UNIT 1 DEFINING DISTANCE EDUCATION

Unit Structure

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1.0 OBJECTIVES

In this unit, we intend to give you an overview of what we mean by 'distance education'. However, it should be clear that we cannot capture the term in a conclusive and straitjacketed definition. The attempt is essentially, therefore, to put together the views of various thinkers in order to arrive at a satisfactory working definition of the term 'distance education'. In this context, we have also touched upon formal education, non-formal education, correspondence education, etc., because this will help us distinguish distance education from other learning systems.

By the end of this unit, you should be able to

- argue that distance education is a learning activity;
- distinguish distance education from other learning/teaching processes/ activities; and
- explain how distance education becomes a structured system of learning.

1.1 INTRODUCTION

Distance education is characterised by a non-conformist and non-traditional approach which, in effect, questions existing norms of traditional education and seeks to provide a new orientation to educational processes. It assumes premises about the nature of learning that are vastly different from those governing the traditional system of education. Moreover, it has its own dialectic register which arises out of its endeavour to overcome the problems that are implicit in imparting instruction to students who are at a distance from the teacher and/or the institution.

This clearly shows that distance education does not exist in a vacuum. It is, in fact, an outcome of certain socio-historical compulsions and technological growth: it is a system which is firmly related to social and cultural environments. The most important development in this regard is the advancements made in the field of electronic mass media. For instance, technological growth opens up new channels of communication which, when put to use, can replace the usual channel, i.e., oral communication. At some places throughout this block, we have used the terms 'correspondence education' and 'distance education' interchangeably. However, when we need to mean a particular system of education, we have indicated what actually we mean.

1.2 DISTANCE EDUCATION VIS-A VIS TRADITIONAL EDUCATION

Distance education, in comparison with the conventional educational system, is a wider system in terms of both connotation and denotation. Its connotation is wider because it works in a much larger learning situation: a situation in which many factors remain indeterminate and inchoate. It has a wider denotation in that it covers a considerable distance in order to effect academic communication.

However, this does not mean that open/distance learning can be defined in any precise manner. It has as many critics as it has enthusiasts. It remains imprecise and that perhaps enables it to accommodate many different ideas and aims. Perhaps as Keegan (1986) suggests, it cannot be used in an administrative context. It can be carried out both in face-to-face encounters and at a distance. Many distance teaching universities have closed, rigid structures and are slow to respond to the community's educational needs. And yet what makes distance teaching distinct is perhaps the fact that educational technology plays a major role in distance education. Education technology itself is a developing field which today includes audio-visual aids, the computer, the mass media, etc. It is this fact (i.e., that educational technology is a developing field) that helps make distance education dynamic and exciting.

Along with distance education, one can also list various other non-traditional forms of education. These are extension programmes which make available the expertise of a university or of a college to new populations; adult programmes which provide non-traditional learning to adults in selected areas, and extended campuses that provide lectures at various locations which are far removed from the official campus.

Nevertheless, following Keegan, one can use 'distance education' as a generic term. It would then include a range of teaching/learning strategies referred to as correspondence education, home study, independent study, external studies or teaching at a distance. Before we proceed any further, let us work out the following exercise.

Check your progress 1

Define the term 'conventional education'.

Notes: a) You can work out your answer in the space given below.
b) Compare your answer with the one given at the end of this unit.

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The concepts on the basis of which distance education operates distinctly distinguish it from the traditional educational system.

It operates mainly on the following concepts:

i) Learner- centredness/learner autonomy
ii) Indirect education
iii) Education in real-life setting

We have given below a brief account of each of these concepts.

1.2.1 Learner-centredness/learner-autonomy

Unlike formal education, distance education puts the client, i.e., the student, first and then the institution. Distance education, in fact, lays emphasis on the needs and convenience of the learners while taking into account the

individual diversity among them and indeed makes this an operative condition. It works on a concept of time which is not arbitrary in the sense that it permits individual variation in the time span required for purposes of study. Further, it does not advocate a definite time frame for any course of study. In that sense, it is a flexible kind of system which adapts itself to the needs of the learners as they actually exist and arise from time to time and place to place. It does not distinguish between the young learner and the old learner, but provides them with a possibility that permits individuals to programme their specific cource of study.

These principles, however, should be understood not in the absolute sense but in the relative sense. For example, an on-campus educational programme of three years duration meant for young students of a particular age with prescribed previous education and economic and social status is restrictive. If the same programme is made a little flexible by relaxing the age limit, formal qualifications, the choice of place to study, and the duration within which the programme could be completed, then, the degree of learner centredness will increase. In relative terms, a three year programme becomes learner centred, if it can be completed in six or eight years instead of three years. Similarly, in all other aspects too, if the progrmme is made suitable to the needs of the learners, it becomes learner centred.

1.2.2 Indirect education

Indirect education suggests the existence of a form of education that is direct. Direct education may be understood as one which assumes the presence of face-to-face communication. In this context, distance education can be called 'indirect' education because the provision for face-to-face interaction here is minimal. It is indirect also in the sense that it provides for as many inputs to learning as can be maintained and preserved. These inputs to learning are placed at the disposal of the learner, within whom lies the crucial ability to learn and to make use of these inputs. Of course, the learners must have the minimum preparedness and the abilities to learn and complete the course.

1.2.3 Education in real-life setting

One feels that distance education does not have the kind of recognisable and apparent structure that formal education possesses. It seems to be amorphous, supine and bloodless, lacking the obvious dynamism that an oral communicator necessarily imparts. While it is true that it suffers from an absence of a certain kind of vitality which only the presence of a teacher can generate, it nevertheless compensates for this by making use of as many inputs to learning as are possible and by structuring itself around the actual learning experience of the students. The recent developments in the telecommunication and computer technologies, have increased the possibilities of techer-student dialogue and peer group interaction. Through e-mail and internet facilities, collaborative learning has become a reality. Given the access to these facilities, distance learners would feel less lonely

and alienated. If some sort of face-to-face teaching-learning component in the forms of summer schools and contact programmes can be arranged, the loneliness of distance learners can be reduced still further.

Having touched upon the concepts on which distance education operates, we shall now unravel the mystery around a few terms which are commonly used interchangeably with 'distance education'. The question is whether we are correct in doing so.

The confusion over the use of the terms stems from the fact that various expressions, such as **non-formal education, distance education, non-traditional education and open education,** which are currently used in the field of education are either not properly understood or not adequately defined. The reason simply is that educational processes underlying the expressions are similar in one or the other aspect, either in terms of their philosophy or in their procedures. In other words unless one is clear about the philosophy underlying these expressions and also the procedures which they imply, there is bound to be an element of confusion, which we should resolve, before we proceed any further.

1.3 A CLARIFICATION OF TERMS

It is an improvement over the single 'correspondence' mode, since distance education uses all the available media for educational delivery. 'Open Education' refers to the approach or the philosophy behind it. We shall being with the beginning.

By formal education we mean the campus-based education at the school, college and the University levels where curricula and syllabi have certain established patterns. The age groups, training, methods of teaching, materials (textbooks) used, evaluation etc. are known to the teachers and the taught. By non-formal education we mean any other approach to take education to those who have not been able to get formal education. Distance education refers to the 'mode' which does not require the physical contiguity of the teacher and the learner at all times.

It is not unusual to confuse the terms 'Correspondence Education', 'Distance Education' and 'Open Education' with each other. It is true that openness to methodology is a characteristic of distance education, but it should be noted that 'non-distance education' or 'face-to-face education' may also use 'open' methodologies. Moreover, 'distance education' is possible without being 'open'. For example, it can be argued that distance education, as practised at the German Open University at Hagen, may not come under the category of 'open education', as this University is 'open' in a limited sense only. It should be clear that there can be various degrees of 'openness' of education. However, at the moment it is difficult to say as to which level of 'openness' may legitimize the nomenclature 'open university' for a university. 'Distance

education' is an expression which officially replaced the earlier term 'correspondence education' in the Twelfth World Conference of the International Council for Correspondence Education, held in Canada in 1982. Since then the Council was renamed as the International Council for Distance Education. The debate on the search for an appropriate expression to encompass all the characteristics which had, of late, come to be associated with what was known as Correspondence Education till recently was accelerated by the emergence of the British Open University in 1969 and the consensus, as indicated above, was achieved in 1982. The expression marks a deviation from the earlier distribution-strategy-based nomenclature to the nomenclature representative of the spatial and temporal relationship between the sources and the receiver of education. Having said this, now let us touch upon 'correspondence education' and open education' in 1.3.1 and 1.3.2 respectively.

1.3.1 Correspondence Education

The distinction between correspondence education and distance education lies in their aims, methods, and orientation. Whereas correspondence education becomes an extension of conventional education as far as its imparting of prescribed knowledge for issuing of certificates is concerned, distance education aims at more varied goals. These include personal growth, training for better job prospects and job enhancement, a change in attitude, etc., in addition to imparting of knowledge. Distance education also employs a multimedia approach including human contact (We will discuss this aspect in ES 313). Correspondence education, on the other hand, depends mostly on printed materials distributed by post. The procedure adopted for admissions to the courses and examinations are more or less the same as have been in use over the centuries in the traditional college/ university education. Thus, correspondence education is essentially a system based on the mode of

i) distribution of teaching materials, and
ii) of effecting interaction, if needed, between the teacher and the taught.

Distance education contrastingly is oriented towards pedagogy: it tries to build the teacher in the materials. Now we may turn to the concept of 'openness'.

1.3.2 Open Education

We may define 'open education' as a system of education that does not operate through traditional conventions which are essentially restrictive in nature — admission restrictions, attendance restrictions, restrictions on the candidature for examinations, restrictions on the period of time to be devoted to a course, restrictions on the number of examinations given and taken in a year, restrictions on subject combinations for a particular degree, restrictions on the modes of didactic communication and the didactic tasks, etc. The larger the number of such restrictions left unobserved, the higher the degree of the 'openness' of the type of education under consideration.

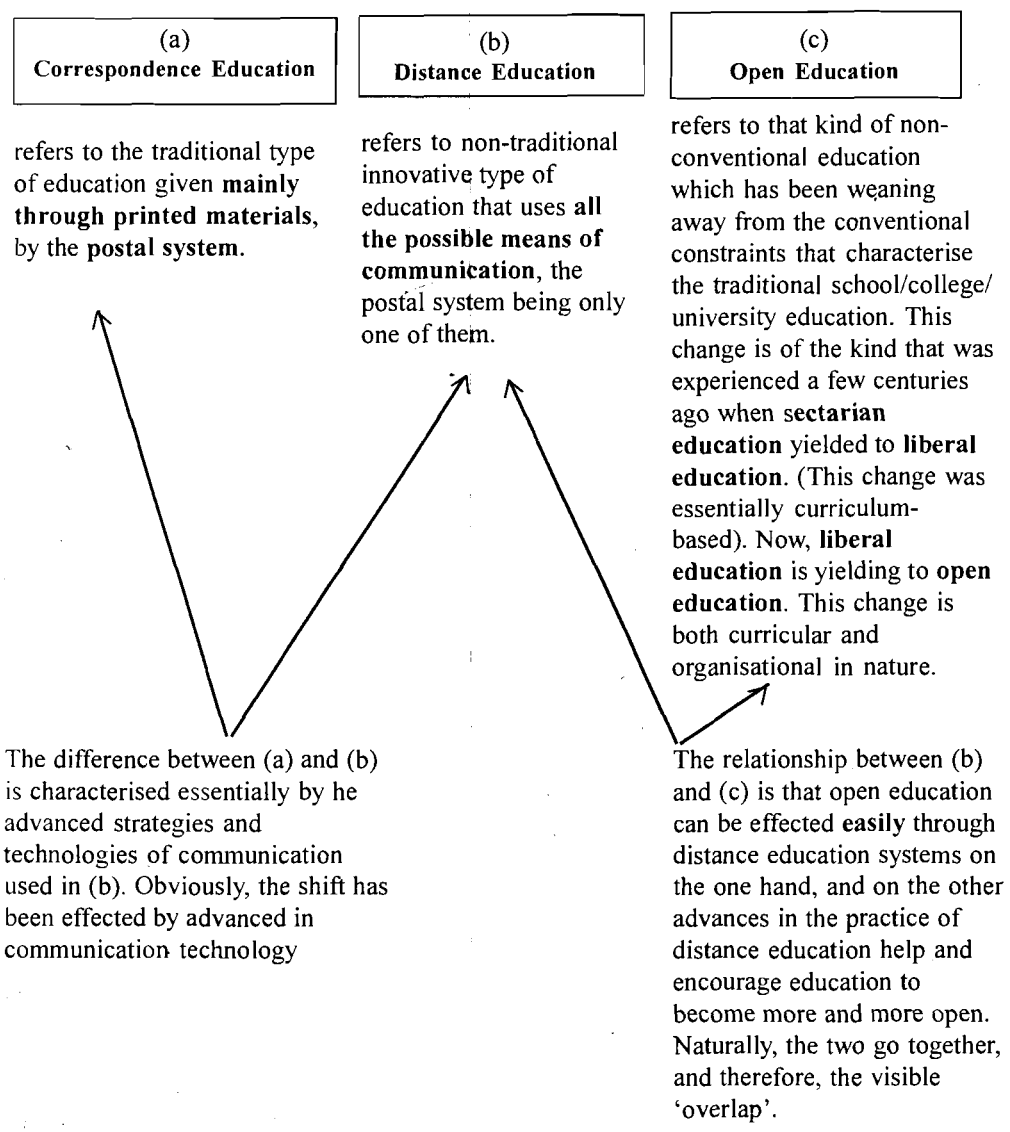
We should make clear our point that 'correspondence/distance education institutes' may or may not be 'open' in the sense we have referred to above, or may be open only to a limited degree. And in the same way, even a traditional college/university may become 'open' to a recognisable degree. Research programmes like M.Phil. and Ph.D. may be put under this category.

In what follows

i) we shall avoid using the expression correspondence education, unless we have to use it in a specific sense, and
ii) the expressions 'distance education' and 'open education' will be used synonymously. (The distance mode allows the educational systems to be open and the openness of the education systems suits the promotion of distance education).

What have we said above?

A diagrammatic representation of what we have discussed is given below:



Scheme 1: Terms mostly confused one with the other

Besides these three terms, there are a few more in use currently, but in the main their currency is localised. They are as follows:

i) **External system/studies:** This term is in use in Australia. It does confuse one, when one thinks of the 'external system' as it functioned in London years ago. The London model of 'external system' makes it possible for learners to sit for recognised examinations, but teaching is not necessarily associated with the system. It is obvious that the term does not connote all that is meant by the term 'distance education' today.

ii) **Extra-mural system:** This expression is used in New Zealand to convey what distance education means to most of us.

iii) **Independent study:** We shall discuss this term in some detail in our discussion of Wedemeyer's definition of distance education. In fact, it is through his writings that this term gained currency in North America.

iv) **Home Study:** This term is localised mainly in Europe, probably under the influence of Swedish schools of correspondence courses. However, it is also being used at a few places in Canada and the USA.

v) **Off-campus studies:** To denote a contrast with the on-campus traditional type of studies the expression 'off-campus studies' is widely used in the Pacific region - Australia and South-East Asian Countries.

As indicated above, these terms do have local currency. But the term 'distance education' enjoys international currency. It may be that these localised terms are not replaced entirely and immediately by the more acceptable term 'distance education'. The fact, however, remains that most of the current literature and reports on all kinds of activity in the field are presented under the label 'distance education' and/or 'open learning'. Both of these terms have already been touched upon in sub-sections 1.3.1 and 1.3.2.

Having discussed and attempted to resolve the confusion that prevails over the use of the term 'distance education' we shall study a few attempts made to define 'distance education' by various thinkers in the field. We have selected five definitions to serve our immediate purpose of highlighting the important aspects of distance education.

1.4 ATTEMPTS AT DEFINING DISTANCE EDUCATION

Attempts have been and are still being made to define distance education succinctly. It is, however, very difficult to arrive at a definition that may bring together, by the processes of connotation and denotation, all the aspects that characterise distance education.

The term, as it has been mentioned, means many differing things to different people, depending entirely on from what angle one wants to view it. For example, given below are five 'early' definitions of distance education. The differences in these definitions are essentially based on the particular aspect of distance education which the particular thinker has made prominent. A brief comment follows each definition so as to help us understand what the main thrust of its author is. (We shall talk about some of these authors, more elaborately in units 2 and 3. In unit 4 of this block, we shall give you a brief account of the changing profile of distance education, focusing on the emerging trends of open distance education).

1.4.1. Wedemeyer

Wedemeyer (1977) has used the terms **'open learning', 'distance education' and 'independent study'** in his works, but favours the last term consistently. He defines 'independent study' as follows:

> 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 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, the ultimate maturity required of the educated person.

Notice that there is a suggestion for two kinds of 'independent study'. One for the on-campus learner who may not want and/or need to attend lectures regularly; the other for the off-campus learners who are on their own. But, both these kinds are subordinate to the overwhelming idea of the ultimate social purpose of education — liberal education for social welfare. It is, therefore, not difficult to appreciate why in the United States of America, the expression 'independent study' is extensively being used to mean both 'correspondence' and 'distance' education. Besides, the expression does connote 'open learning' too, as one needs open access to education in order to become a truly 'educated' person. You could also see that the focus here is on the sociological aspects of education. As a society develops the facilities for better communication and faster mobility, the need for freeing the individual from the traditional fetters of social, economic and cultural institutions gets articulated. If unconventional arrangements can assure the same or even better quality of education, then, the traditional face-to-face education need not be shown as the only way of teaching or learning. Wedeymeyer only gives expression to the changing social environment of the U.S.A. in the sixties and the seventies which saw the peak of liberalism and freedom in the American educational thinking.

1.4.2 Moore

Moore (1973) is more explicit in so far as the characteristic features of distance education are concerned. According to him distance teaching may be defined as the family of instructional methods in which the teaching behaviours are performed apart from learning behaviours, including those that in a contiguous situation would be performed in the learner's presence, so that

communication between the teacher and the learner must be facilitated by print, electronic, mechanical or other devices.

At least three features of distance education are clearly discernible in this definition:

i) teaching behaviour remains separated from learning behaviour (e.g. correspondence courses);
ii) face-to-face teaching and learning forms a part of the system (e.g., contact programmes); and
iii) electronic and other media may be used to effect learning and teaching (e.g., use of audio and video cassettes).

The first two of these features are similar to the ones which Wedemeyer has pointed to. And if we interpret Wedemeyer's expression 'communication in a variety of ways' broadly, even the third feature listed above finds a place in his (Wedemeyer's) definition. While Wedemeyer talks in broad sociological terms, Moore makes his statements more specific to in the context of educational communication. Moore implies that whether the situation is face-to-face or that of distance learning, the effectiveness of education would depend upon the nature of communication and the degree of dialogue. We shall discuss more of this in the next unit.

1.4.3 Dohmen

Dohmen (1977) of Germany defines distance education as a

> systematically organised form of self-study in which student counselling, 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.

This definition places emphasis upon the importance of self-study. This feature of distance education is emphasised in Wedemeyer's definition too. Like Wedemeyer and Moore, Dohmen also emphasises, and correctly so, the use of the media which is what enables distance education to reach out to the consumer of education.

We notice that all the three thinkers quoted above focus, partly explicitly and partly implicitly, on two aspects of distance education. These are :

i) self-study, and
ii) the use of media for educational communication.

Dohmen recognises the need for student support too, which is an important addition to the kind of self-study which distance learners pursue.

The point being made is that as against the oral communication used in the conventional classroom type of teaching, which is not a process of self-study, distance education uses print, electronic media and oral face-to-face situations for purposes of self-study which is the basis of distance education.

Now, we shall turn to a definition that presents a theoretical framework for the entire process of distance education.

1.4.4 Peters

Peters (1973) defined distance education as "a method of imparting knowledge, skills and attitudes which is rationalised by the application of division of labour and organisational principles as well as by the extensive use of technical media, specially for the purpose of reproducing high quality teaching materials which makes it possible to instruct great numbers of students at the same time wherever they live. **It is an industrialised form of teaching and learning".**

Peters' definition is interesting because, besides the use of technical media and mass education, he emphasises a specific ethos which relates distance education to the nature of the industrial society. It is also possible to view distance education as a system arising from the new and specific needs of an industrialising society in which almost all activities, including education, have to fit into time-schedules that are geared to more rigid working and learning conditions. The possible comparision between the conventional, face-to-face education and the 'industrialised' distance eduation is as follows:

In the artisan period of commodity production, the artisan as an individual had complete control over his art or trade. The skills of an individual artisan or worker could be distinguished by the commodity, and the indivuduality of the producer was thus maintained. Similarly in the ideal face-to-face classroom teaching, the teacher is solely responsible for the choice of the curriculum, syllabus, method of instruction and evaluation. The individuality of the teacher is very much recognisiable, even if advanced mechanical devices are used in the classroom. But in distance education every thing becomes a collective activity -- development of courses, their delivery, the process of evaluation etc. Because of the size of the numbers, distance teaching operations become massive and the logistics become complex and at times cumbersome. The very nature of these activities, affects the individual identity of those involved in the practice of distance education. The difference between face-to-face education and distance education is that of the division of labour. The degree of division of labour in distance education corresponds to a large extent to the division of labour an industrial in operation.

1.4.5 Holmberg

Holmberg (1981) defines distance education as that kind of education which covers

> The various forms of study at all levels which are not under continuous, immediate supervision of tutors present with their students in lecture rooms on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organisation.

What is interesting about Holmberg's definition is that distance education is being looked upon as an organised educational programme, which assures institutional support to the student. We shall elaborate on this and a few other points of view in the next unit.

Check your progress 2

i) Who has defined distance education as an industrialised teaching/ learning system?

ii) Which of the five thinkers we have studied above says that there is a need for human-support in an industrialised teaching and learning system?

iii) Identify and write down the main concept which is common to the views of Dohmen, Wedemeyer and Moore.

Notes: a) Space is given below for your answer.

b) Check your answers with those given at the end of this unit.

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1.5 SIGNIFICANT ASPECTS OF DISTANCE EDUCATION

It should not be assumed that there are no other definitions except the five we have touched upon above, nor do we suggest that any one or a combination of any two or more of the above definitions actually defines distance education comprehensively. There are other definitions too, and many more will come up as we explore this innovative system of education. Obviously, the question of defining distance education is open, and it will remain so for quite some time to come. The purpose of the above details will have been served if they enable you to identify the various characteristics of distance education as it is understood today. This is exactly what Keegan has already done for us. He brings together various aspects of these definitions in order to clarify the nature of distance education. These aspects are

i) the separation of teacher and learner.

ii) the role of the educational organisation
iii) the place of the technical media
iv) two-way communication
v) the separation of the learner from his peer group
vi) industrialisation

Each of these may be considered briefly as follows:

i) The teacher and the learner are separated from each other and this is a central characteristic of this form of education.
ii) Distance education is an institutional kind of educational system. It is, therefore, distinct from private study which may result from private reading or watching TV or attending a talk, etc.
iii) Distance education makes use of the various technically advanced media such as printing, telephone, audio-video, broadcasting, computer, etc.
iv) It is two-way communication because the student is able to respond through assignment-responses or other media and therefore can receive feedback. The student thus enters into a dialogue with the institution.
v) Each student is separated from his/her peer group in the sense that although the learners form a fairly sizable population they do not have face-to-face interaction among themselves. Thus distance education becomes a highly individualised learning system. In this sense, it remains one of the most individualised of all educational systems. Even though study groups may be formed under distance education learning programmes, these may not be compulsory and the student is free to work entirely on his/her own.
vi) Distance education is a specific answer to a specific need. It is the developed industrial society that has created a need for a more capsular kind of education. At the same time, it is the same society that has developed the necessary technology to be able to structure an educational system that will cater to such a specialised kind of need for education.

In that sense, one can say that distance education is an offshoot of industrial development. Thus, today one can define distance education as that field of educational endeavour in which

- the learner is quasi-permanently separated from the teacher throughout the duration of the learning process;
- the learner is quasi-permanently separated from the learning group throughout the duration of the learning process;
- a technological medium replaces the inter-personal communication of conventional, oral group-based education;
- the teaching/learning process is institutionalised (thus distinguishing it from Teach-yourself Programmes) and,
- two-way communication is possible between both the student and the teacher (thus distinguishing it from other forms of educational technology).

In essence, it represents individualisation of the educational processes.

Finally, one must recognise that the concept of distance education is basically a democratic idea. This is, perhaps, what makes it most unique. What a lecturer says as part of his/her oral and spontaneous communication within the classroom is in many ways private. At least, it is restricted to a definite and small number of persons and cannot be captured in any medium for review or revision.

On the other hand, the information that is communicated in a distance education learning programme is something that is open to public inspection. Such learning resources, therefore, can be publicly criticised and can be reviewed and revised from time to time. Hence one might conclude by saying that the democratistation of the educational process is possibly achieved in some measure by the process of distance education.

1.6 IN JUSTIFICATION OF DISTANCE EDUCATION

Doubts have often been expressed about the nature of distance education and its true efficacy. Some have suggested that since there is no teaching function in it, distance education should not be described as an educational activity. Some have seen it more as a kind of business similar to what mail order firms carry out. To many it may appear to be a kind of industrial, organisational selling of learning goods for financial profit.

One answer to this is to say that distance education is not a conventional kind of education. There is minimal face-to-face or interpersonal communication and institutionalised teaching. It is based on rationalised and technologically produced teaching programmes.

The above argument assumes that all learning does not depend on teaching. People learn from the time they are born until they die. They learn from books, television, from movies and from everyday life. This learning is different from on-campus learning which is primarily limited to teacher-oriented communication. By implication, this means that we are learning all the time. And yet the concept of interpersonal communication is central to distance education. Since the quality and quantity of learning depends entirely on the kinds of material that are developed by the institutions, this inter-personal communication can be divided, following Keegan (1986), into the following functions:

i) *Information* : *to provide information*
ii) *Expression function* : *to express feelings*
iii) *Control function* : *to get someone to behave in a certain way*
iv) *Social contact function* : *to relieve privacy*
v) *Stimulation function* : *to stimulate*

These functions are carried out in distance education through printed or electronic or computer-based interaction. There is, therefore, a need within distance education to compensate for the following weaknesses of technology based education:

i) no heard language,
ii) an absence of immediate feedback,
iii) delayed reinforcement
iv) no physical contiguity (of teachers and learners).

Above all, the environmental factors of the learners are vastly different. What can compensate for these weaknesses, to a large extent, is a more rationally determined means-ends process: the use of a context-free language, a better emphasis on the learning of skills, etc. All these can be developed through an easy readable style, anticipation of students' problems, careful structuring of contents, self-testing questions, clearly enunciated instructional objectives, inserted questions and model answers.

All this leads us to a two-point conclusion

Distance education achieves

i) an industrialisation of teaching, that is, inter-personal communication is replaced by mechanically designed systems of communication that lie in the printed work, in audio and video cassettes and in computer-based materials; and

ii) privatisation of institutional learning, that is, students learn at home and at their own pace. In other words, the individual student becomes the focus of learning.

Distance education, thus, is a movement away from labour intensive costs in education since it reduces the active participation of a teacher within the system of education.

1.7 LET US SUM UP

In this unit, we attempted to give you an overview of the term 'distance education' -- with a word of caution that it is not easy to define the term comprehensively. The attempt was carried out by distinguishing the system of distance teaching and learning from the other systems of education and briefly discussing the definitions presented by a few thinkers in this field. Their ideas were discussed so as to give you a complete picture of the significant and conspicuous features of distance education. To ward off naïve criticisms against this mode of teaching, we have, towards the end of the unit, said a few words in justifying distance education as a learning activity, which is more effective than the traditional systems of education.

With these ideas in the background, we shall now turn to the philosophies which underlie the concept of distance education. To these philosophies we shall devote two units, namely units 2 and 3 of this block. In unit 4 we shall discuss some of the emerging operational concerns of the nineties which should answer many of the questions raised about the effectiveness and relevance of distance education of the previous decades.

Check Your Progress: Possible Answers

1 By traditional education we mean a system which operates primarily within a classroom setting. It tries to bring about learning mainly through and with the presence of an oral communicator, i.e., a teacher. In other words, in the traditional system, teaching as an activity finds fulfilment and consummation within a situation in which the teacher and the pupil work contiguously. For example, much of school and college education is of this type.

2 i) Peters
ii) Holmberg
iii) 'Independent study', 'self-study' or 'learner autonomy'.

UNIT 2 PHILOSOPHICAL FOUNDATIONS 1

Unit Structure

2.0 Objectives

2.1 Introduction

2.2 Independent Study: Charles Wedemeyer
- 2.2.1 Autonomy of the learner
- 2.2.2 Distance between the learner and the teacher
- 2.2.3 Structural system

2.3 Independent Study Revisited: Michael Moore
- 2.3.1 Moore's notion of independent study
- 2.3.2 Distance: a function of 'dialogue' and 'individualisation'
- 2.3.3 Learner autonomy

2.4 Let Us Sum Up

2.0 OBJECTIVES

Under the philosophical foundations of distance education, we shall try to acquaint you with the most general issues and principles of distance education. In this attempt we shall discuss some significant ideas and our perceptions pertaining to this discipline. We shall, therefore, survey the seminal literature on distance education and identify the various distinct lines of thought that attempt to provide philosophical foundations to the discipline under consideration.

The distinct lines of thought presented here coupled with those given in the following unit will enable you to get acquainted with underlying philosophies of distance education. Besides, you will develop useful insights into the efficacy of the distance mode of teaching and learning. In essence, after completing this unit, you will be able to

- clearly state what independent study and autonomous learners mean
- knowledgeably discuss the implications of the term 'distance' in distance education.

2.1 INTRODUCTION

We have chosen six important theories -- of which two will be discussed in this unit and the remaining four constitute the following unit -- in order to give you a comprehensive overview of the philosophies that underlie distance education.

The proponents of the 'theories' we have chosen are listed below for easy reference.

Table 1: Distance education: Thinkers and theories

S. No.	Name	Major theoretical contribution
1.	Charles A. Wedemeyer	• Independent study
2.	Michael G. Moore	• Distance : a function of 'dialogue' and 'individualisation' • Learner autonomy
3.	Otto Peters	• Distance education: an industrialised form of teaching and learning
4.	Borje Holmberg	• Guided didactic conversation
5.	John A. Baath	• Significance of two-way postal communication
6.	David Sewart	• Human element in an industrialised form of learning and teaching

Of the six thinkers, we have already touched upon the views of four : Wedemeyer, Moore, Peters and Holmberg. We shall elaborate here their views at some length and consider the views of Baath and Sewart.

2.2 INDEPENDENT STUDY: CHARLES WEDEMEYER

A professor of education at the University of Wisconsin, Madison, Wedemeyer was associated with distance education at the university level in the USA from early 1960s to late 1970s. He retired in 1977. His liberal outlook is manifest in his work in the field of distance education. His contribution to the theoretical foundations of distance education comprises his analysis of the difference between distance education and conventional face-to-face education. His analyses of the major distinctions/differences between the two present three key notions:

i) ***autonomy of the learner,***
ii) ***distance between the teacher and the learner, and***
iii) ***structural system.***

These three notions have since become the very bases of the overall concept of distance education. We shall discuss these notions in the following sections and thus introduce you to what may be called Wedemeyer's theory of 'independent study'.

2.2.1 Autonomy of the learner

Wedemeyer's writing popularised the expressions **'independent study', 'open learning' and 'distance education'**. (The first of these expressions is used extensively in the USA for correspondence courses and distance education programmes at higher levels of education). 'Open education' is an expression which has given meaning to the term 'open university' though there is no 'open university' in the United States as such, and 'distance education' is the expression which replaced the expression 'correspondence education' officially in the year 1982 (see unit 1, block 3). At the core of all the three expressions is the notion of 'learner autonomy'. Wedemeyer's definition of independent study (see 1.4.1) gives us a clue for understanding the concept of learner autonomy. The learners study independently in their own environment free from the constraints of 'inappropriate class placings' and develop in themselves a capacity and maturity that enables them to carry on 'self-directed learning'.

Wedemeyer has outlined his ideas about 'independent study' as follows:

i) It consists of teaching/learning arrangements, and these arrangements have various forms. The special feature of these arrangements, is that, the teachers and learners stay away from each other, and didactic communication takes place in various ways.

ii) Its purposes are to facilitate learning activities of both the on-campus and the off-campus students.

On the one hand, it relieves an on-campus learner from the tyranny of inappropriate face-to-face teaching; on the other, it provides learning opportunities in one's own familiar situation and helps one in building up, through *self-directed learning*, the maturity which characterises an educated person.

Besides, it may be noticed, Wedemeyer has introduced the notion of 'continuing education' as one of the purposes of 'independent study'. The obvious basis of 'independent study' is Wedemeyer's liberal educational philosophy. He thinks that factors like geographical remoteness, poverty or any other type of social disadvantage, poor health or disadvantageous physical conditions, or any psychological conditions that inhibit one from undergoing institutionalized education should in no way stand in the way of one's achieving the desired educational goals.

The immediate pedagogical implication of such a philosophy is that we look for unorthodox means and modes of educating all those who are willing to be educated. If one cannot go away from one's place of work or residence because of economic or physical conditions, if one cannot attend a class because the classroom atmosphere is psychologically or sociologically hostile to one, or just because of compelling social commitments one cannot fit into the traditional school, college or university modes of education, then the state must bring education to one's door step. This is possible, only and only

if the basic characteristic of that unorthodox system is to allow the teachers and the learners work apart from one another. Consequent upon accepting this basic characteristic, we must admit that in this system, word of mouth cannot be the major means of communication. By implication, the teacher-learner communication must take different forms: the printed word, a telephone talk, a radio talk, etc. We should keep in mind that the context here is the United States, and when we have to put these concepts into practice we must take into account the specific situations obtaining in our own countries our social set up, growth of the economies, educational provision, cultural factors, academic traditions, etc.

Advantages of 'Independent Study'

Some of the advantages of this approach may be debated against some of the disadvantages it may suffer from, but of these advantages, the few which Wedemeyer has highlighted are given below:

i) The student will be able to work on her/his own pace; she/he will not be forced to get into the straitjacket of the classroom, nor forced to undermine her/his social obligations against the restrictive academic schedule of a college or a university.

ii) The student will be able to choose her/his educational goals; s/he will not opt for courses that do not suit her/him, nor the activities that do not suit her/his purposes.

iii) Besides, the student will go about learning in her/his own way utilising her/his resources to the maximum; s/he will take on to herself/himself the responsibility of engaging herself/himself in self-instruction and also decide the way her/his achievements may be assessed.

The student of the above description is the autonomous student — an educated person in the real sense of the word. Whatever is done by the educational institutions for such a student will be by way of providing educational facilities, which cannot be made available on the above terms through conventional face-to-face teaching. It is the distance mode of teaching that goes with the above student characteristics (see unit 4 of block 1).

2.2.2 Distance between the learner and the teacher

As indicated above, student autonomy has many pedagogic implications. The strongest of them all is that the learner has to learn apart from the teacher. How different is this proposition from orthodox classroom teaching?

A classroom situation comprises five components :

i) ***the teacher,***

ii) ***the learner,***

iii) ***the subject-matter which is taught and learned,***

iv) ***a communication system, and***

v) ***the classroom, i.e., the pedagogic site.***

Wedemeyer sums up this description graphically as follows:

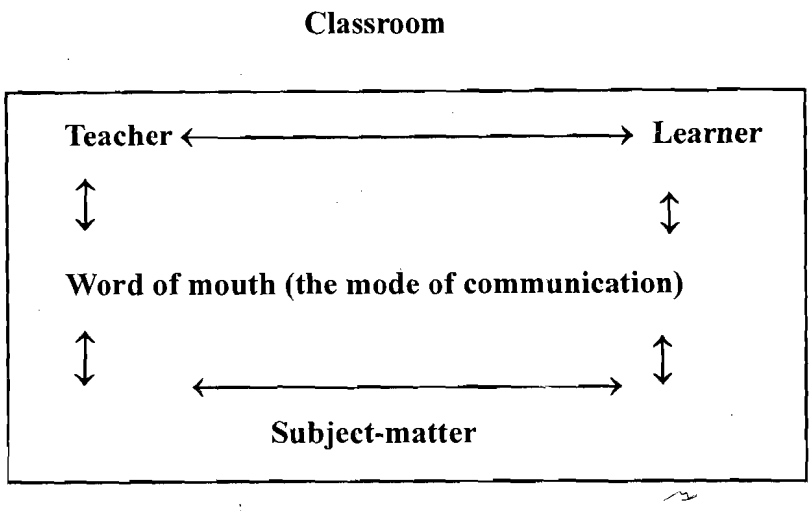

Fig. 1: The formal classroom situation

This model of teaching and learning has a prestige which is the result of centuries of socially acceptable practice. It is a universally accredited socio-academic norm. In the new proposition articulated above, Wedemeyer is challenging this age-old socio-academic norm, a cultural artifact which by virtue of its existence over the centuries does not appear to have any need for reform or alternatives. And then, Wedemeyer points to the gradual but definite process of social evolution which has built viable alternatives to this potent cultural artefact. This process of social evolution is outlined below:

i) The invention of writing broke down the absolute monopoly of speech as the medium of communication; besides, writing made it possible to record communications and transfer them over space and time.

ii) The invention of printing broke down the monopoly of single-copy-written communications. Printing allowed the same communication to be passed on at the same or differing time(s) over distances to as many receivers as one wanted.

iii) The development of telecommunications and computers collapsed the dimensions of time and space; and when applied to education, telecommunications open up hitherto unknown possibilities of teacher-learner contacts.

iv) The development of democratic philosophies ended the monopoly of elitist and sectarian forms of education.

v) The introduction of correspondence education was the result of sheer social needs and pressures. In the beginning it was not a movement sponsored by the state, nor was it the result of a deliberate effort made by educationists individually or collectively.

vi) The development of programmed learning and teaching machines pointed to the possibility of self-instruction, and learner-based education.

These changes have made it possible to organise teaching and learning in ways considerably different from what is represented by the model presented

in Figure 1. One of the possible new ways of organising teaching and learning is represented in Figure 2.

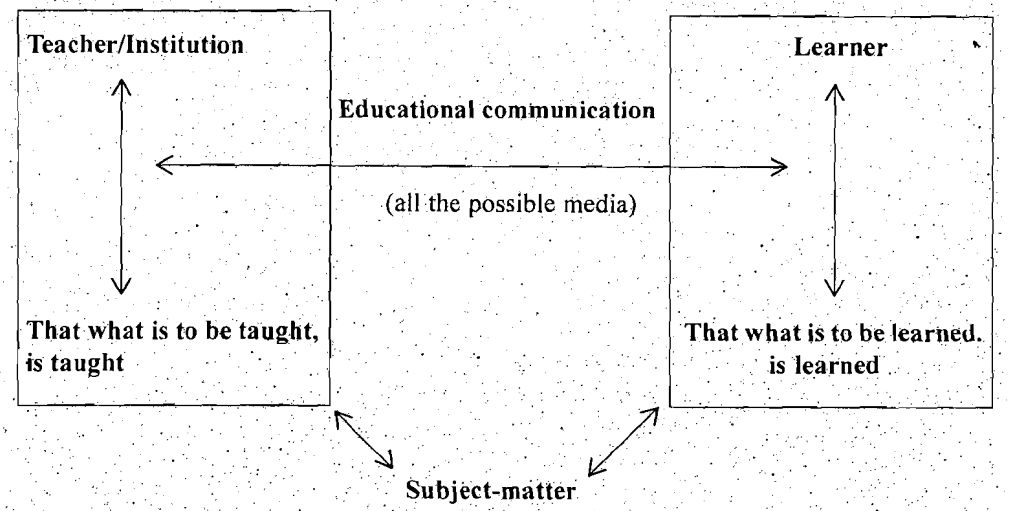

Fig. 2: A departure from the formal classroom situation

Reformation of conventional socio-academic norms

From Figure 2, it may be understood that the essential components that comprise a teaching-learning communication have remained intact. The difference suggested above is that instead of one box (see Fig. 1) we have two boxes now, both of them independent of each other. And the distance between the two boxes is filled by non-traditional means of educational communication which do not entirely do away with the traditional means of face-to-face (single box) communication. Thus the above model is not different from the one presented in Fig. 1, as far as the basic components of a teaching-learning situation and their purposeful interaction are concerned. But if we use the proximity of these components as the major criterion for characterising the situation, the above model marks a complete departure from the traditional classroom model, which is a convenient concomitant of face-to-face educational communication. Obviously, then, if the obsession with face-to-face educational communication is shaken off, i.e., a judicious variety of systems of communication is adopted and perfected for purposes of being pedagogically effective, the confines of the classroom can be broken; and it will be possible for the learners to learn on their own, away from their teachers, and for teachers to teach even when they are away from learners. This situation, which is basically characterised by DISTANCE between the teacher and the learner, has a few significant implications for the overall teaching-learning process. The more significant of these are :

i) the learner has the freedom to start, pace and stop his learning activities — it is he/she who is responsible for his/her progress or failure;
ii) the learner is not necessarily torn away from his/her environment — physical, socio-cultural or geographical;
iii) media other than the spoken word, such as the printed word, audio-visuals, etc., are exploited for the benefit of both the teacher and the learner; and

iv) learning can be made more and more relevant to individual needs and it is the learning activity which becomes more significant than the teaching effort.

Thus, distance education necessitates a change in both the learner-culture and the teacher-culture. The learner has to take on responsibilities and roles which traditionally did not belong to his/her culture and the same holds true for the teacher. This change has already occurred in the developed world. It will take some time for the developing countries to accept this change. That the process has already begun in many developing countries is clear evidence that it will gain momentum. If the communication technologies are imaginatively used, the strong oral traditions and the cultural identities too can be preserved and developed further. The interactive element which is the main strength of face-to-face education can be taken to a higher level in distance education. But all these should be done with a sense of realism.

2.2.3 Structural system

The expected cultural changes which have been suggested above obviously necessitate redefining the characteristic of learners, teachers and the education system in order to make non-contiguous educational communication pedagogically effective. This characteristic of distance study means that the learner is physically at a long distance from the teacher for much, most or even all of the time during the teaching/learning process, in contrast to educational communication in a classroom situation which is 'contiguous'. Such a redefinition of these characteristics forms the basis of a system that is structurally different from the traditional formal system of education. This new system may be visualised in the following features:

i) the learners have to take much greater responsibility for learning than they were used to;
ii) wider choice of the content and the methods has to be provided to the learners;
iii) individual differences among the learners have not only to be recognised, but also catered to;
iv) learners have to be allowed their own pace to complete or working through the courses -- they may start, stop and /or complete the courses according to their own convenience and abilities;
v) evaluation of student performance should be independent of the consequence, methods and place;
vi) teachers should concentrate on educational tasks by withdrawing from social and administrative tasks -- they should function more as managers of educational materials than as the traditional sources of all correct information and/or knowledge;
vii) teachers should accept the role of the educational media as a role complementary to their own — the implication is that the courses/ materials have to be reconceived and designed afresh;
viii) the educational operation should effect a judicious media-mix — using all the media and methods should be one of the major principles of course design and production; and

ix) the system should operate wherever the learner(s) may be -- it should be independent of the domicile and grouping characteristic of the learners.

A system of education that incorporates the above characteristics is **an independent study system**, according to Wedemeyer.

Check your progress 1

Give two reasons why an 'independent study system' is claimed to have the potential to change the 'cultures' of learners and teachers'.

Notes: a) Write your answer in the space given below.
b) Check your answer with the one given at the end of this unit.

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Having completed this exercise, let us now turn to the second significant line of thought.

2.3 INDEPENDENT STUDY REVISITED: MICHAEL MOORE

Moore has worked at the University of Nova Scotia and the University of Wisconsin at Madison. Besides, his experience as a senior counsellor of the British Open University (1981) has contributed to his insights immensely. He is at present with the Pennsylvania State University, USA, and the editor of *The American Journal of Distance Education*. His contribution to the theory

of distance education does not consist in the presentation of a new concept thereof, but in a more insightful and analytical model which, while essentially confirming the notions of Wedemeyer, sharpens them to build broad taxonomies to quantify the various degrees and types of independent study. His taxonmies can be applied to the educational transactios of both distance and face-to-face modes. But here we look at them in the context of distance education only.

2.3.1 Moore's notion of independent study

For Moore, independent study is a generic term which describes all such educational transactions as may be distinguished from the traditional formal education in terms of the variables of 'distance' or 'apartness' and 'autonomy'. He describes the traditional formal system by the expression 'school environment' which is characterised by the classroom lecture or seminar and a setting in which teaching and learning activities are not only 'contemporaneous' but also 'coterminus'. And all other educational transactions which allow 'distance' and 'autonomy' are forms of independent study, be they open university programmes, correspondence courses, external degree programmes or teach-yourself programmes. Any, and all of these educational programmes can be classified in terms of two variables, namely 'distance' and 'autonomy'. Being variables, both 'distance' and 'autonomy' can be expressed/represented as continua on the basis of two critical characteristics of the system of independent study namely,

i) dialogue, and
ii) individualisation

Here we should remind ourselves that it is the difference in the degree of 'dialogue' and 'individualisation' that differentiates a distance learner, a distance teacher, and distance teaching/learning from their counterparts in the traditional formal education. We shall elaborate on this.

i) Dialogue

For Moore, 'dialogue' is a broad term which may best be interpreted by the expression 'academic interaction' aimed at effecting teaching and learning; teaching as far as the teacher or the institute is concerned, and learning as far as the learner is concerned. This 'dialogue' may take place in a face-to-face situation, by individual or group telephone, individual or group correspondence, computer assisted instruction or may be mainly one sided, as in the case of programmed instruction, television, radio and text materials. Dialogue, in this sense can take place between the learner and the learning materials even without the presence of a teacher. On the other side, even with the presence of a teacher, 'dialogue' may not take place if the learner lacks motivation and the teacher fails to communicate effectively.

ii) Individualisation

An educational programme is said to be highly 'individualised' if its

curricular components, namely objectives, methods, materials and evaluation have a very high correlation with the curricular components of the learner's learning programmes.

In order to understand the concept of 'individualisation' more clearly we would like to bring in another important concept here -- the concept of 'structure'.

Traditional academic programmes are highly 'structured', i.e., their curricular components, namely, **objectives, methods, materials** and **evaluation** are usually predetermined irrespective of what the needs of a particular learner may be. A graduate programme, for example, assumes that all the students who opt for the combination Physics-Chemistry-Mathematics are, more or less, at the same level of mental ability, have the same study skills and motivation for learning, irrespective of their socio-cultural backgrounds. An academic programme of this kind, i.e., one which does not take into consideration the divergence in learner-characteristics, and is therefore prepared for a hypothetical average learner, may be called a 'structured' programme. On the contrary, an academic programme which is flexible enough to cater to diverse learner-characteristics, cannot have a rigid structure; and a programme that lacks structure (in the sense in which the term has been used above) will make 'individualisation' of learning possible, as its objectives, methods, materials and evaluation can be adapted to those which the leaner is fit for and is seeking.

Let us consider a hypothetical situation. A learner with the ability to complete a three year degree programme in one year has to unnecessarily wait for two years more than necessary to get the degree because the "structure" of the programme does not allow individualisation. In another situation, a learner, for whatever reasons, takes more than three years to complete the programme but gets the degree with a stigma that he/she "failed" to complete the programme within the stipulated period, and therefore is not worthy of being be considered a first rate student, whatever the scoring in the individual courses/papers. In both cases individualisation is neglected because of the rigid structures. As soon as efforts are made to tak care of individual needs of learners, the structures begin to relax. This is tru of every other aspect of learning — styles of learning, forms and methods of study, examination, evaluation etc.

We may now use the expression 'individualisation' and 'lack of structure' synonymously, for 'individualisation' may be achieved through 'lack of structure' in an academic programme, and 'lack of structure' assures 'individualisation'. Having studied Moore's notions of dialogue, individualisation and structure in his analysis of the notion of 'independent study' we show you now how he uses these notions to expound his concept of distance and autonomy.

2.3.2 Distance: a function of 'dialogue' and 'individualisation'

A particular combination of the features *dialogue* and *structure* in an academic programme will give it a character of its own. And different combinations of these features will give us differing categories of academic programmes. Using letter symbol + D for high dialogue, -D for lack of dialogue, -S for lack of structure, and +S for highly structured, Moore categorised the possible educational programmes as follows:

Table 2: Programme types in terms of 'dialogue' and 'structure'

Distance as the variable	Type	Programmes Type	Examples
Most distant ↑ ↓ Least distant	-D+S	1. Programmes with no dialogue but with structure	Programmes in which the communication method is radio or television
	-D-S	2. Programmes with no dialogue and no structure	Independent reading/ study programmes of the 'self directed' kind.
	+D+S	3. Programmes with dialogue and structure	Programmes using two-way communi-cation methods
	+D-S	3. Programmes with dialogue and no structure	A tutorial programme

Besides using these variables, dialogue and individualisation, for purposes of categorising the academic programmes, Moore uses them to formulate his notion of distance. He says that the actual distance between the learner and the teacher/institution should not be measured in terms of the *spatial distance between the two, but in terms of the degrees of dialogue and individualisation* which the academic programmes offer. On the basis of the differing degrees of 'dialogue' and 'individualisation' the continuum of 'distance' may be represented as follows:

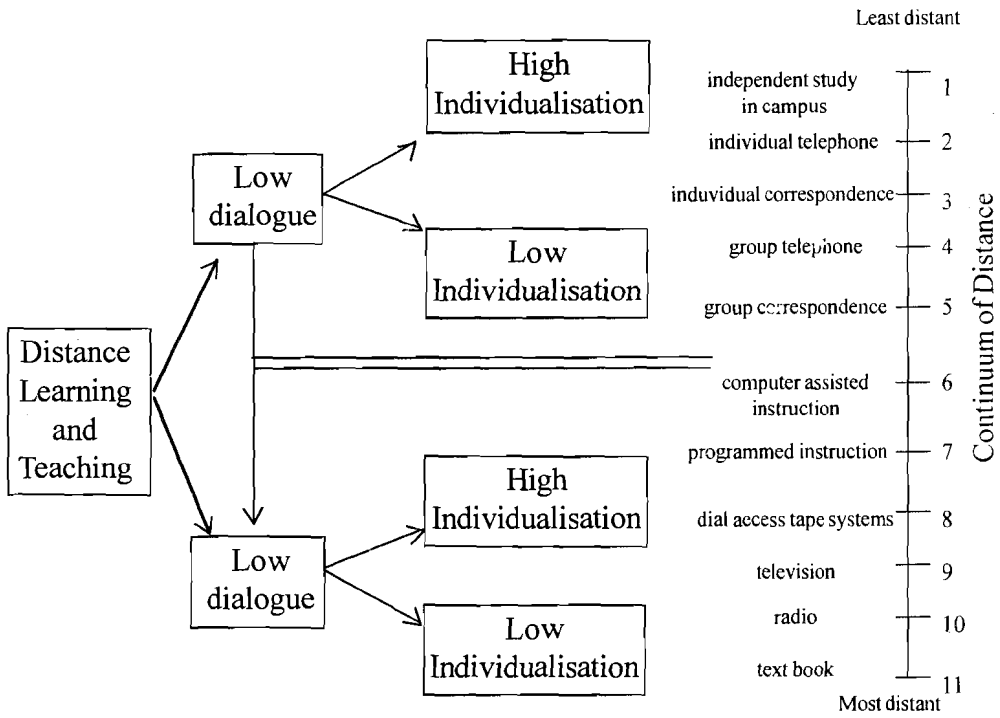

Fig.3: Continuum of 'distance' in terms of 'dialogue' and 'individualisation'

This classification of distance teaching/learning methods on the basis of variability of 'dialogue' and 'individualisation' makes it clear that the term 'distance' is not to be confused with the degree of physical 'contiguity'. A learner X may be physically further removed from the source, depending on a particular combination of the degrees of 'dialogue' and 'individualisation' arranged for X. For example, learner X may be 400 miles away from his/her distance teaching institute and learner Y just 4 miles away from his/hers; but there are arrangements which make it possible for learner X to interact with his/her institute and/or the teachers by telephone as many times a day as he/she would like to, as against learner Y who has to depend entirely on text materials sent to him/her by his/her institute which does not make any arrangements for additional academic interaction. In such a case, we shall say that relatively learner Y is more distant from his/her institute than learner X. Thus 'distance' in this context is to be seen as a function of 'dialogue' and of 'individualisation'. That is to say, the higher the degree of 'dialogue' and 'individualisation' the less distant the learner is from his/her teacher/institute, and the lower the degree of 'dialogue' and 'individualisation', the more distant the learner is from his/her teacher/institute.

So far, we discussed Moore's concept of 'distance' as one of the characteristics of distance education. Now we turn to its second characteristic, namely 'learner autonomy'.

2.3.3 Learner autonomy

Before you start reading this subsection, it would be a good idea to have a quick glance at 1.2.1, where we have very briefly explained what learner autonomy is. In the traditional educational system, education is thrust upon

learners from above, in which sense it is a top-down model. The curricular components are chosen and/or decided upon by the institute and/or the teacher, which/who prescribes the line to be followed by the learner. Let us elaborate on this point.

We have indicated earlier that a curricular unit is constituted by the statements of objectives, the methods that suit those objectives, the materials which may suit those methods, and the evaluation-system which may help achieving those objectives through the agencies of the suggested methods and the prescribed materials. Accordingly, an academic programme for which the objectives, methods, materials and evaluation are decided by the institute/ teacher may be termed 'institute/teacher determined'. Against this background, it should not be difficult to visualise a programme which may be called 'learner-determined'. We shall call a programme 'learner-determined' if its objectives, methods, materials and evaluation (all the four curricular components) are determined by the learner himself/herself. Put differently, a 'learner-determined' programme may be said to allow 'learner autonomy'. Depending on the degree of 'learner autonomy' which a particular programme may allow, we can classify it in a typology ranging from 'learner-determined' or 'autonomous' to 'institute/teacher determined' or 'non-autonomous'. What follows is an illustration to exemplify what we have said above:

Table 3: Programme types in terms of learner autonomy

Range of Programme types	Sl. No.	Programme types	Setting of objectives	Procedure (Methods + Materials)	Evaluation
Teacher-determined (non-autonomous) (N)	1	Most correspondence courses	N	N	N
↑	2	Many private study courses	N	A	N
	3	Studies in which the learner controls evaluation only	N	N	A
	4	Studies in which learner controls course content and evaluation	N	A	A
	5	Learning car driving	A	N	N
	6	Learning sports skills	A	N	A
↓ Learner-determined (autonomous) (A)	7	Studies for personal improvement	A	A	A

Table 3 shows that learning programmes may range from 3N types to 3A types. Let us explain this further by taking a B.A. Degree programme as an example. The objectives of this programme are predetermined by the university concerned. Thus, as far as the objectives of the programme are concerned, they do not allow autonomy to the learner and we indicate it by the letter 'N' (non-autonomous). The methods adopted and the material used to effect teaching are also determined by the university and/or the teacher; so, on this account either the learner is not allowed any autonomy and again we indicate this by the letter 'N'. The same is the case with evaluation which is determined by the university. Thus, a B.A. degree programme is through and through a 'non-autonomous' programme. On the other hand, a qualified engineer may join a course for purposes of his/her personal improvement in his/her profession, i.e., to keep himself/herself abreast of the latest in his/her field of specialisation. Assuming that many such courses are available, this engineer will choose a course, keeping in view his/her requirements and/or interests, i.e., he/she will decide on the objectives of the course, he/she will also decide on and follow the methodology and the materials according to his/her choice, and finally he/she will decide when his/her objective is achieved. A course of this kind is completely 'autonomous' and we may call it a 3A type course. And between the two types illustrated above there can be a range of course/programme types, some more and some less autonomous than others.

Walk-in admissions, on demand examinations, computer conferencing, collaborative networked learning , evaluation, examination, etc., which are currently practised in a number of open distance learning institutions around the world are basically rooted in the notions of learner autonomy, individualisation, dialogue and multi-channel learning. What at first appear to be ideas in the work of educational thinkers eventually become possibilities and practices, thanks to the advancement of communication technologies which gradually become educational technologies. But even without sophisticated technologies, it is possible to ensure learner autonomy and 'individualisation' leading to a reasonable degree of 'dialogue', if efforts are made to relax the conventional structures of institutions and programmes. In this sense, the physical distance of distance education becomes less important as the notion of distance is viewed more and more in terms of 'communication' and 'dialogue'. Quite legitimately, the concept of distance education is thus being identified with 'open education' and 'open learning'.

Check your progress 2

Why has item 5, i.e., 'learning car driving' (Table 3), been categorised as an 'ANN' type programme?

Notes: a) Write your answer in the space given below

b) Check your answer with the one given at the end of this unit.

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2.4 LET US SUM UP

In this unit, we discussed the contributions of Wedemeyer and Moore in the field of distance education more elaborately than what we have done in unit 1. Wedemeyer's liberal educational philosophy is reflected in his contention that the learner should be allowed to be autonomous. He is of the opinion that being manipulated as pawns in the straitjacketed classroom situations, the learners will be prevented from selecting suitable courses for themselves and thus fail to utilise their own resources to the maximum. He, therefore, contends that a need for the reformulation of conventional socio-academic norms is not only desirable but also imperative. This aim can be achieved through the practice of distance education as it promotes 'learner autonomy'.

Moore suggests that 'physical distance' alone is not significant in conceptualising 'distance education'. What matters, besides, are the variables of 'individualisation' and 'dialogue', as a very high degree of both these variables makes a course/programme less distant pedagogically and, conversely, a very low degree of both the variables will make a course/ programme greatly distant. In this context, we explained what Moore means by dialogue and individualisation.

For him dialogue is 'a measure of the degree to which the communication medium in a distance education programme permits learner-teacher interactions', and individualisation is 'a measure of the extent of the responsiveness' of a teaching programme to the objectives of an individual

learner. Thus an educational programme in which the learning programme occurs separately in terms of time and place from the teaching programme allowing the learner control (of varying degrees) over the objectives of learning, learning tools, methods and evaluation, is an 'independent study' programme.

Check Your Progress : Possible Answers

1. An independent study system is claimed to have the potential to change the learner and teacher cultures primarily because of the following two reasons:
   i) In an independent study system, the learner has the freedom to start a programme, to go at his/her own pace and stop his/her learning activities whenever he/she wants to. That is to say, it is he/she who is responsible for his/her progress or failure. On the contrary, in a traditional system of education the learner is controlled by many variables -- teacher, classroom situation, examination patterns, time schedule, etc.
   ii) Learning in an independent study system can be made more and more relevant to individual needs and it is the learning activity which becomes more significant than the teaching one. And so the teacher has a completely different role to play in the teaching/learning process.
2. As far as learning 'car driving' is concerned, the objectives are set by the learner himself/herself and not by any external agencies (you can compare it with any traditional teaching prgoramme, in which the learning objectives are set by external agencies - material-designer, teacher, etc.), whereas methods, materials, and evaluation are determined by the instructor. Thus, the learner is autonomous (A) as far as his/her objectives are concerned, but non-autonomous (N) as far as the procedures of learning and the final evaluation are concerned. So we label the programme 'ANN'.

UNIT 3 PHILOSOPHICAL FOUNDATIONS 2

Unit Structure

3.0 Objectives

3.1 Introduction

3.2 Distance Education: an Industrialised Form of Teaching and Learning -- Otto Peters
- 3.2.1 Rationale behind the above views
- 3.2.2 Industrial characteristics of distance education
- 3.2.3 Distance Education -- most industrialised form of education
- 3.2.4 Pedagogic aspects of Peters' theory

3.3 Guided Didactic Conversation -- Borje Holmberg
- 3.3.1 Guided didactic conversation -- an explanation
- 3.3.2 Features of didactic conversation

3.4 Two-way Postal Communication -- John Baath
- 3.4.1 Pedagogic Significance of tutor comments
- 3.4.2 Pre-enrolment counselling

3.5 Human-element in an 'Industrialised' Form of Education -- David Sewart
- 3.5.1 Vital need for human support
- 3.5.2 Major issues and compromises

3.6 Let Us Sum Up
Putting Units 2 and 3 together

3.0 OBJECTIVES

This unit aims at introducing four eminent thinkers in the field of distance education so as to continue our discusion of some of the major philosophies on which the concept of distance education is based.

By the end of this unit, you will have obtained adequate background knowledge of the significant philosophies of distance education. You will be able to

- discuss how the distance teaching processes can be compared to the industrial ones,
- argue the need for building conversational elements in distance teaching materials, and
- explain the importance of human support to distance learners.

3.1 INTRODUCTION

This unit, as was mentioned earlier, is a continuation of the previous one in which we discussed the philosophies that underlie the concept of distance education with particular reference to Wedemeyer and Moore. In this unit, we will be looking at the significant lines of thought propounded by Peters, Holmberg, Baath and Sewart. We shall look at Peters' views on the industrial nature of distance education in detail and consider Homberg's particular emphasis on the two-way didactic communication. We shall then give a brief account of the views of Baath and Sewart who essentially extend the argument of Holmberg for the human element in the otherwise industrialised nature of distance education. At the end of the unit you will see how each thinker adds a new element to theorisation in distance education.

3.2 DISTANCE EDUCATION: AN INDUSTRIALISED FORM OF TEACHING AND LEARNING – *OTTO PETERS*

Peters was appointed the first Vice-Chancellor of the Fern Universitat (the open university of the former West Germany) in 1975. Earlier he had worked at the German Institute of Distance Education in the former Federal Republic of Germany, where he developed significant insights into the process of distance education. His belief was that highly developed industrial societies had generated a vast variety of needs for education. This fact coupled with the phenomenon of population explosion, according to him, had rendered the conventional system of education inadequate to fulfil the educational needs of the ever growing number of learners. He therefore contended that new approaches have to be explored, and new techniques developed and made available for application — all these have to be 'industrial' in character as the very need for them has arisen as a result of industrialisation.

3.2.1 Rationale behind the above views

Peters developed his ideas partly from his extensive survey of distance education during the 1960s. In 1973, from his surveys he concluded that **distance teaching/learning was an industrialised form of teaching and learning.** He made his major contribution to the theory of distance education through a book titled ***The Didactical Structure of Distance Teaching: Investigations towards an industrialised form of teaching and learning.*** (It was written originally in German).

It should be mentioned here that Peters did not ignore the earlier theoretical inputs to arrive at such conclusions. Far from that, he in fact used these inputs to strengthen his view that distance education is an 'industrialised' form of education. For example, the categories developed by German educational theorists like Heinmann and Schultz for traditional education namely 'intention', 'content', 'methodology', 'choice of medium', 'personal

characteristics' and 'socio-cultural situation', when applied to the process of distance education, show that distance education is a phenomenon that is very different from conventional education. We shall elaborate on this point here:

i) The didactical intention of distance teacher is bound to be of a higher degree in the cognitive domain, but of lower degrees in psycho-motor and affective domains.

ii) The choice of content cannot be as vast and varied in distance education as it may be in the conventional system. (Face-to-face components have to be introduced, if practicals of various types constitute parts of the content).

iii) Teaching methodology and the selection of media also undergo major changes.

iv) Differences in personal characteristics and socio-cultural backgrounds of the learners are also non-conventional -- first generation learners compete with traditionally elite groups, middle aged learners find themselves grouped with younger learners, etc.

The above analysis made Peters conclude that the categories proposed for the analysis of conventional didactical structure are not adequate for analysing the structure and/or process of distance education, and proposed to analyse distance education with the help of categories taken from 'industrial' theory and practice. Peters' views, however, must be seen in the operational aspects of distance education and should not be over simplified as a complete educational theory that negates other theories of education.

3.2.2 Industrial characteristics of distance education

Here, we shall discuss some of the characteristics of distance education which have parallels in the industrial sector.

Division of labour

The production of teaching materials for purposes of distance education is an industrialised process. A whole range of experts from subject specialists, course writers and editors to instructional designers, printers, etc., work on industrial lines to produce materials which are to be used in ways different from those that are used to learn from conventional books. The basic industrial principle that is involved here is 'division of labour'. This principle is not only applicable to the production of materials, but also to the rest of the pedagogical processes — those who prepare the information and academic tasks are not the ones who supply or transmit them, those who supply/transmit them are not directly concerned with tuition and counselling, those engaged in tutoring and counselling can be different from those who evaluate the learners' progress or assess their performance. In essence, each activity is taken care of by a specialist. It is a system, which in industrial parlance is called Taylorism and Fordism, indicating the two distinct phases of modern industrial mode of production.

Mass Production of teaching materials

'Mass production' is obviously a phenomenon of industries. When looked at from an historical point of view, clear parallels are identifiable between industry and distance education. For example, the growth of industry is seen from individual labour to group effort, and manufacture to mass production to meet higher demands. So has been the case with the emergence of distance education (See unit 1, block 3). We can also see parallels in the progress from the initial use of tools, through simple mechanisation, to automation and computerisation and the parallel is quite striking.

Systematisation of work procedures

There are identifiable parallels between the consequence of industrialisation and those of distance education. For example, it has been realised that as in industrialistion, in distance education too, success depends, to a great extent, on :

- 'planning' which has to be scientific in nature,
- formalisation of procedures,
- standardisation of products,
- systematisation of the overall process,
- mechanisation which has implications for social and attitudinal changes in the manpower used for the purpose, and
- heavy dependence on centralisation.

Peters rated these parallelisms high in his theory of distance education.

Layout

It may appear trivial to find a parallel even in the design of buildings, yet it is vital. What we are driving at is that the 'campus' of an open university is markedly different from that of a typical traditional university. In the former, the structures are more or less similar to those of an industry in the sense that it has separate sections for 'production', 'design', etc. And the role of teachers more often than not is similar to that of managers.

It is possible that one can add a few more parallels here. The intention, however, is not to present an exhaustive list. Those which are presented here are illustrative of the point that Peters tried to impress on. Having seen the parallels between distance education and industry, we should also know how this industrialised form of education differs from the face-to-face system of education.

3.2.3 Distance Education -- most industrialised form of education

Peters' conclusion is that, of all forms of education, distance education is the most industrialised, and that along with the theory of industrialisation, the

heuristic categories used therein are the best means to explain this new educational phenomenon. As an illustration of this point of view, we present below, how Peters differentiates educational communication as it obtains in conventional education, which is supposed to be based on interpersonal communication, and in distance education wherein communication is indirect, i.e., communication which is mostly effected through various media.

Table 4: Distance and Conventional teaching contrasted

Face-to-face Teaching	Distance Teaching
Institution where communicative action takes place	System of educational action determined by rational means-ends thinking
Students' and teachers' actions are predominantly determined by social norms	Teachers' and students' actions are predominantly determined by technical rules
The medium of interaction between students and teachers is 'the inter-subjectively shared everyday languages'	The medium of interaction between students and teachers is 'context-free language'
Teaching is determined by 'reciprocal behaviour expectations'	Teaching follows 'conditional prognoses' and 'conditional imperatives'
The focus is on the 'internalisation of rules'	The focus is on learning 'skills and qualifications'
Teaching aims at preserving the institution	Teaching aims at 'problem-solving, attainment of objectives by applying means-to-an-end principles'
Students are punished on the basis of conventional sanctions. They fail because of decisions made by the authority, i.e., of teacher, headmaster, director of education	Students fail because of their inability to cope with the reality of learning at a distance. They drop out of their courses, for instance, due to various problems.

3.2.4 Pedagogic aspects of Peters' theory

Some of the significant pedagogic aspects of Peters' theory are given below:

i) In distance education, educational communication is artificial as the overall communication is broken up into components -- print, audio, video, etc., which are effected mechanically. Such a sea-change in educational communication has assigned new roles for both the teachers

and the learners. The teaching acts and the learning acts too, along with the responsibilities of the teacher and those of the learner have changed.

ii) The teacher is more a 'manager' than a repository and the sole interpreter or commentator of information , as in conventional systems of education. The first task of the teacher, then, is to accept this new role and adapt himself/herself to the system of distance education. He/She is faced with a situation in which the entire teaching process and the teaching materials split into many components, each of which is performed and managed by different persons and tools, which constitute the system. To adapt to this new system is to break off from a professional pattern that has centuries behind it. Obviously, it is not an easy task, but an understanding of

- the present socio-educational scene the world over, and
- the characteristics of the different sub-systems of the system of distance education

should go a long way in helping the willing teacher to adapt himself/ herself to the new role — that of a distance teacher.

iii) Most of the learners who come to the fold of distance education have had their grounding in the conventional system of education. They find distance education attractive, for it allows them to have their own way -- the instruction is not time-bound, place-bound, nor person-bound. They can choose from a vast variety of options open to them, take their own time to complete courses and chose their own places to work through the courses. These advantages notwithstanding, the responsibilities of a distance learner have not only increased, but also changed in character. Very often he/she finds it difficult to cope with this industrialised system and drops out.

These consequences of the industrialisation of education should, by implication, give rise to a new class of educationists who take on the responsibility of making this industrialised system of education more humane, and help the teacher adapt himself/herself and the learner to benefit most from this new educational situation. This process, one can see, has already started. The concern for student support and the rapid developments of interactive media have already started responding to the 'human needs' of distance learners. More about these developments shall be discussed in unit 4 of this block.

It is useful to compare the above propositions of Peters with what he has said at a later stage. Peters (1993) still maintains that distance education is a typical product of the industrial society but takes into account the changes of the post industrial society which is in need of 'new models of distance education'. Such models are being developed by combining various facilities offered by technology, particularly telecommunications having the potential to make distance learners autonomous and at the same time free to participate in group learning. Peters expects the shift from industrial to post - industrial distance education to be a 'Copernican one'.

Check your progress 1

Identify and write down four features which are common to an open university and an industry.

Notes: a) Write your answer in the space given below.
b) Check your answer with the one given at the end of this unit.

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3.3 GUIDED DIDACTIC CONVERSATION– *BORJE HOLMBERG*

The fourth significant contribution to the theory of distance education is the concept of 'guided didactic conversation' propounded by Borje Holmberg.

Holmberg started as a lecturer in English and turned to distance education in 1956 on joining Hermods, the leading Swedish correspondence institution at Malmo, of which he became the director in 1965. He was a professor of distance education at Fern Universitat, Hagen, before he retired.

3.3.1 Guided didactic conversation -- an explanation

A profilic wirter and a sound theoretician, Holmberg takes the view that the core of education is learning by individual learners. Having taken this stand, he believes that distance education should be accepted as an appropriate mode of education particularly suitable for individual learning, as it makes it possible for the learner to depend on his/her personal work which is essentially independant of face-to-face direct teaching. The distance learner is free to choose from the various support facilities made available to him/her -- radio and TV programmes, audio and video cassettes, telephone and computer, even face-to-face teaching in contact programme, etc. -- but the onus of learning or achieving the academic objectives is on his/her own

shoulders. He/She is engaged in what is being called 'self-study' or 'independent study'. The significant point to be kept in mind is that a learner engaged in 'self-study' is not a loner. He/She does not go about his/her studies all alone. He/She has a whole team of administrators, writers, media producers, teachers, evaluators, tutors, educationists, counsellors, etc. working with him/her but all of them have supportive roles, they support individual learning or self-study.

A word of caution is necessary here. In the Indian situation, one can come across candidates who appear at university examinations privately, at some places they are called 'external candidates'. Such private/external candidates are not to be confused with the kind of learner we have tried to define above. For Holmberg, a private external candidate is entirely on his/her own, he/she is a loner, but a distance learner, on the other hand, has all the necessary support available for his/her 'self-study' The support that is talked about is made available by the open university/correspondence institution or whatever name we may choose to give it. The essence of this academic support is to build ***an academically fruitful relationship between the individual learner and the supporting institution,*** and this relationship, according to Holmberg, is characterised by what he calls '*guided didactic conversation*'.

Check your progress 2

Why is this conversation called 'guided and didactic'?

Notes: a) Write your answer in the space given below

b) Check your answer with the one given at the end of this unit.

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Types of didactic conversation

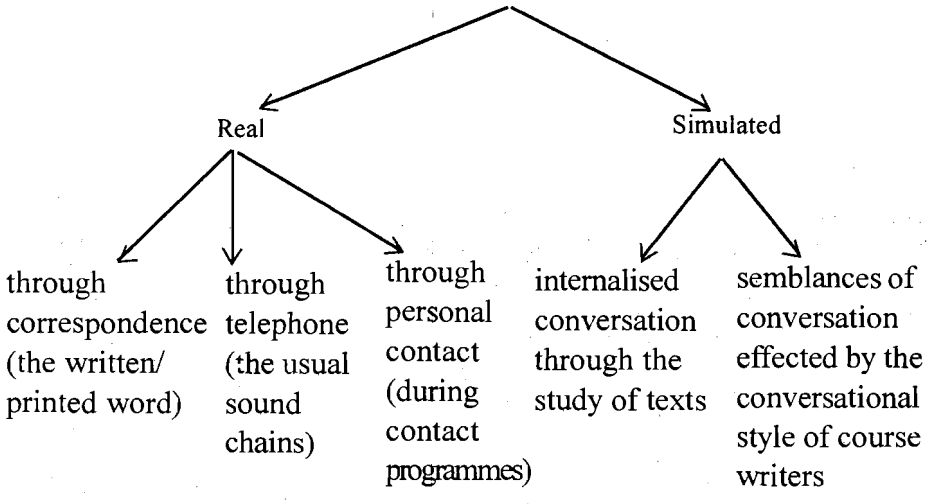
Outlining the notion of 'conversation' in his book 'Status and trends of distance education', Holmberg (1981), says:

> *A kind of conversation in the form of two-way traffic occurs through the written and telephone interaction between the students and the tutor and others belonging to the supporting organisation. Indirectly, conversation is brought about by the presentation of study matter, as this one-way traffic causes students to discuss the contents with themselves. The conversation is thus both real and simulated. The simulated conversation is not only what Lewis calls internalised conversation caused by a study of a text, but is a relationship between the course developers and the students, created by an easily readable and reasonably colloquial style of presentation and the personal atmosphere of the course superficially characterised by, for instance, the author(s) referring to himself/herself/themselves as "I" or "we" respectively and the students being spoken to as 'you' ('I recommend that you ....'). Questions and replies, suggestions and references to problems known to the students belong here. This style of presentation stimulates activity and implies reasoning, discussion for and against, referring to the students' previous experience and thus avoiding omissions in chains of thought. Revision tasks and self-checking exercises also belong to the simulated conversation.*

In the above excerpt, among other points, Holmberg identifies two types of didactic conversation:

i) real, and
ii) simulated

They can be represented diagrammatically as follows:



Scheme 2: Guided didactic conversation

Elaborating further his concept of 'guided didactic conversation' he says:

> *My theory of distance education as a method of guided didactic conversation implies that the character of good distance education resembles that of a guided conversation aiming at learning and that presence of the typical traits of such conversation facilitates learning.*

This view of the style of guided didactic conversation in distance education is based on the following postulates:

i) that feelings of personal relation between the teaching and learning parties promote pleasure in study, and motivate the students;
ii) that such feelings can be fostered by well-developed self-instructional/ learning material and suitable two-way communication at a distance;
iii) that intellectual pleasure and motivation to study are favourable to the attainment of study goals and the use of proper study processes and methods;
iv) that the atmosphere, language and conventions of friendly conversation favour feelings of personal relation according to postulate (i) above;
v) that messages given and received in conversational forms are comparatively easily understood and remembered;
vi) that the conversation concept can be successfully translated for use by the media available to distance education; and
vii) that planning and guiding the work, whether carried out by the teaching organisation or the student, are necessary for organised study, which is characterised by explicit or implicit goal perceptions.

3.3.2 Features of didactic conversation

The seven items listed above, in effect, suggest various procedures which may prove crucial in facilitating learning at a distance, i.e., improve the quality and effectiveness of 'guided didactic conversation', which, according to Holmberg (1981), has the following characteristics:

i) Easily accessible presentations of study matters; clear, somewhat colloquial language, in writing easily readable, if the text is printed; moderate density of information.
ii) Explicit advice and suggestions to the student as to what to do, what to avoid, and what to pay particular attention to.
iii) Invitation to an exchange of views, to questions, and to judgments of what is to be accepted and what is to be rejected.
iv) Attempts to involve the student emotionally so that he or she takes a personal interest in the subject and its problems.
v) Personal style including the use of the personal and possessive pronouns.
vi) Demarcation of changes of themes through explicit statements, typographical means or, in recorded, spoken communication, through a change of speakers, e.g. male followed by female, or through pauses. (This is a characteristic of the guidance being provided rather than of the conversation).

The above features of 'guided didactic conversation' suggest explicitly what the course designers and course writers should do in order to effect distance learning successfully.

Having thus presented the various postulates and the assumptions on which the concept of 'guided didactic conversation' is based and also the implications thereof for planning and developing the course materials. Holmberg (1981) summarises his hypothesis as follows:

> *The stronger the characteristics of guided didactic conversation, the stronger the students' feelings of personal relationship between them and the supporting organisation. The stronger the students' feelings that the supporting organisation is interested in making the study matter personally relevant to them, the greater their personal involvement. The stronger the students' feelings of personal relations to the supporting organisation and of being personally involved with the study matter, the stronger the motivation and the more effective the learning.*

These hypotheses have implications for the methodology of distance education (which we shall discuss in detail in Courses ES 312, 313, 314 and 318).

Thus, with the help of the concept of 'guided didactic conversation', Holmberg suggests what he thinks distance education is, what the nature of distance teaching materials should be, and finally what kind of distance teaching methodology will prove successful. (It is not out of place to mention here that some aspects of Holmberg's hypotheses have already been established empirically and certain others are being currently investigated).

Holmberg has written extensively on the theory and practice of distance education over the years. But he has steadily maintained his central thesis that distance education is an organised, systematic way of effecting an educational dialogue between the learner and the teacher or institution. The recent developments in the interactive educational media have only strengthened Holmberg's theoretical position.

3.4 TWO-WAY POSTAL COMMUNICATION -- *JOHN BAATH*

The fifth view that we would like to talk about here is that of John A. Baath of Sweden who worked at Hermods in Malmo. His name is mainly associated with the concept of 'two-way communication in correspondence/distance education'. However, we shall also briefly touch upon his insights into the models of distance education.

You can easily see that Baath's views do not differ from those of Holmberg in essence; the difference, if any, lies in specific emphasis which Baath places on 'two-way communication" vis-a-vis the models of distance education materials. There is, thus, room for the argument that having discussed Holmberg at some length above, a discussion on Baath is superfluous. But we have special reasons for introducing Baath's views. What are those reasons?

Baath accepts that correspondence/distance education has become a means of mass education by 'industrialising education' and also that distance study is essentially 'individual study'. However, his experiences as a course writer, editor, tutor and course designer impressed upon him that "a correspondence tutor could stimulate his students to most remarkable improvements, by means of constructive criticism, encouragement, and personal involvement in the individual student's learning problems" (Baath, 1980). He also notices that "there was a clear tendency to reduce the amount of postal two-way communication in the teaching system". We shall elaborate on all these in sub-sections 3.4.1 and 3.4.2.

3.4.1 Pedagogic significance of tutor-comments

It is obvious that in correspondence/distance education, the tutor's comments pertain to assignments meant to be worked on by the distance learners. The suggestion is that for bringing about "most remarkable improvements" in learner performance, tutor-comments (stimulated by assignment based tasks) play a very significant role in distance education. Thus, tutor-comments constitute a highly desirable pedagogic component of distance education.

But, tutor-comments do not find a place in the overall plan of the "industrialised" kind of academic support provided to the distance learner. Tutor-comments may come in only as a link in a chain of two-way communication, which is started by the correspondence/distance institution through the course materials. If there is a provision for compulsory assignments to be worked through, the learner is obliged to provide the second link in the chain of two-way communication by working through the assignments and submitting them for assessment by the correspondence/ distance tutor(s). The assessment made by the tutor(s) is the third link in the chain of two-way communication. The fourth link could be the questions and doubts raised by the learner(s) in response to the assessment made by the tutor(s). But, let us take a second look at the third link mentioned above.

Experience has shown (and this applies, for example, to most cases in the context of developing countries) that the only overt indicator of tutors' having gone through the learner-response is a grade (on point-scale) or mark (per cent) put on top of the response sheets. Such a grade or mark may stimulate some communication or reaction on the part of the learner, but it cannot go far pedagogically, as, in such a case, the tutor has functioned more as an 'examiner' than as a correspondence/distance tutor. His tutorial input, the actual third link in the chain of two-way communication, should consist of 'constructive criticism, encouragement, etc.', for it is comments and not mere grades/marks that improve learner performance.

Our interest in Baath's work lies essentially in his emphasis on the pedagogic significance of tutor-comments which form the crucial link in the chain of two-way communication in correspondence/distance education. Secondly, but equally importantly, we are interested in his realisation that, in spite of

the pedagogic significance of assignments, etc., there is a tendency "to reduce the amount of postal two-way communication". We are inclined to believe that this is a dangerous tendency. It might be that alternatives will be found, as Baath did by way of building in "some kind of two-way communication within the material: in terms of self-check exercises, detailed model/specimen answers, etc., but the significant point that emerges from this discussion is that two-way communication is needed for improving learner performance. (We shall return to this issue in Course ES 313).

3.4.2 Pre-enrolment counselling

In his significant work on the analysis of distance education on the bases of some of the well-known teaching models (such as the ones presented by Skinner, Rothkopf, Ausubel, Bruner, Rogers, etc.), Baath suggests, among other things, that we could very broadly talk of two distance teaching models:

i) the model which displays stricter control of learning towards fixed (academic) goals, and
ii) the model which displays less control of learning towards fixed (academic) goals.

Having identified these two broad models, he finds that the former tends to focus on teaching/learning materials — making them self-sufficient in as many ways as they possibly can be—and relegate two-way communication between the learner and the tutor/institution to an insignificant position in the overall teaching - learning process, while the latter assigns a significant role to two-way academic communication in its teaching/learning schemes. Without passing any value judgment on either of these models, Baath is pragmatic in suggesting that the design of teaching/learning materials is, of course, important (as two-way communication can be built into them) but no less important is two-way communication, on its own merit, be it by mail, telephone or in a face-to-face situation. To these two prime factors responsible for the success of distance education, he adds one more, namely, 'pre-enrolment counselling'. He adds this factor as his analyses of learning strategies show that learners, especially adult learners, need help in

i) defining and identifying their learning goals,
ii) selecting suitable materials to achieve those identified goals, and
iii) resolving their academic difficulties and promoting or sustaining their motivation.

Though distance learners are adults and to a large extent 'self-directed' in their learning they still need the support of a teaching agency. Baath's views on tutor comments and pre-enrolment counselling together fulfil the educational needs of learners in all the above mentioned three areas of distance learnig. A slightly adapted and updated version of Baath's views operates in the current practice of computer mediated conferencing (CMC), collaborative learning and on-line courses.

Before you proceed further, answer the question given below:

Check your progress 3

How does the distance tutor operate to effect 'two-way communication'?

Notes: a) Space is given below for your answer.

b) Check your answer with the one given at the end of this unit.

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3.5 HUMAN-ELEMENT IN AN 'INDUSTRIALISED' FORM OF EDUCATION -- DAVID SEWART

In this section we shall touch upon the view of David Sewart, (1978; 1980) who entered the field of distance education in 1973 at the British Open University. His experience in tutorial services, made available at the regional and study centres of the Open University, has convinced him of the immense significance of these services to such an extent that he believes that the crux of distance teaching is a 'continuity of concern for students learning at a distance'. The expression 'continuity of concern' proposes a human element in an otherwise "industrialised" form of education. In a sense, Sewart reinforces the view of Baath, but with greater emphasis. The strength of his conviction lies in the pragmatic approach he suggests. We shall discuss it in sub-sections 3.5.1 and 3.5.2.

3.5.1 Vital need for human support

Sewart argues that distance education institutions/universities are essentially institutions of mass education, and a particular package of materials is served to hundreds of students, and in many cases to thousands of them. Can such a

single package perform all the functions of a teacher (who in the worst situations has to adjust his/her reach to about a hundred or more students) on the one hand, and cater to the vast variety of the needs and the idiosyncrasies of distance learners on the other? Sewart's answer to both the questions seems to be a clear 'no'.

If a package of materials with such qualities is to be produced it will be formidably expensive, as it will have to display all the interactive processes which obtain between the teacher and each individual learner. The implication is that, however sophisticated the design and vast the reach of such materials may be, the learner body will always need additional human support which alone can match the infinite variety of problems that non-contiguous teaching/learning give rise to. The distance teaching institutions will have to provide this advisory and tutor support which alone can match the infinite variety of problems that non-contiguous teaching/learning give rise to. The distance teaching institutions will have to provide this advisory and tutor support through a human agency which alone can guarantee the 'continuity of concern for students learning at a distance'. The pre-planned package of materials is a constant. It needs human versatility to help the distance learners exploit this constant to satisfy the variety of their needs and difficulties.

3.5.2 Major issues and compromises

The major issues that Sewart addresses himself to are

i) the lack of immediate feedback, and
ii) near total absence of peer group interaction.

It is not as though other thinkers have not considered these issues, but they have not chosen to be so emphatic about their pedagogic significance as Sewart has. It is primarily on the basis of the attitudes towards the issues which Sewart has been emphatic about, that the educationists are divided into two camps

i) those who are not ready to recognise a system of education that is bereft of the all important human element, crucial in any process of learning — lack of esteem for distance education is mainly a consequence of this attitude of suspicion; and
ii) those who are all out for distance education, and would like to reduce the human element in distance education to the minimum.

Sewart rejects both the views. He is, however, closer to the former as he justifies distance education with three very strong arguments:

i) Education should benefit from new communication technologies and exhibit their potential maximally. Distance education depends on and provides for the utilisation of such technologies.

ii) Education has to be democratised, the leftouts have to be taken care of, steps have to be taken that no society allows leftouts of any kind. Only distance education can meet this challenge.

iii) Given the limited nature of human, economic and spatial resources, the only viable mode of education is distance education.

Nor is he with the latter group, for he emphasises the role of the human element in distance education. As he characterises distance teaching/learning packages essentially by their constancy, he would like to provide for

i) the infinite variety of learner problems,
ii) immediate fedback, and
iii) peer group interaction.

To resolve all the three issues effectively, Sewart emphasises the introduction of the human element in distance education, whereby a continuity of concern for students learning at a distance can be maintained.

It may be noticed that Sewart is presenting a compromise between the two extreme views mentioned above. And compromises bring in their wake additional problems, both theoretical and practical.

The theoretical problems raised by Sewart's views pertain to a very basic notion of distance education. A heavy component of face-to-face teaching in distance education programmes might sound to be a contradiction in terms. And secondly, the provision for such extensive human support will falsify some of the economic theories about distance education. On the practical front, to establish and maintain a vast network of such human support brings in immense operational complexities in the overall management of distance education. Sewart provides answers to these problems. He contends that face-to-face elements in distance education should be regarded as its legitimate constituent like all other media constituents, and any legitimate obligatory expenditure to effect such inclusion of human support, its operational complexities notwithstanding, should not be grudged against, as the overall cost, i.e., that of the package of materials and human support put together, will still be less than what the conventional system will incur for a given equally large number of learners.

Check your progress 4

List the main issues raised by Sewart. What are his suggestions for resolving the issues?

Notes: a) Write your answer in the space given below

b) Check your answer with the one given at the end of this unit.

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3.6 LET US SUM UP

The views discussed in this unit are presented briefly in the following table (for comparison see Table 1, unit 2, block 2).

Table 5: An outline of unit 3

Peters	finds identifiable parallels between industry and distance education. Some of them are i) division of labour, ii) mass production, iii) systematization, and iv) structure of buildings and layout.
Holmberg	suggests with the help of the concept of 'guided didactic conversation' i) what he thinks distance education is, ii) what the nature of distance teaching materials should be, and iii) what kind of distance teaching methodology will prove successful.
Baath	recommends i) effective tutor-comments, and ii) pre-enrolment counselling.
Sewart	contends that 'human support' should be regarded as a vital constituent in the distance learning/teaching process.

Check Your Progress: Possible Answers

1 a) division of labour
b) mass production
c) systematisation
d) layout

2 The conversation is '*guided*' and '*didactic*' because the course developers *guide* the distance learners — primarily on *academic* and *pedagogic* issues — through an easily readable conversational style of presentation.

3 A distance tutor helps effect two-way communication by using his/her comments as a tool. That is to say, instead of following the customary way of putting a mark or a grade on the top of the response sheets — as an indicator of his/her having gone through them — a distance tutor writes down constructive criticism and encouraging comments to help bring about 'most remarkable improvements' in learner performance.

4 a) the infinite variety of learner problems,
b) absence of immediate feedback, and
c) absence of peer group interaction.

Sewart suggests that the problems can be resolved if 'human-support' constitutes a significant part in the system of distance education.

PUTTING UNITS 2 AND 3 TOGETHER

To conclude this protracted discussion on the theories of distance education, we must admit that we have not been exhaustive — we never meant to be.

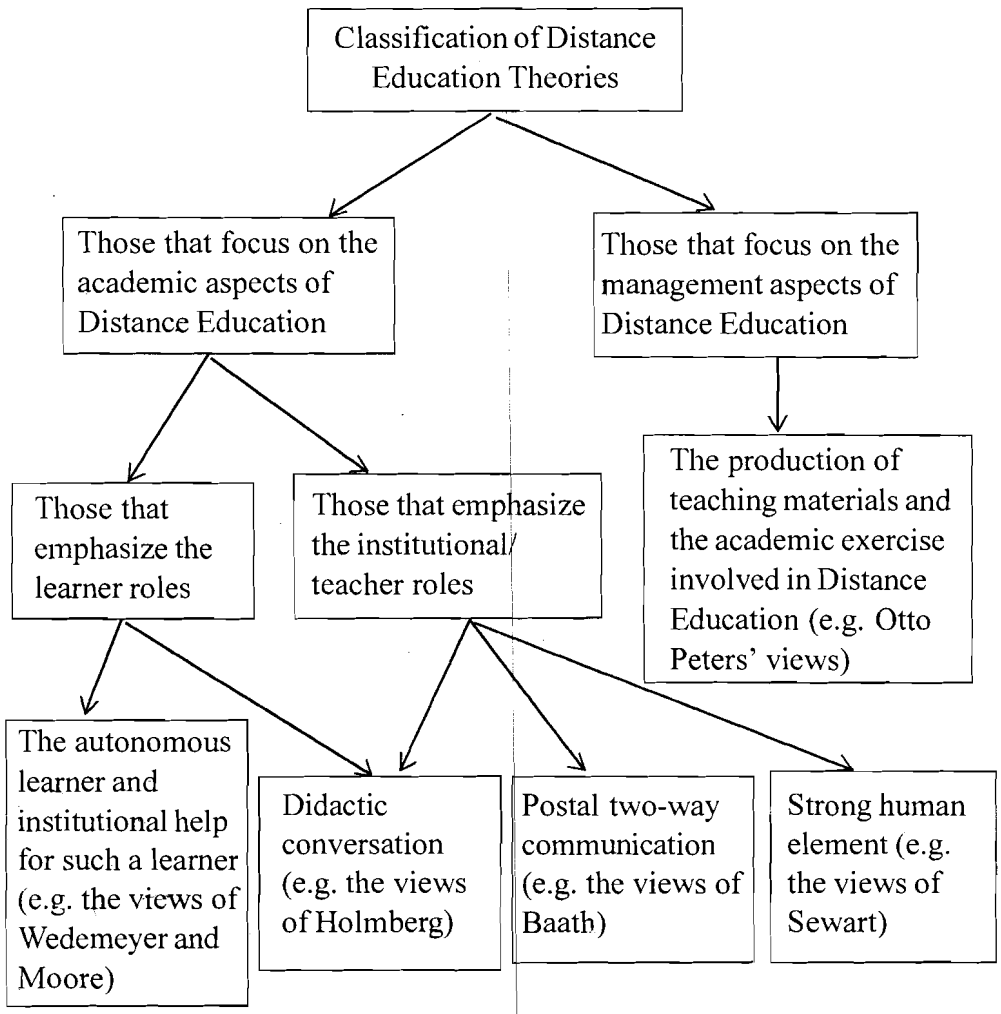
The purpose of presenting the views of these six thinkers to you is to acquaint you with the major lines of thought that gave a direction to distance education during the seventies and the eighties. As our purpose is limited, we haven't tried to evaluate these theories by arguing for or against them, nor have we tried to compare and/or contrast them with each other. Currently, a lot of thinking is going on and the literature on distance education is miltiplying at a very fast rate. Till we can access the available literature, the following sum up will be helpful.

The six theories which we have acquainted you with can very broadly be put into two classes.

Class 1: The focus of the thinkers is on the **production** of teaching/learning materials. Peters appears to be the major thinker whose works belong to this class.

Class 2: The focus of the thinkers is on **learner concerns**. On the basis of differing orientations theories based on learner concerns may be further divided into two sub-classes. The first sub-class focuses on learner motivation and the objectives of learning as seen and decided on by the learner. The second deals with the pedagogic aspects of a teaching/learning programme, i.e., how a particular educational programme be made successful in terms of learner achievements. To the first sub-class belong the views of Wedemeyer and Moore who emphasise learner autonomy and independent study. And to the second, Holmberg, Baath and Sewart.

It may not be a mere accident that the European thinkers discussed here feel more concerned about the pedagogies of distance education, whereas the Americans feel concerned about the motivational aspects in distance education. Socio-cultural differences may have a lot to contribute to such differing orientations. We will find occasions to see in what ways these theories are either already discernible, or may find use in the context of developing countries. The schemata presented below captures the discussion in units 2 and 3.



Scheme 3: Academic and management aspects of distance education classified

Before we see how these **theories** get **operationalised** in the practice of distance education, we would like you to take a second look at unit 4 of block 1, the NEW LEARNER, who is the focus of all the activities and processes that make distance education a new educational phenomenon. Unless we properly understand this **NEW LEARNER,** we may fail to appreciate some of the significant aspects of the practice of distance education. We shall turn to these aspects in courses **ES** 312, 313, 314 & 318.

UNIT 4 EMERGING OPERATIONAL CONCERNS

Unit Structure

4.0 Objectives

4.1 Introduction

4.2 Distance Education and Communication Technologies

4.3 Networked Collaborative Learning

4.4 Quality Issues

4.5 Economic Arguments

4.6 Research and Staff Development
- 4.6.1 Research
- 4.6.2 Staff Development

4.7 Let Us Sum Up

4.0 OBJECTIVES

After having gone through this unit, you should be able to :

- discuss the implications of the latest communication technologies for distance education,
- explain the ways of collaborative networked learning,
- analyse the quality issues pertaining to distance education, and
- highlight the importance of cost effectiveness, research and staff development in distance education.

4.1 INTRODUCTION

Distance Education, in terms of its evolutionary stages, has been categorised, of late, into four generations.

The first-generation was characterised by the traditional correspondence education which differed from face-to-face education essentially only in one respect: the delivery through correspondence mode. In all other respects such as curriculum, syllabi, and evaluation it followed the norms and conventions of face-to-face campus based education system. The instructional medium was print.

The second-generation of distance education called the 'multimedia' model brought in changes in the curricular, delivery and assessment and evaluation aspects by accommodating print, radio, television, audio-video tapes, computer base learning and interactive video.

The third-generation of distance education called 'the tele-learning model' extended the scope of it by further integrating the audio-video teleconferencing, audiographic communication, tv/radio facilities and by enhancing the interactive element in the teaching-learning process.

The fourth-generation of distance education 'the flexible learning model' succeeded in integrating the interactive multimedia, the internet based access to information and the computer mediated communication through electronic mail (Taylor 1998).

In the previous units (i.e., units 2 and 3) of this block we have discussed extensively the theories of distance education which broadly focus on the concerns and issues related to the first and the second generations of distance education which held sway until the mid 1980s. With the advent of CD-ROM 'internet' and 'e-mail', the forms and features of distance education have been changing more rapidly than during previous periods. Though the relevance of the philosophies of distance education discussed in units 2 and 3 has not diminished in their pedagogic and historical significance, the way they addressed the issues of 'distance', 'structure', 'dialogue' 'communication', 'human element', 'interaction', etc. needs to be reviewed, updated, and re-interpreted in the light of the developments in the communication technologies many of which have already been incorporated by the third and the fourth generations of distance education.

The developments in the communication technologies have come as if they came as answers to the questions raised by the distance educators of the sixties and seventies. Many of the problems posed by physical distance and communicational barriers of the earlier phases of distance education have been solved by the growth of technology. However, these solutions are confined to those societies and nations which have easy access to technology. Therefore, while reviewing and re-interpreting the previous theories of distance education, we should be careful in recognising their current relevance in societies which are technologically disadvantaged with limited possibilities of adopting relevant and affordable technologies. Even the nations which are very advanced cannot boast of practising third and fourth generations of distance education in full measure, nor can they say that the traditional media have no place in the practice of distance education.

Having said this, we must realise that no nation remains as 'advanced' or 'backward' eternally and those who have the urge to learn from others and those who have the initiative and determination to localise or indigenise the knowledge and experience available anywhere in the world have every chance of catching up with the most advanced players in any field, including distance education. Precisely for this reason we present to you in this unit some of the emerging operational philosophies of distance education.

We shall touch upon some of the current debates on communication technologies, networked collaborative learning, quality issues, cost concerns, research domains, management of change and staff development in the context of distance education. These issues are dealt with more elaborately in the other courses. For example, for communication technology and the related issues, see ES 318; for quality assurance see ES 312; for economic perspective, see ES 317; for research, management and staff development see respectively ES 315; 314 and 319. Here we shall merely touch upon their theoretical underpinnings and their implications for distance education practice.

4.2 DISTANCE EDUCATION AND COMMUNICATION TECHNOLOGIES

Distance Education, as we said earlier, is more than 160 years old. Postal services prompted Isaac Pitman to teach shorthand to his students through correspondence. Later, the telephone, radio and television widened the scope of distance education to be offered in an extensive way by numerous institutions in Europe, North America and Australia. After the establishment of the UK Open University in 1969 many developing countries got the inspiration to offer distance education through print, audio, video and/or broadcast. Multi-media distance education of this kind, however, did not drastically alter the pedagogic foundations and principles of distance education which more or less tried to approaximate to those of the campus based, face-to-face teaching/learning. In otherwords, until the mid 1980s, distance education, besides increasing the access to a larger number of learners, mainly contended with face-to-face education for academic credibility and efficiency in transmitting knowledge and information. "What face-to-face education can do, distance education can also do", seemed to be the slogan. And the claim had substance.

But with the arrival of the voice mail, CD-ROM, e-mail, internet etc. the basic assumptions about teaching/learning have been altered, if not shattered. At least at the higher education level, even the campus based teaching-learning is no longer confined to the classroom. The virtual classrooms and the virtual universities have freed the students from the obligation of sticking to particular timings and places even within the campuses. Today both the campus based learners and the distance learners can, if they have access to technology, enter any library of their choice through internet. Of course, the library must have its website!

If 'communication technology' can be defined as 'anything that helps interaction', then, the modern communication technologies such as the satellite based tele-communications and the computer technology are the most interactive media that the world has ever seen. If these technologies can be appropriately combined with cognitive sciences, then, what Eisenstadt calls the 'knowledge media' emerges.

Based on Eisenstadt's views on the relationship between communication media and distance teaching-learning, James Taylor (1998) makes the following claim:

> *The emerging fourth generation of distance education, i.e., the flexible learning model promises to combine the benefits of high quality interactive multimedia with access to an increasingly extensive range of teaching-learning resources and enhanced interactivity through computer mediated communication offered by connection to the Internet, (James Taylor, 1998).*

Let us now see how these new technologies can contribute to the enhanced interactivity in distance education which has been the main concern of Holmberg, Sewart, Moore and other distance educators all along.

The new communication technologies we have in mind are basically two: the computers and the satellite based telecommunications. These technologies offer a wide range of facilities such as the e-mail, internet, and a range of interactive devices such as CD-ROM, audio-video conferencing, voice-mail, computer mediated conferencing etc. (We have discussed their operational and application aspects in detail in ES 318). These facilities are extremely useful is accessing and sharing information and knowledge.

Distance education institutions have a number of uses in the new technologies, if appropriately employed in their attempts to achieve their main objectives such as:

- freeing the knowledge from the narrow geographical and institutional barriers,
- realizing their long-cherished goal to make it possible for the distance learners to learn from any place, time and way of their choice,
- offering high quality courses at affordable costs,
- giving a wider choice to learners to choose the courses they want to study, and
- facilitating the design, development and delivery of learner centred courses.

But the above objectives become realiseable only when the social environment, technology growth, the necessary knowledge inputs, funding, and infrstructural facilities are present. These conditions are tough and even the advanced countries do not fulfil them yet. At the same time, we must admit that many of the above mentioned objectives are being met in a selective way. The ten mega open universities (see unit 3 of block 3) depend on the communication technologies in varying degrees for different purposes. For example, the UK Open University offers some of its courses on line, because the students who opt for those courses have sure access to computer technology required for completing the courses. At the Indira Gandhi National Open University (India), some computer courses are offered on-line while the computers are mainly used for course development and

administrative purposes. All the ten mega open universities have access to the communication networks of their respective countries and thus reach their students in many different ways: through broadcasts, telecasts, cassettes, teleconferencing, telephones, computer mediated conferencing, etc.

The technology or media policies of these universities are not uniform, since the policies are decided on the basis of a number of factors : availability, access, usability, cost, etc. of technology; the readiness of academics and students to teach and learn through the non-print media; the social attitude towards technology-based education; and of course, the ultimate deciding factor — the government's policy. Even if all these are favourable to the use of communication technology, still there is one set of crucial issues that will keep everyone thinking. The issues are :

- Should technology be education driven or education technology driven?
- Is technological determinism harmful to education or not?
- Can the technology gap between the advanced world and the developing world ever be bridged?
- Is the emphasis on technology-based distance education not part of the cultural imperialism of the advanced world which wants to maintain its supremacy in the name of globalisation of knowledge?
- What are the implications of the new technology for soverignity of nations, local cultures and languages and the indigenous educational systems?

Depending on the context in which one is placed, the answers to the above questions would vary. Those who have the control over the technology in question will maintain that the fears about technological determinism are unfounded. Towards this end, they would highlight the positive aspects of the communication technology, ignoring or superficially acknowledging the problems of access and cost. On the other hand, those who are habituated to a particular set of traditional practices of teaching-learning would not like to change their mindset and they may even ridicule the advantages and facilities offered by the new communication technologies. But the fact remains that the communication technologies are growing fast and their applications are more quickly understood in the military, industry and business sectors than in the education sector. It is also true that the technological backwardness of nations is not a permanent barrier, provided some initiative is shown by them to take advantage of the latest technology available.

Technology leaps are possible. Recently, Indian farmers with minimum literacy in their local languages started using internet for agricultural purposes in some provinces (States) of India. Similarly, hi-tech communication centres are being set up by some state governments in southern India. In the city of Bhopal, an Open University called Maharishi Open University has been set up which is completely technology based. Similar arrangements are being made or have already been made by the advanced countries. Going by these examples, one feels that educational institutions, including distance teaching universities are somewhat conservative in applying technologies to maximise their educational practices even in the advanced countries.

Considerable research has been done by Diana Laurillard (1993), John Daniel (1996), David Hawkridge (1995), Michael Moore (1995) and Tony Bates (1998) on the applications of communication technologies in distance education. While Laurillard has focused on the teaching effectiveness and learning productivity by the use of communication technologies, Daniel, focusing on the experiences of the mega universities, discusses the importance of strategic planning and technology policies of distance teaching universities, and Hawkridge anticipates dramatic changes in distance education theory building, thanks to the developments in communication technologies. Moore and Bates have looked at the micro level transactional issues related to the use of these technologies. Bates, while recognisig the advantages of the latest technologies, takes a realistic view of the issue and argues for an appropriate and affordable technology policy.

We must keep in mind that the foregoing analyses of the new technologies of communication do not in anyway minimise the educational value of the traditional media like 'print' and 'face-to-face' sessions. One can observe that while all the latest technologies can facilitate a better and more efficient delivery of knowledge and information sharing they can never substitute knowledge as such. Knowledge generation is still the domain of the thinking minds, i.e., human beings, notwithstanding the hype about 'artificial intelligence'.

Check Your Progress 1

List the latest media used by your university/institute. Analyse the ways in which they have influenced the process of course development and student support.

Notes: Space is given below for writing your answer.

4.3 NETWORKED COLLABORATIVE LEARNING

'Network' is a technical term used in computer sciences to mean a chain of interconnected machines and operations. In the common parlance it means any complex system with numerous points of contact connected together. In the distance education system, it means an arrangement whereby learners and teachers/tutors are linked together through the means of computer communication to interact with each other. 'Collaboration' here means a conscious decision to cooperate with each other to promote active learning. The decision may be on the part of institutions as well as individuals to pool their learning resources together and cooperate to help each other, depending on the need and convenience.

The need for interaction and human communication was accepted even by the extreme interpretation of 'distance'. The physical and transactional distance was previously narrowed by occasional face-to-face contact sessions, study groups, telephone tutoring, etc. With the development of highly interactive communication technologies (see section 4.2) the chances of distance learners coming together have increased tremendously. Similarly, the distance teacher/tutor/academic counsellor can communicate with the learners at will. Given the minimum communication facilities, a single tutor can now guide and monitor the group learning of hundreds of learners from a distance. At present, the following interactive media are available for networked collaborative learning, besides face-to-face contact sessions:

i) Telephone
ii) Audio conferencing
iii) Video conferencing
iv) E-mail
v) Internet

Computer mediated conferencing is possible through e-mail while the Internet helps the learners to access a wide range of knowledge and information. The first three (i.e., i,ii,iii) allow as instantaneous an interaction as the actual face-to-face interaction does.

Let us briefly look at the implications of the collaborative learning approach for distance learners.

From the individual learner's point of view, it is a great facility as well as an opportunity to learn from a variety of sources and also to interact with his/her tutor and peer group. The pre-condition is that the learner must have access to the interactive technology and the willingness to learn. Though individual ownership of the computers is a problem in the developing countries, access to institutional facilities is a possibility. Given the will and administrative efficiency, the study or university centres can provide the

interactive media facilities to learners to a reasonable degree. Wherever affordable, individual learners can get e-mail and internet facilities, especially when the cost of the computers and the serving agencies is coming down.

From the institutional point of view, it would be useful for them (the institutions) to pool their intellectual and infrastructure facilities together and mutually agree to use them optimally and in a rational manner. In the process of doing so, they would discover that instead of duplicating their efforts (e.g. development of certain courses/programmes by many institutions within a country or region with little variation) and wasting their limited resources (e.g. every institution setting up its own study centres, audio-visual media, production centres, etc.) they can agree upon certain arrangements which would facilitate their functioning in an efficient way and focus on activities which could attract maximum attention and the best professional expertise from them. Institutions known for their excellence in selected areas of their operations, can further develop their specialisation and look towards others who have the excellence in other areas. They can mutually develop best practices which can be shared by them all. But for the perceived fears, apprehensions and ego-clashes, countries with a large number of distance teaching institutions of different types can contribute to networked collaborative learning at the levels of policies and resource sharing.

At the micro level, the most effective collaborative learning is possible through computer conferencing. Computer conferencing systems are broadly divided into two groups: (a) Asynchronous and (b) Synchronous systems.

The asynchronous system provides shared work space for communication, allowing participants to interact with each other by placing their documents on a theme and commenting upon each other's documents and views. This process can continue over a period of time and there is no need for the participants to communicate at the same time as is the case with audio or video conferencing. This flexibility is the main strength of this kind of conferencing.

The synchronous system, on the other hand, enables the participants to communicate among themselves in real time. Real time communication is as effective as the face-to-face, telephoneic, or audio-video conferencing but less expensive than all these. Synchronous systems of computer conferencing become handy when there is a need for instantaneous communication among participants spread across the globe without having to travel and spend much time and money but at the same time to attend to the urgent tasks without losing real time.

Besides computer mediated conferencing (CMC), there are other ways of networking for active learning. As we said in section 4.1, e-mail and internet allow a high degree of freedom and facility to participants to interact with fellow learners, colleagues and others professionally and socially.

Professionals get the necessary information and contacts to benefit mutually

and grow better and faster in their careers while learners get opportunities to discover new sources of learning and new areas of interest.

Collaborative learning, of course, enables the learners to see new meanings in what they see in the text or hear in the voice through heightened social interaction. 'Constructivist' approach to learning thus emerges out of shared information, views and interpretations. Value systems and cultural constructs of particular societies acquire newer dimensions when they come into constant contact with other value systems and cultures. Pluralism, tolerance and better appreciation for each other's view points become the cornerstones of collaborative learning through networking. However, these rosy, and idealistic goals do not become realities just like that. Behind these possibilities, lie a whole range of risks and dangers such as the tyranny of technological monopoly or supremacy, the arrogance of dominant cultures, the wiping out of value systems, languages and cultures of small and economically weak communities, the spread of mono-culture under the garb of universalisation and globalisation, the disappearance of institutions unable to withstand the market driven competition, the invisible and sudden rendering of millions of people jobless, the abrupt collapse of financial institutions, etc. are also the results of networked information revolution. Distance educators advocating the digitalisation and computerisation of education must weigh carefully both these options: an opportunity to catch up with, and an equal chance of losing out to the bigger partners in the race of technology driven education. Where technology becomes education driven, the above dangers can at least be minimised, if not altogether avoided.

Before we move on to the next section, let us work out an exercise.

Check Your Progress 2

Give at least two reasons in favour of networked collaborative learning.

Notes: a) Space is given below for writing your answer.
b) Compare your answer with the one given at the end of the unit.

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4.4 QUALITY ISSUES

Closely following the developments in the communication technologies and their subsequent applications in distance education, issues related to its quality are being raised. The concern at the first phase of distance education was to somehow take education out of the confines and constraints of the classroom, and thus the correspondence 'mode' was found as an easy delivery mode for the same curriculum and subject content as determined by the campus based universities. In the second phase, after having experimented with the correspondence 'mode' the efforts were on to increase the access and spread of distance education through multi-media. In the third and the fourth phases (or generations) of distance education the concerns are about the possible merger of both the systems of education through increased use of interactive communication technology and quality assurance in distance education. The future thrust would naturally be on the 'merger' or convergence of campuses with virtual campuses and the shortening of real distances in offering quality education at all levels.

One may safely characterise the 1990s as the decade of communication technologies and quality concerns in the history of distance education. If you glance through the procedings of the international, regional and national conferences, seminars, workshops, symposia, etc. of distance education pertaining to the present decade, you would notice that next to the technology issue, it is only the quality issue that dominates the debates and discussions among distance educators around the world, and justifiably so.

The physical spread of distance education is no more in question (see units 2and 3 of block 3). However, to effectively counter the charges against distance education as the 'second rate' or 'second best' education, it is necessary for distance educators to demonstrate that it is second to none. Besides establishing 'parity of esteem' with the face-to-face educational system, distance education leaders have the additional obligation of justifying the initially heavy investments on distance education operations. They are also challenged to prove their relevance and the efficiency of their academic programmes. Though all these are equally applicable to face-to-face education, distance education is prone to more rigorous public scrutiny than its face-to-face counterpart is. Because of its wider jurisdiction and the heterogenous student profile, distance education has a wider public presence and therefore greater social accountability. It can fulfil these obligations satisfactorily, only through quality assurance in its academic content and delivery of services.

What is quality in general? It is an industrial term commonly used to refer to the degree of excellence and standard of products or goods and commodities set by the producers and manufacturers to satisfy the customer needs and thus, to stay in business. While quality refers to the final product, quality assurance refers to the process.

Broadly quality means: fitness for purpose, value for money, customer satisfaction and conformity to standards pre-determined by an organisation. To assure these, the production process takes care of inputs (i.e., raw-materials, skilled labour, the time required, the right kind of supervision, management and marketing strategies) to bring out a product which can sell. In the industrial context it is relatively easy to determine and stick to quality standards and assure them in the process of production, as we are dealing with lifeless products and commodities. But it is not so in the educational context where a complex range of factors and variables related to processes of human thinking, perceptions, attitudes and abilities are involved. The definitions and interpretations of quality and quality assurance vary in any educational context, depending on the individual participants and the institutional or social contexts (Ramanujam, P.R., 1997).

Though of industrial origin, nations and practices of quality assurance and quality maintenance have become accepted educational concerns, especially in distance education which displays many industrial features in its operational aspects. Quality aspects are to be confronted by institutions and the individuals working in them at least on four counts : i) how to set high stands, ii) how to maintain consistency, iii) how to make it serve the intended purpose, and iv) how to give back the distance learners the value for their money. When these questions are satisfactorily answered, we can say with some confidence that the institution concerned has been able to assure quality. But do we have the answers?

Setting high standards is not an abstract theoretical construct. As we know, standards are relative and keep on changing depending on the changing contexts. When distance education aims at setting high standards, it would mean aiming at standards comparable with those set by the best known institutions within the country – either campus based or distance mode. Or it may be an attempt to reach comparable standards set by well-known foreign institutions. Consistency would mean that after having set the standards the institution is able to apply them across the programmes over a period of years to achieve recognizable uniformity of standards in its academic activities and service facilities. Fitness for purpose would mean that the programmes and delivery services are able to produce graduates of the desired quality and in acceptable numbers, and the value for money would mean that the learners are satisfied with their learning experiences and the degrees and certificates they earn. In this regard, the job market and the employers should see the degrees as useful, and the society at large must recognise them as worth having.

In the extremely complex educational enterprise it (quality assurance) is easier said than done. In the institutional set up unless everybody thinks it as their business to assure quality it is not possible to assure it or maintain it. Institutional arrangements and policies must be geared to this end right from the beginning. Planning, development, implementation and evaluation of distance education programmes must be effected in a professional manner focusing on at least the following six areas:

- Curriculum design and course development
- Delivery mechanism
- Student support services
- Learning resources, besides course materials
- Continuous monitoring leading to quality assurance
- Evaluation of every activity at regular intervals

John Daniel (1997) highlights four basic ingredients of distance education. High quality multimedia learning materials; dedicated academic support; sleek logistics; and a strong research base.

High quality learning materials prepared by professionally competent teams of distance educators assure the learner of a positive learning experience.

Dedicated support services help the learners through counselling, tutoring, assignment marking and the final evaluation.

Efficient logistics assure the learners the receipt of study materials, evaluated assignment responses and other required information in time.

A strong research base helps the academics in updating the course materials, and alerts the policy makers and administrators about what is required to respond meaningfully to the new developments and changing needs.

The difficulty is not so much in recognising the importance of the above ingredients in assuring quality as in acquiring the necessary competence to develop these ingredients and put them in place. Even if competence is available, the environmental and political factors may not use it in time or may treat the quality aspects rather superficially and casually. Such non-serious approach is common with institutions which do not declare quality assurance as their basic concern (Koul, 1997).

However, with the increasing awareness about consumer rights, legal provision for protection of customers' interests, competitive markets and the rapid growth of information technology, quality assurance is not merely a question of professional obligation but is a crucial factor that decides the survival and growth of institutions. If not on the conscious demands of learners, certainly for their own survival, distance teaching institutions are persuaded to view quality issues seriously.

Check Your Progress 3

Point out at least three differences between quality assurance as seen in industry and education.

Notes: a) Space is given below to write your answer.
b) Compare your answer with the one given at the end of this unit.

4.5 ECONOMIC ARGUMENTS

One of the oft repeated arguments in favour of distance education is that it is cost-effective, in the sense that it is less expensive than the campus based face-to-face, classroom education.

The economic argument easily convinces the politicians about the need for distance education. Though 'cost effectiveness' does not always mean 'cheaper' and 'less expensive' as popularly it is understood, experience shows that in general and in the long run distance education saves a significant portion of the public fund which otherwise would have to be spent in establishing more campus based educational institutions in order to meet the growing demands for education for all.

The governments of the developing countries are faced with a dilemma. They have declared 'education for all' as their policy but find themselves hard pressed for the necessary resources, both financial and human to implement this policy quickly and efficiently. The solution for this dilemma is found in distance education, since distance education does not require huge investments on hostels and classrooms, and the recurring expenditures of distance teaching institutions are certainly lower than those of their face-to-face counterparts (we discuss the details in ES 317, the course on the 'Economic Perspective of Distance Education). The governments have also a political reason to support distance education . When thousands and millions of learners of all ages can receive their education from their places of living and work, the threats posed by organised students' movements can also be

of learners of all ages can receive their education from their places of living and work, the threats posed by organised students' movements can also be avoided. From the economic perspective, if smaller amounts of money can yield the same, or at times better educational results, then why to invest more in expensive propositions?

There is yet another economic reason for promoting distance education. Whereas the conventional institutions depend heavily on government subsidies to survive and offer programmes and courses, distance teaching institutions have shown the way to become financially self sufficient or at least less dependent on government funding. Here, just two examples will suffice. The Open Learning Institute (OLI) of Hong Kong (now called the Open University of Hong Kong) became self-supporting in four years. The Indira Gandhi National Open University (IGNOU), India met 93.7% of its recurring expenditure through government funding in 1986-87. In 1997-98 it met 80% of its recurring expenditure from students fee and other sources of income, receiving government grants only for infrastructual development. Cost analysis of different distance education institutions around the world show that generally they incur less per student, per graduate and per credit expenditure. The ratio ranges from 1:2 to 1: 4 or 1:6 as compared to per student expenditure by conventional institutions. How is this possible?

Invariably, distance teaching institutions (universities, colleges, schools) enroll many more students than any of their face-to-face counterparts ever can. This number factor gives an advantage to distance education over the face-to-face one. Although the initial investments of distance teaching institutions appear to be quite heavy, because of the need to develop minimum infrastructural facilities such as buildings, equipment (computers, studios, etc.) and regional services networks, soon they are able to recover the cost, as their programmes and courses attain the economies of scale. The salary component of expenditure in distance teaching institutions is also comparatively less, since a relatively small number of full-time staff operate vast systems, often engaging part-time staff wherever necessary.

Besides the large numbers, the development of quality study materials and the use of communication technology also provide greater scope for institutions to reap the benefits of economies of scale by distributing the developmental cost among a large number of readers and viewers.

Normally, budget allocation of any distance education institution would be made under the following heads.

i) **Academic activities:** Development of learning materials in print, audio-video, radio, television, i.e., multimedia; delivery of these materials, including face-to-face teaching; staff development; (attending conferences, workshops, seminars, training programmes); research -- both discipline based and system based.
ii) **Infrastructure:** Buildings, equipment, transport, study centres, regional centres, libraries, labs, etc.
iii) **Administration:** General administrative tasks related to the overall functioning of the institution
iv) **Management of student support services:** Management of counselling

Usually investments on the above are quite heavy at the initial stages but as the system gets estabilished, the recurring expenditure comes down. Depending on the strategies followed on each of the above services, costs may vary among the distance teaching institutions. For example, in the development of courses, some institutions like the erstwhile Hong Kong OLI buy materials from other institutions and adapt them to suit their needs with the help of a small team of experts. This approach saves a lot of money. Similarly, instead of going for full-time tutors and counsellors, institutions like IGNOU appoint part-timers. Study centres also can be located in existing educational institutions. Where there is a need for making the courses available in many languages, the courses can first be developed in one language and then translated into other languages, as is the practice at IGNOU in India. Providing tutorials and counselling sessions would workout cheaper, if students have access to interactive technology of the types we have mentioned in section 4.1. Cost factors, thus, speak in favour of mass educational and training programmes offered through distance mode, especially in the developing countries which often complain about lack of funds for education.

Check Your Progress 4

The cost of distance education can be brought down in many ways. Discuss some of them in your situation.

Notes: a) Space in given below for writing your answer .

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

4.6 RESEARCH AND STAFF DEVELOPMENT

Research in distance education is a major activity, though it has not got the attention it deserves in the developing countries. The institutions practising distance education in a professional way, particularly in the European, North American, Australian and South East Asian regions have made research an integral part of their activities. In the developing countries, the importance of research as part of the developmental activities is gaining ground. We shall touch upon some of the major issues of research in sub section 4.6.1.

Similarly, staff development in distance education is also emerging as a crucial area. Besides orienting the academics and other staff to distance education activities, professionalism demands appropriate and timely staff development programmes for the effective functioning of personnel in the system. The new communication technologies and the changing patterns and priorities of distance education warrant continuous staff training. We shall touch upon some of these issues in sub-section 4.6.2.

4.6.1. Research

Systematic research in distance education did not start till the 1960s, but some contributions, mainly in the areas of academic esteem and learner concerns were available by the beginning of the 1970s. However, proliferation of research into various aspects of distance education started in the 1970s markedly with the activities of the UK Open University. The Fern Universitat too gave prominence to research as part of its academic excellence. In the North American and the Australian Universities practising distance education, research has always been treated as an essential component to ensure quality of learning and teaching as well as a means to improve the quality of education. In the eastern countries like Thailand, China and Malaysia research is given a reasonable emphasis to maintain social credibility and practical relevance of distance education programmes. But sadly, in the developing countries in general research in distance education is disappointingly at a primitive level. A cursory glance at the proceedings of international conferences and seminars would show that whereas sophisticated research contributions come from the advanced countries in large numbers, the contributions from the developing world are not only fewer in number but also qualitatively wanting. Most contributions from the developing world stop with descriptions of the institutions and their programmes sprinkled with a few empirical or reflective studies. The inescapable conclusion is that in the developing countries the importance of research in distance education is yet to be appreciated fully. Even where there is some awareness about it, research is not viewed as a development oriented exercise or a need of the system. (Koul 1995).

Every aspect of distance education is significant enough to research into. However, depending on the priorities of a given institution, the kind of

facilities it makes available for research activities and the stage of growth and maturity of the distance education system as such, the focus and the quality of research would vary. Normally, every distance teaching institution should conduct research, as an institutional requirement, on the following themes:

i. Distance Education concepts, policies and practices in a given context
ii. Characteristics of distance learners and learning styles
iii. Course design, development and delivery
iv. Effectiveness of courses and performance of learners
v. Media (including medium of instruction) and technology appropriate to a given context
vi. Cost Effectiveness
vii. Programme Evaluation

Under each of the above categories/areas of research you can think of a number of sub-categories and areas, reducing the focus of research to specific issues, concerns and problems. Holmberg (1988) mentions nine areas of research which are as follows:

1. The concept of distance education
2. Student bodies,
3. Teaching and Learning in a restricted sense
4. Administering distance education
5. Course and systems evaluation
6. Theoretical approaches to distance research
7. The history of distance education research
8. Methods applicable to research into distance education
9. Distance Education as a discipline

Identification of research areas and problems are less difficult than deciding on the methods and approaches to research and the implementation of research projects in distance education. These difficulties can be solved, if the institutions could formulate their research policies very early in their activities. Whether research should be initiated with an institutional/systemic perspective to serve institutional purposes or it could be carried out more as a ritual or imitation without a clear direction which may serve individual ambitions at the cost of institutions must be decided by the institutions themselves. If these questions are resolved, then, different methods and approaches to research would find their places within institutional settings.

Keeping in view the scope of this sub-section it will suffice to say that all the methods applicable to Social Sciences such as the philosophical, historical, scientific, experimental, naturalistic and case study methods are also applicable to distance education research. Similarly the approaches such as empiricist (or objective) approach, interpretive (or subjective) approach and critical (or problematic) approach are also adopted by researchers in the field of distance education. The validity and the claims of all these methods and approaches are subject to scrutiny and further debate, though they have their specific uses. We discuss these issues in greater detail in ES 315, the course on "Research For Distance Education".

4.6.2 Staff Development

Staff development in distance education has emerged over the last three decades as a distinct area of specialisation within the discipline having implications for theorising and practising of distance education. Untill the 1980s there were hardly any well thought out comprehensive programmes/ courses exclusively meant for training distance education personnel. The assumption was that those who could teach in the classroom could also teach through the distance mode. Therefore, whatever arrangements were made available for the general staff developed in the context of campus based teaching were extended to distance teachers also. Gradually the complexity of operations in distance teaching warranted special staff development programmes relevant to train distance educators and the support staff in their functional areas and also to enable them to appreciate the unique features of the system. For example, at the stage of correspondence education, it was enough for the staff to acquire skills, which they had, to write lecture notes and some ability to write comments on assignment-responses from learners. But with the evolution of distance education into multi-media, tele-learning and flexible models involving a high degree of division of labour, sophisticated technologies and complex systems of operations, it became extremely difficult, if not impossible, for the teaching and non-teaching staff operating distance teaching units/institutions to be effective without proper orientation and training. This realisation has resulted in the design and development of a variety of staff development programmes in distance education.

The earliest efforts were obviously made by the UK Open University to design staff development programmes, though the understanding in general was to allow the staff to acquire their competence on the job. Full-fledged programmes eventually were developed by India, Australia and the United Kingdom, particularly from the mid eighties. As of now, at least 135 courses of different magnitudes are available on staff development. These courses are offered by different institutions from Australia, Canada, Fiji, Germany, Hong Kong, India, Sri Lanka and the United Kingdom. It is obvious that more staff development courses/programmes must be available in the United States, Latin American and Caribbean countries, China and Japan too. We can safely state that during the last two decades staff development in distance education has grown both in magnitude and importance.

4.7 LET US SUM UP

In this unit, we have addressed a few crucial issues related to the recent developments in distance education. The developments pertain to:

- Communication technologies used in distance education
- Networked collaborative learning
- Quality issues related to distance education practices

- Economic arguments in favour of distance education
- Research and Staff Development which promote professional approach to distance education.

We have focused on the above developments keeping in view their importance in the theorisation of distance education. Therefore, we have deliberately confined our discussion to those aspects and generalisations which could historically and logically link up with the previous units of this block. The issues discussed in this unit provide enormous scope for further theoretical debate.

Check Your Progress: Possible Answers

2. Through networked collaborative learning, distance learners can enrich their understanding of the courses they study, and also overcome their feeling of social isolation.

   The institutions can avoid duplication of efforts and use their limited resources more rationally.

3. In the industry, standardisation of products and processes are possible and even desireable, but it is very difficult and complex in education. Standardisation, in fact, is detrimental to creativity in the learning process.

   In the industrial context, it is easy to select or reject the products for their quality or lack of it, but in the educational situation it is very difficult to do so.

   In the industrial process it is the 'equality' of inputs that assures equality of products, whereas in education it is the equality of opportunities that matters; and the 'equality of products' can never be assured.

4. IN the UK Open University, per student cost is roughly 50 percent of the per student cost of the conventional universities. In India IGNOU's per student cost is about 40 percent as compared to that of conventional universities; and the per student cost of CCIs is just 20 per cent of that among the face-to-face counterparts.

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