was found that attrition rate in such courses was high, and only 15% of the enrolled students completed the course. The attrition rate was due to students studying in cohorts so that if one student in the cohort dropped out, the others dropped out too. Another reason why the students didn't complete the course was that since no college credit was offered, students were not encouraged to finish it.

● **No scope for disabled** : It is problematic for learners with disabilities and a poor internet connection to use MOOCs. That means learners who have visual disabilities cannot be made to go through such courses.

● **No special attention** : When learners are not able to understand a topic, hardly they get special attention from the tutor. In other words, it can't provide for personalized courseware and attention from a tutor.

● **Unable to pay attention** : Students are unable to pay attention to such courses because they just have to browse through the course material. There is no animation in the course material. There is also no introduction given. Sometimes, although the course was cited as free, there were costs incurred in the form of readings required from books as advised by the course designer.

● **Other limitations** : Besides the above-mentioned points there are other limitations which include difficulty in keeping track of students' assignments and involvement, language barrier while offering MOOCs and inability to use as a credit-earning course at universities.

6.5 Blended Learning : The Teaching-Learning Process for Future

Blended Learning : Concept

Blended learning or "hybrid learning" represents a learning model that combines both formal (traditional classroom) and non-formal (online courses) methodologies. The term blended learning is generally applied to the practice of using both online and in-person learning experiences when teaching students. In a blended-learning course, for example, students might attend a class taught by a teacher in a traditional classroom setting, while also independently completing online components of the course outside of the classroom. In this case, in-class time may be either replaced or supplemented by online learning experiences, and students would learn about the same topics online as they do in class. So, the online and in-person learning experiences would go parallel and complement one another.

Blended learning is a mix of a classic and modern learning method. It is also called as hybrid learning and mixed-mode learning. Trainees are learning from their computers as well as they get instructions from their trainers. Blended learning, which combines the best of face to face and online instructions in ways that can help

personalize training for learners, often look very different from one classroom to the next. But when it is done well, then blended learning should involve some common characteristics-

● **Online and offline learning :** Blended learning combines some form of online learning with some type of offline learning. Learners may take classes over the internet in a classroom with one or more trainers standing by to help them complete their work.

● **Instructor involvement :** Those who take online learning from home can interact with their trainers online through message boards and emails.

● **Independent learning :** Another feature of blended learning solution is that it fosters the idea of independent learning in trainees. Blended learning programs allow learners to learn on their own and to use the materials and resources presented to them in ways that work best for them.

● **Peer interaction :** Another key characteristic of blended learning is peer interaction. Those learning in traditional classrooms will have their peers sitting right next to them, which lets them work together on assignments. Trainees who take classes online can interact with others via the class message boards or forum.

● **Support for learners :** Another characteristic that blended learning programs share is the support available for learners. Trainers working in these programs offer learners all the help and support they need both through offline meetings and online solution.

Desirable qualities of blended learning solutions :

The most obvious reason why blended learning is enjoyed is because it increases engagement. Most of the learners nowadays, have a smart phone, which is like having a handheld computer. With blended learning learners can use their smart phones and learn online at their own pace. This may sound like a matter of convenience, but engagement is a powerful technique. While technology is treated as a solution to a problem, it is just one component of a much bigger solution that always requires good teaching practices. Blended learning makes strong use of technology in the learning environment, but this is not the only way in which this

takes place. Learners should always remember that these tools are no substitute for the hard work of learning. Rather they should possess some relevant qualities. Strong interpersonal skills are needed to succeed in today's world. Along with these group skills, learners must have the ability to work alone to complete the tasks. A quality blended learning solution will support learners as they develop these internal and external traits. The increasing awareness and availability of internet services are precondition to the growth of blended learning. Although implementing blended learning solutions is a complex process because trainers must determine the perfect blend of face-to-face activities and online learning when designing courses.

Advantages of Blended Learning :

Blended learning is an important part of the learning landscape. A number of researchers have shown that learners favour blended learning to traditional classroom. Blended learning should continue to implement technologies that are affordable and thus provide engaging and effective instructions that personalize learning for all. Here are some advantages of blended learning.

1. **Flexibility :** Blended learning classes offer flexibility for teachers in how they present material and for students in the pace and variety of the learning approaches they experience.

2. **Effectiveness :** Studies have shown that because blended learning incorporates multiple methods of instruction from an assortment of perspectives, it proves to have an effective learning outcome for most students involved.

3. **Teacher empowerment :** By incorporating technology into classroom instruction, teachers are freed up to reach more students. Teachers can move within the stations or activities to interact with individual or small groups of students and check on progress. Data provided by educational technology programs also empowers teachers with insights on each student's learning. So, they can more effectively address gaps.

4. **Engagement :** Because most students today are surrounded by technology in their everyday life, they often engage more easily with material when technology is incorporated in instructional settings. Additionally, students become empowered as they expand their technological skills and competency with technology.

5. **Differentiation** : Because blended learning incorporates a variety of instructional approaches, learning activities can be tailored to address numerous learning styles. Additionally, high-quality digital educational tools allow teachers to measure each student's individual learning level and provide activities and instruction that meet the needs of the student.

Disadvantages :

Blended learning has some serious issues to resolve. These issues can exert negative impact on entire teaching –learning system, leading to reduces effectiveness of this mode.

1. **Dependence on technology** : Academic institutions must have the infrastructure, tools, and financial backing to support the technology required as a piece of a blended learning classroom.

2. **Teacher training** : Teachers must be trained in technology usage and be prepared to introduce and regulate all activities throughout the instructional period to effectively implement a blended learning environment.

3. **Paucity of time** : Although incorporating technology frees up some time for teachers, they still need to provide one-on-one instruction to individuals and small groups. Teachers also spend additional time reading, evaluating, and utilizing data from digital education programs to create individualized re-teaching plans for students needing extra assistance to address gaps in learning.

Even with these obstacles, the benefits of blended learning outweigh the disadvantages. With the necessary training and support, teachers can successfully create an effective blending learning classroom that engages and benefits students of today.

6.6 Summary

The COVID-19 has resulted in academic institution shut all across the world. Globally, billions of learners are out of the classroom. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. Research suggests that online learning has been shown to increase retention of information, and take less time. Thus, online

learning has got a significant ground for future education. In this chapter we have discussed on different factors related to non-print instructional materials. We have put our focus on different medium of non-print instructional materials. Then we have analysed different aspects and components of Multi-Media and OER. We have also analysed the designing considerations of designing online courses and MOOCS. At last discussion has been made on Blended Learning which is the Teaching-Learning Process for Future.

6.7 Self-Assessment Questions

● Discuss on different types of media for Non-Print Instructional Materials.

● What is Multi-Media ? Explain different components of it. Write the benefits of its use in education.

● What is OER? Discuss on its advantages and disadvantages.

● What do you mean by online courses ? Explain its advantages.

● What do you mean by MOOCs ? Analyze its advantages and disadvantages.

● What is Blended Learning ? Write its features.

● Discuss advantages and challenges of Blended Learning.

6.8 References

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