
UNIT 4 EMERGING OPERATIONAL CONCERNS

Structure

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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 mediated 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 called '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 recognizing 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 MDE-418; for quality assurance see MDE-412; for economic perspective, see MDE-417; for research, management and staff development see respectively MDE-415, 414 and 419. 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 approximate to those of the campus based, face-to-face teaching/learning. In other words, 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 modem 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 MDE- 418). These facilities are extremely useful in accessing and sharing information and knowledge.

Distance education institutions have a number of benefits 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 centered courses.

But the above objectives become realisable only when the social environment, technology growth, the necessary knowledge inputs, funding, and infrastructural 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 sovereignty 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 Hawkrige (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 Hawkrige 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 recognising 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

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

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

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.

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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, telephonic, 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, and the abrupt collapse of financial institutions, which 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

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

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

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

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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 proceedings 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 2 and 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 heterogeneous 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 standards, 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 nonserious 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

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

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

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

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4.5 ECONOMIC ARGUMENTS

One of the often 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 MDE-417, 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 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 infrastructural 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 established, 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

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

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

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

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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 programme 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 (of 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 MDE-415, 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 theorizing and practising of distance education. Until 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 have, 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 practicea,
- Economic arguments in favour of distance education, and
- 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.

4.8 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress 1

Reflect your expression here and describe implications at your university institution.

Check Your Progress 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.

Check Your Progress 3

In the industry, standardisation of products and processes are possible and even desirable, 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 'quality of inputs' that assures quality of products, whereas in education it is the quality of opportunities that matters; and the 'quality of products' can never be assured.

Check Your Progress 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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STAFF TRAINING AND RESEARCH INSTITUTE OF DISTANCE EDUCATION

Dear Student,

While studying the units of this block, you may have found certain portions of the text difficult to comprehend. We wish to know your difficulties and suggestions, in order to improve the course. Therefore, we request you to fill up and send us the following questionnaire, which pertains to this block. If you find the space provided insufficient, kindly use a separate sheet.

Please mail to:

Course Coordinator (MDE-411)
STRIDE, IGNOU, Maidan Garhi
New Delhi-110068, India

Questionnaire

Enrolment No.

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- 1) How many hours did you need for studying the units?

Unit no.	1	2	3	4
No. of hours				

- 2) Please give your reactions to the following items based on your reading of the block:

Items	Excellent	Very Good	Good	Poor	Give specific examples If poor
Presentation Quality					
Language and Style					
Illustrations Used (diagrams, tables, etc.)					
Conceptual Clarity					
Check Your Progress Questions					
Feedback to CYP Questions					

- 3) Any other comments: