UNIT 1: DISTANCE EDUCATION AND HUMAN RESOURCE DEVELOPMENT

Structure

1.0 INTRODUCTION

In the preceding Block, you studied about different terms and basic concepts as they are applied in the field of 'economics of education'. This Block is an extension of the previous Block, and as such the information and understanding gained while working through Block 1 would help you especially if you are new to 'economics' as a discipline, to grapple with the issues discussed in this Block.

The first Unit of the present Block examines the contribution of distance education to the development of human resources. The Unit identifies distance education as investment in human beings, and discusses its contribution to human capital formation. This is followed by a discussion of the role of distance education in meeting the human resource needs of the economy, and improving the quality of human resources.

1.1 LEARNING OBJECTIVES

After going through this Unit, you should be able to:

- describe distance education as investment;
- state and describe the indicators which point to the contribution of distance education to the formation of human capital; and
- explain how distance education meets the human resource needs of the economy.

1.2 THE CONTEXT

The Indian educational system, in common with that of many developing low income countries, has the following major problems:

- the costs of education and the expenditure on it are increasing;
- access for disadvantaged learners from rural areas is limited;
- the quality of education given is low, resulting in learners acquiring less cognitive knowledge than learners in the developed countries acquire;
- school education is characterised by high rates of dropout (the dropout rates for India from Classes I to X, in 2004, were 60.41 per cent for boys and 63.88 per cent for girls); and in 2017-18, the GER for secondary education was 79.3% and senior secondary education was 56.5% only;
- the response of the educational system in providing education relevant to the goals of the social and economic development of the country is quite low; and
- there exists a great deal of inequality of educational opportunity.

The impact of the educational system on income distribution is an adverse one because learners from wealthy families acquire a disproportionately larger share of educational opportunities. The progress in respect of education of women and education of the rural people as well as Schedule Caste and Schedule Tribe population **(Economically Weaker Section of the society)** is not as much as it should have been, despite decades of planning.

One way of tackling this situation is to reform the educational system by adopting appropriate steps within it. Distance education, as one of the major reforms, has been introduced over the last few years in the country. The *National Policy on Education, 1986,* and the *Programme of Action* adopted by the Indian Parliament had emphasised the **open learning system.** Some forms of such an open learning system already exist for schools and colleges through correspondence/distance education offered by a few Schools, the Directorates of Correspondence Courses, and the Open Universities. At present about 140 institutions (Dual mode distance teaching institutions, State Open Universities and one National Open University i.e. IGNOU and few private institutions are offering distance education at tertiary level.

For higher education in India, both the documents mentioned above envisage a nationwide distance education system consisting of:

- a national, centralised, autonomous institution of distance education as visualised in the Indira Gandhi National Open University;
- a number of state-based, autonomous type of institution, such as Dr. B.R. Ambedkar Open University of Andhra Pradesh;
- campus-based universities offering extension services for off-campus students; and

- distance education offered through directorates of correspondence courses by the conventional universities.
- Dual mode private institutions like D.Y. Patil University, Pune.

All these have the common objective of giving education to as many people as possible in different areas of the country in a cost-effective manner. Even though distance education can be provided to the entire population, to suit the different kinds and levels of interests and needs, there remains a greater pre-occupation with courses and degrees offered by the conventional on-campus system.

It is in this context that the importance of educational planning, particularly the use of distance education for human resource development, becomes important. After the 1950s, when the role of education in promoting economic growth in developing countries was highlighted, education itself was regarded as investment in human capital.

The important role of education and training, in contributing to new projects in all sectors of development, is now well recognised and fully exploited as part of development policy by international institutions such as the World Bank. For example, the *World Bank Report, 1980*, recommended greater attention to be focused upon human resources for national development. This report emphasised that the means to tackle poverty were to increase employment, meet basic needs, reduce inequalities in income and wealth, and raise the productivity of the poor. According to the above report, human resource development should be the main instrument used to achieve such goals.

1.2.1 Human resource development (HRD)

HRD is not an isolated societal activity concerning education alone! It is worth noting that "human capital accumulation" and "human resource development" have to be distinguished from each other for policy purposes. **Human capital accumulation** refers to the formation of human capital through education, and, in developing countries like India, through health and nutrition because of the impoverished nature of the population. The problems of human capital accumulation are mainly the concern of Neo-classical (or modern) Economic Theory. **Human resource development** is a term frequently used in policy documents. It includes provisions for better education, improved conditions of health and nutrition, and reduction of fertility — each of these makes its own important contribution to the quality of life, and all of them together enhance the productivity of investment in education.

Many examples of the relationship between education and other forms of social investment can be cited to emphasise the need for parallel investment in education and other social welfare measures. In general, investment in education should be parallel to other sectoral investment — new knowledge about the effects of contaminated water will be of no use if there is no alternative water supply available. Conversely tube wells may be of little use if the community knows nothing about sanitation and hygiene.

1.2.2 Distance education for human resource development

Human resource development in India is at present characterised by a good deal of imbalance of all kinds in terms of region, gender and levels of education. Even the level of literacy varies between the rural and urban areas, and between boys and girls. There are disparities in the standards of the higher level of education as well as the level of the educational attainment of different populations. The planners could place a high emphasis on well designed instructional programmes through distance education to take care of this kind of imbalance.

The Eleventh Five Year Plan of India (2007-2012) laid special emphasis on human resource development (HRD) and it is being called Educational Plan. Some of the targets of the Plan are:

- To ensure universal secondary education by 2017, i.e. the end of the 12th Five Year Plan
- To ensure 100% enrolment and retention even up to higher secondary stage (including vocational education and other streams) by 2020
- To increase Gross Enrolment Ratio from 11% in 2006 to 15% by 2011-12 through rapid expansion of higher education system while ensuring quality and inclusion, and also restructure and re-orient higher education system to meet the requirements of a knowledge economy in a globalised world.

One of the objectives of the plan is to increase by 5% the number of students that enter graduate studies after completion of high school secondary education, i.e., an increase of seven million enrolments when compared against today's situation. The target fixed for 2012 is to have 21 million students going annually for higher education. For all these purposes, the use of Information communication technology will be emphasised and distance education will have to be adopted, using a variety of means and methods, including web and online/internet resources. In this context, distance education creates the possibility of, and has the potential to provide large scale multi-media education for the development of human resources.

Research evidences show that continuing education can improve work efficiency and productivity, and, thereby, contribute to economic growth. *Both work efficiency and productivity, besides a certain required level of education; depend upon training and orientation of human resource. These types of activities would include on-the-job training, upgrading courses, awareness courses etc.*, which are possible easily through *distance education only (Gaba, 2007)*

1.3 EDUCATION AS INVESTMENT VIS-A-VIS DISTANCE EDUCATION

Many research studies have shown that educational expenditure is an investment, which raises the productivity of an individual and his/her earnings. There are both private and social returns for education. Since distance education is also one of the modes of providing education, one can also speak of it as an investment, and consider the size of the investment within a cost-benefit framework. Distance education includes various forms of study, which are not under the continuous and immediate supervision of teachers present with their students in the lecture rooms and it includes all the teaching methods in which teaching is conducted through print and/or mechanical or electronic devices. Organising programmes of education for all through formal systems with the help of teachers, class rooms, etc. is bound to be economically beyond the reach of any developing country. Distance education is a means by which this huge task of developing human resources can be achieved. By implication, distance education could be a better investment. It may be cheaper compared to that of conventional education, but capable of higher social and private returns.

Several media are being used in the process of distance teaching/learning — printed materials, television, radio, audio and video cassettes, audio-visual aids, and so on. With the added benefits of these media, efforts have been made to achieve objectives like upgrading and/or training of teachers, providing literacy and fundamental education to adults, and extending beyond their premises the services of institutions for community development.

The present system of formal education, consisting of schools, colleges and universities, is facing enormous challenges with regard to quantity, quality, relevance and, most importantly, resource constraints. Unconventional approaches through distance education and the adoption of suitable educational technologies can help in meeting the challenges of the formal system. In fact, there are certain inherent advantages in the system of distance education — greater flexibility, cost-effectiveness and easily adaptable combinations of subject to suit the varied needs of learners. In particular, the advantages of distance education are its potential for contractual employment and its 'reach' to cover every aspirant of learning.

Activity 1.1

Notes: i) Write your answer in the space provided below.

ii) Compare your answer with the one given at the end of the Unit.

Theoretically speaking distance education can be a more potential and viable investment as compared to conventional education. Which aspects of distance education do you think give greater potential and viability to distance education as investment in human resource development?

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1.4 DISTANCE EDUCATION MECHANISMS AND CAPITAL FORMATION NEEDS

In India, in the wake of planning for social and economic development during the last fifty years, we have seen higher growth in both human and physical (non-human) capital. Physical capital has grown at a much faster pace than human capital. It is in the context of stepping up the human capital formation for raising the productivity of physical capital that distance education assumes special importance.

In the next section, you will find some of the indicators of the contribution of distance education to capital formation. Before that, let us very briefly, look into the mechanisms of distance education and consider how it can meet the different aspects of capital formation needs.

1.4.1 The mechanisms of distance education

By now, you have fairly a comprehensive idea about distance education (as described in Course ES-311). In what follows is simply to refresh about the mechanism of DE and put it in the context of present discussion. Distance education operates through mechanisms different from those of formal education. It usually involves a combination of different kinds of media in the instructional delivery. At one extreme, radio and correspondence lessons, and other such components may teach a group of individuals, who never meet a teacher and have no occasion for physical contact among themselves within the premises of any institution; and, at the other extreme, distance education can be used to support instructional activities at schools and supplement the routine work of the classroom teachers. Whatever mechanism is adopted, distance education can be taken to mean an educational process in which a good part of teaching is conducted by some one distant in space and time from the learner.

1.4.2 Growth of human knowledge

Human knowledge grows fast, and existing knowledge becomes obsolete quickly. Under such circumstances, distance education has to cater to the requirements of those already employed. Their knowledge can be upgraded and updated through continuing education programmes. In higher education in particular, one of the objectives is to expand the frontiers of knowledge; and the task of imparting developments in new knowledge areas in the developing countries can be achieved through distance education with its multi-media mechanisms, so as to reach a larger number of clients at a relatively low cost.

1.4.3 Development of skills

The case will be very different, if the idea is to help develop the skills of the learners. One has to be careful in using distance education strategies for skill development, because there has to be greater physical participation and involvement of the target groups of the population in skill generation. Such skills are, generally, available in different kinds of industries, and they can be demonstrated to different target groups of learners through appropriate media. With the help of technological gadgets and mass media, it will be possible to update the existing skills of learners and generate new skills among them. The quality and efficiency of the educational process including skill development determine the degree of success in the job market, i.e. the kind of job acquired and the probability of finding the job.

1.4.4 Leisure utilisation and life satisfaction

Distance education could be quite useful in the utilisation of leisure time. As technologies advance, and are made widely available, people are spared from many kinds of routine work. Consequently, people get more leisure time which can be profitably and pleasurably put to use. Distance education can cater to the needs of such people who wish to fill their leisure time with pleasurable and profitable hobbies and activities. Pursuit of education through distance mode may be a rewarding experience to many such people. In many areas it may entail social and private gains as well, such as housewives taking up courses ranging from guiding pre-school children or developing kitchen gardens, to offering counselling or advice on portfolio management in the stock market. Such educational achievements in the life of adults outside the premises of educational institutions and the gains that accompany such achievements provide great satisfaction to an individual. Further, they provide stimulation to work harder, all of which, in turn, enhance human productivity.

1.4.5 Supporting lifelong education

Lifelong education is a new concept and a new approach to the educational process, which is revolutionising the educational systems of the world. The educator's role is changing; instead of a teacher, he/she is becoming a motivator. The traditional classes are beginning to break up and are being replaced by study groups. The students learn to use all the resources of information from libraries, and computers, as well as from other electronic devices. In the changed circumstances, distance education can play a crucial role. Lifelong education has to employ new means and technologies for achieving the desired objectives; and distance education, with large scale use of mass communication media, provides vast scope to apply those technologies and achieve those objectives. Such media are now widely used in many developed and developing countries.

Faure and others, in their world education report, *Learning to Be* (1972), have envisaged lifelong education as a crucial aspect of humanity, and have observed that almost all the activities of an individual centre round and contribute to this process. Therefore, if education is not turned into a continuous process involving a variety of activities such as special courses, orientations, seminars, etc., throughout one's life, its objective of constant enrichment of life can not be retained. To enrich the process, strategies and methods like distance education and other forms of open learning would inevitably be adopted and in fact, the coming century would largely depend on this mode of educational transaction.

Activity 1.2

Notes: i) Space is given below for writing your answer.
ii) Compare your answer with the one given at the end of the Unit.

Briefly describe in what ways distance education contributes to the formation of human capital. Use ten lines to write your answer.

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1.5 DISTANCE EDUCATION, HUMAN RESOURCE NEEDS AND NATIONAL ECONOMY

Distance education, with the use of the right kind of educational technology and media, can be made to play a crucial role in the national economy, meeting human resources needs and thereby contributing to economic development. Dissatisfaction with the quantitative approaches to human resource forecasting (adopted in India and other developing countries) that stress formal institutional experience has now become universal. The focus of attention is being shifted to a wider dimension of human resource forecasting and utilisation in these countries, one that stresses and accommodates non-formal and non-face-to-face methods of providing educational opportunities. In the following sub-sections, let us consider how distance education meets the human resource needs of the economy of a nation.

1.5.1 Meeting human resource needs of the country

Modern economic growth is characterised by a high level of technology which is also fast changing. Therefore, it is necessary to have all the human resource trained and endowed with different skills; such human resource has to be generated by the educational system, and must be of an international standard both in quantity and quality.

Though human resource planning in India has been going on for nearly five decades, detailed human resource forecasts have not been compared to the production of the technical education system in terms of the number of persons trained in engineering, medicine and agriculture. Exercises of various kinds using relationships between different parts of economic variables have been tried for different kinds of human resource. Human resource forecasts have been made generally on the basis of more direct relationships between the stock of highly educated and technical personnel and the assessed needs of the economy, sector by sector or globally. But such exercises have not appreciably influenced educational decision-making. Detailed efforts for relating planned growth rates and different industries with detailed occupational groupings, or relating occupational structure to the educational requirements were not generally made except for the one made by the Labour Ministry in 1969; but it did not substantially influence the educational decision-making. It is, therefore, not surprising that there were substantial differences between the forecasts and actual turn out for absorption in the country.

Human resource planning should go beyond the quantitative concern of producing a certain strength or size of human resource. It should be related to a broad strategy of human resource development. It may be emphasised here that human resource needs are not related solely to the requirements of economic development. Broader aspiration for social and political modernisation, relating to national development, should also be taken note of, and the educational planning should be related to them as well.

The planning and management of distance education seriously takes into account the human resource needs of the country on the one hand, and tries to base the design and development of educational programmes according to needs of potential clients on the other hand. Besides, provisions in support of the principles of lifelong education, training and updating (both in-service and pre-service) are made part of the continuing education programmes, and are considered as regular activities of a distance teaching institution.

1.5.2 Quality of labour force

The quality of the labour force is a very important consideration, when we look at the human resource development in a country like India. This is influenced by the development of education and training, the level of nutrition and health, and the availability of professionals and facilities like doctors, nurses, hospitals, etc. The following table shows the percentage of literates categorised on the basis of their education level.

Table 1.1: Educational composition of labour force (Urban India)

Educational Level	1972-73		1977-78		1983		1987-88		1993-94		2004-05	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Illiterate	24.8	67.4	22.1	58.2	21.7	56.5	19.6	51.8	17.9	44.5	12.8	34.4
Literate but up to primary	37.2	16.5	33.6	17.9	30.1	17.5	30.5	19.0	25.4	17.7	22.4	18.8
Middle	15.0	4.0	17.2	6.7	18.1	6.3	16.4	7.3	17.5	8.1	19.5	10.9
Secondary	16.6	8.0	18.4	10.8	19.9	11.6	21.8	12.3	24.6	15.1	15.0	7.7
Graduate and above	6.4	4.1	8.7	6.4	10.1	8.0	11.7	9.6	14.6	14.6	30.3	28.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Figures relate to usual status of individuals. Figures for the years 1972-73 and 1977-78 relate to the population age 5 years and above while figures for the years 1983, 1987-88 and 1993-94 relate to the population age 15 years and above.
Source: *Manpower Profile of India* (1998 and 2008) , IAMR, New Delhi.

Table 1.2: Educational composition of labour force (Rural India)

Educational Level	1972-73		1977-78		1983		1987-88		1993-94		2004-05	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Illiterate	61.1	91.6	55.0	88.1	52.1	86.2	48.3	82.3	43.7	79.0	33.6	66.2
Literate but up to Primary	29.0	7.1	30.8	9.1	29.2	10.2	29.6	10.2	29.0	13.7	29.4	18.0
Middle	6.3	0.8	8.5	1.6	10.8	2.1	11.6	3.2	13.6	3.9	18.0	8.2
Secondary	3.1	0.4	4.7	1.0	6.4	1.2	8.4	2.0	20.9	2.7	9.2	3.7
Graduate and above	0.5	0.1	1.0	0.2	1.5	0.3	2.1	0.4	2.8	0.7	9.8	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Figures relate to usual status of individuals. Figures for the years 1972-73 and 1977-78 relate to the population age five years and above while figures for the years 1983, 1987-88 and 1993-94 relate to the population age 15 years and above.
Source: As in Table 1.1.

From Tables 1.1 and 1.2 you will find that during 2004-05, 30.3% urban male/28.2% urban female and 9.8% rural male/3.9% rural female possess degrees and diplomas. In terms of quantity, this is very low in comparison to those who complete secondary and higher secondary education. Besides looking after the quantitative expansion of tertiary and professional education in the country, one of the important tasks of distance education has been to upgrade the quality of both instruction and output at the secondary and higher stages of education. Though not an easy task, this would require adequate skills, unflinching perseverance, and sufficient time to materialise. A distinct and immediate possibility is the in-service and on-the-job training and orientation of the professionals from various sectors of the economy which the formal system of education would find difficult to provide.

1.5.3 Work efficiency and productivity

Due to the low level of education among the Indian labour force, its work efficiency and productivity is low. This is particularly true of traditional sectors like agriculture. Research evidences show that human resources development and education improve work efficiency and productivity, and, thereby, contribute to economic growth.

Both work efficiency and productivity, besides a certain required level of education, depend upon training and orientation of human resource. Such activities would include on-the-job training, upgrading courses, awareness courses, updating courses, etc., which are possible much more easily through distance education than any other means known to us today.

1.5.4 Employment opportunity

Education, given through either the on-campus or the distance mode, can raise the employment opportunities in many ways, as it helps develop the necessary skills, attitude and motivation to match opportunities – wage-employment as well as self-employment. With the large scale adoption of distance education, the role of the educational system in providing employment opportunities is bound to increase. However, this presupposes a matching between human resource needs and educational opportunities provided through this mode.

1.5.5 Minimising opportunity cost

A major obstacle in the progress of formal education particularly in rural areas and at the elementary level has been the opportunity cost due to the foregone earnings of the children who are required to work in the farms with their parents. It remains a major consideration even at the tertiary level. From this point of view, distance education has a marked advantage over on-campus education because it can minimise the opportunity cost. One can study through the distance mode while continuing in gainful employment – whether in industry, office or agriculture. This consideration is a major incentive for expanding distance education facilities at all levels of education. Expansion of distance education would reduce the cut-off point of on-campus education, thereby increasing possibilities of early employment, and of continuing with professional education subsequently while one is forming a career.

1.5.6 Contribution to equality

Distance education can provide equality of educational opportunity by creating access at both secondary and higher levels, casting aside some of the rigid entry-requirements of the conventional system with regard to age and qualifications; and requirements of a strict schedule of studies, stipulation of attendance, imposition of teacher/institution designed curriculum, etc. It can be useful, particularly for the dropout to whom instruction can be provided irrespective of age, employment status, etc. through multi-media packages. It can also be used for promoting quality in achievement among different categories of learners, and, thereby, be used for promoting equality in access and achievement.

Activity 1.3

Notes: i) Space is given below for writing your answer.
ii) Compare your answer with the one given at the end of the Unit.

Write down the six indicators of the contribution of distance education to human resource development. State in about six lines how distance education helps minimise opportunity cost.

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1.6 DISTANCE EDUCATION AND THE QUALITY OF HUMAN RESOURCE

In India, access to education has considerably increased, though there has not been much improvement in the quality of education. That is why the Seventh Five Year Plan of India attached special importance to the quality of service in education, health and family welfare. Literacy, life expectancy, health and nutrition continue to be given special consideration, and therefore the links between education and other aspects of human resource development like health and fertility have to be specially noted. The quality of education and health has to be considered in relation to its cost; and minimising the cost for a given quality or getting the best quality for a given cost has to be aimed at.

Distance education can influence the quality of human resources in diverse ways. At present, education is being delivered through blended learning approach. There are specific reasons for offering educational programme through blended learning mode. For instance, the process of skill development in the informal sector in developing countries is more important, since formal training institutions do not have the capacity to train all those, who want to acquire skills, and a few of those, who want to acquire the skills, have the means to afford formal training. The ability to learn, to transform existing knowledge into new knowledge, is a source of competitive advantage of increasing significance. In such cases, daily learning has become an integral part of their day to day job. A part of such learning relies on the trade of tacit knowledge among employees (Gaba, 2007)

Hence, distance learning or blended learning approaches plays positive role in developing human resource in various ways. In the areas of health, nutrition and education, the open learning system can spread necessary awareness among those whom such awareness might help – the large number of uneducated people, particularly women – and thereby improve upon the status of the population with regard to health, nutrition and education. In the process, distance education or blended learning approach will call for interaction among people belonging to different areas of operation such as teachers, technologists, learners, administrators and other functionaries. This will enhance the possibilities of interfacing education with other aspects of social life.

While considering the quality of human resources, it is essential to take note of the quality of education. The quality of education in an educational institution can be defined as:

i) the level of material inputs allocated to an educational institution (i.e., resource concentration); and
ii) the level of efficiency with which a fixed amount of material inputs is organised and managed to raise student achievement.

However, it is not only the material level inputs which influence any improvement in student achievement. Many researchers in education have identified three subsets, which have a significant influence on the quality of education:

i) teacher quality;
ii) teacher behaviour within the classroom; and
iii) organisation of the educational institution.

These indicators, with different connotations and implications, can also be applied to teaching-learning transactions in distance education if we want to ensure the quality of its process as well as of the product(s).

1.7 LET US SUM UP

At the beginning of this Unit, we focused your attention on the different aspects of human resource development. This was followed by a consideration of the investment aspect of education where we pointed out that distance education can play a complementary role in promoting educational investment, particularly in developing countries like India, Pakistan and Bangladesh, where there is a great deal of educational backwardness.

Reference was made to the inadequacy of our efforts for human resource development, particularly in relation to physical capital formation. Having established the need for higher educational investment and pointed to the possibilities offered by distance education for this purpose, the many ways in which distance education can contribute to human and non-human capital formation were elaborated. In particular, the role of distance education in meeting the needs of human resource in the Indian economy has received special attention, both because of the not-so-comprehensive interpretation given to human resource and its development, and because of the importance given to human resource in the theory of economic growth. Human resource requirements for an economy like that of India has to be considered in a much wider sense to include not only skills but also attitudes and motivations; and human resource forecasting and development have to be thought of in much wider terms. In carrying out the task of human resource planning, distance education can play a prominent role; in making education more relevant and widespread to all sections of the population. It overcomes the present obstacles, which the conventional (on-campus) system is facing, and in equalising educational opportunities for different types of learner groups.

Since it is necessary to consider the question of the quality of human resource, the quality aspects of human resource development were also considered in the last section of the Unit. While the quality of health is quite easy to define, we are not equally clear about education in this regard. It can be looked at from many points of view, and it will change with the changing needs of the economy. In any case, the cost dimension will have to be taken into account. Efforts have to be made to optimise the relationship between cost and quality. For a given cost, the quality needs to be maximised, and for a given quality, the cost needs to be minimised.

1.8 MODEL ANSWERS TO ACTIVITIES

Activity 1.1

There are a few pointers that suggest that distance education is a viable investment in human capital. First, "distance education" is another mode of "education" and therefore, like the latter, should be considered a worthwhile expenditure. Second, distance education justifies the larger possibility of purposeful investment in that it provides access and quality on the one hand, and the large scale use of multi-media for frequent communication, and effective self-instruction and self-learning, on the other.

Activity 1.2

Distance education provides mechanisms for imparting knowledge and for self-learning, which are essential for the growth of human capital. For the effective formation and development of human resources, the growth of knowledge, understanding, skills and attitude is a pre-requisite, which is facilitated by the mechanisms of learning at-a-distance. Besides, utilisation of leisure for fruitful individual development, deriving satisfaction from a sense of achievement, etc., is also made possible through distance education. Distance education also helps the process of lifelong learning and thereby the continuous development of individuals throughout their lives.

Activity 1.3

The six indicators are: human resource needs, quality of labour force, work efficiency and productivity, employment opportunity, opportunity cost, and equality. In the system of distance education, one can study even while on a job, whether in the field, in office or in industry. Hence, one does not have to forego one's earning while continuing with one's education.

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