LEARNER-CENTRED DISTANCE EDUCATION : A RESEARCH-BASED FRAMEWORK

by

Dr. Arun K. Gupta
Director, Model Institute of Education and Research,
Jammu, India.

The emergence of distance education as an alternative and supplement to formal education in recent times is mainly due to a realization on the part of educational thinkers and planners that this form of education has several inbuilt advantages in matters of student access, costs, quality of learning and human resource development. However, it was only after the 1950's that, what is today recognized as the "nascent" discipline of distance education, came into being. We seem to have reached a stage when the concepts, media, practices, experiences and insights gained in different situations with different target groups need to be woven into a coherent theoretical framework and overall technology to make distance education a truly flexible, diverse, worthwhile and effective medium of education.

Characteristics and Models

Distance education is conceived today essentially as an open learning system with some special characteristics. These, according to Keegan (1980), are (a) separation of teacher and learner; (b) influence of an educational organization; (c) use of signal carriers; (d) provision of two way communication; (e) occasional opportunities for didactic and social meetings; and (f) industralized form of education. Components or sub-systems underlying distance education have also been identified. According to Holmberg (1981), these are (a) individual; (b) organization; (c) content and structure; (d) organization and administration; (e) contact programmes; (f) media; and (g) evaluation and revision.

Attempts have also been made to develop models of or for the effective management of distance learning systems. (Kaye and Rumble, 1981; Twining, 1982; Banthiya, 1984). Recently, Gupta (1985) suggested a systems approach management model for distance education. In this model, effective management of distance education is assumed to depend upon the management of subsystems; namely those related to (a) learner; (b) curriculum; (c) learning materials; (d) operational factors; (e) operational sources;

(f) organizational factors; and (g) developmental sources. The author also delineated the sub-components underlying each component and suggested that there was a need to further study each sub-system in detail to strengthen it in the light of research studies so that the benefits from distance education could be optimized. In the present paper, an attempt has been made to analyze the "learner sub-system" in the management model in the light of researches conducted in the field. At the very outset it may be said that, as in any other form of education, the learner should occupy the central place in distance education as well. It can be argued that distance education (or correspondence education, external study, home study, independent study, distance teaching, oral tuition, telemathic study, postal tuition, or whatever one may wish to call it) is more likely to succeed if the individual is made the central focus of our endeavour and we, as distance educators, respond to his or her requirements not just as a learner but as a whole person who needs a variety of forms of support in addition to academic guidance. As appropriately observed by Smith (1982) "..... to have it otherwise is to confuse the means with the ends, to get the priorities wrong or, at best, do right things for wrong reasons". It is therefore important to look at distance education from the learner's angle rather than from the organizational angle as may sometimes become the case.

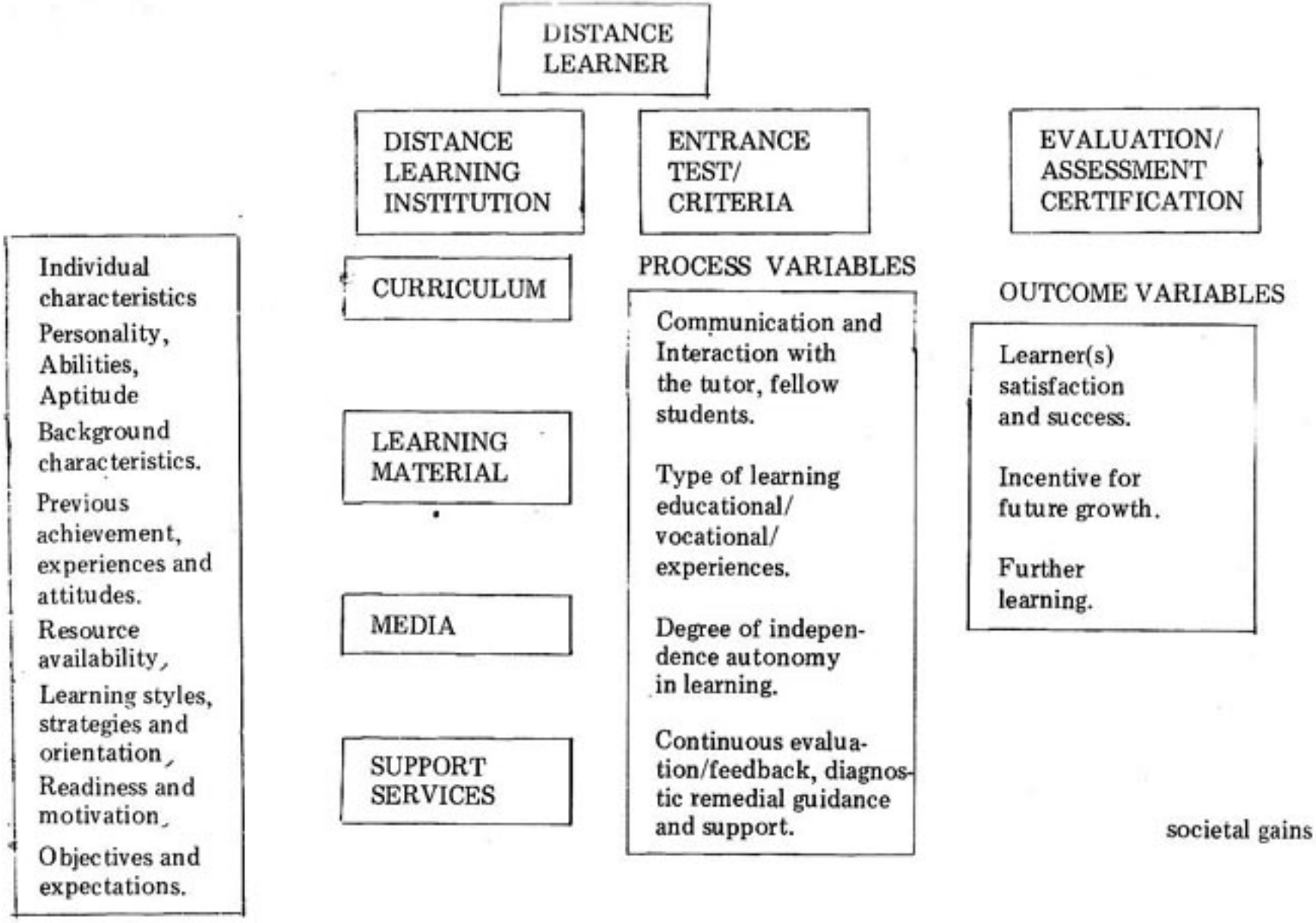
Model of learner—Centred Distance education

It may be seen from the model that the learner has been given a central place while the distance learning system has been fitted to suit his needs, objectives and expectations. This is so because the distance learner happens to be a living dynamic organism who approaches a distance learning organization with the expectation that the particular organization can fulfil his immediate and long term needs in the process of development and actualization. Hence, what type of learner enters the distance learning system is an issue of crucial importance for the success of the whole programme.

The learner in distance education programmes may be in one of these categories: one who had to discontinue his education owing to pecuniary or other circumstances; a resident of geographically remote areas where access to a particular academic programme does not exist; one who had to discontinue his education because of lack of aptitude and motivation but who now feels motivated; one who could not find a seat in a particular institution or does not wish to join a regular college or university department; an inservice person who wants to brighten his career prospects and an individual

DISTANCE EDUCATION: THE LEARNER'S PERSPECTIVE

The system of distance education as it impinges on the learner can be represented by the following model :



who looks upon education as a life time activity and may either like to refreshen his knowledge in an existing discipline or acquire knowledge in a new area. All these categories of learner may enter the same distance learning programme. Whether or not they would all complete the course and derive adequate satisfaction from it would depend upon how each of them has been treated through the various services and components of the system. Their success in distance learning situations would also, to a large extent, be dependent upon their entry behaviour and characteristics. It is worthwhile, therefore, to review what type of learner characteristics are related to success in distance learning situations.

What research says on learner characteristics

1. Contrary to the earlier view that adult learning decreases with age (Thorndike, 1928), recent evidence suggests that middle-aged adults are as capable .of learning as younger members of a family (Sjogren and Knox, 1965; McIntosh and Wooley, 1978;). As aptly summarized by Holmberg (1982), studies have shown that a distance learner is generally an adult, gainfully employed, with women outnumbering men. The age group 25—35 seems to be the largest one in most distance learning systems while the average age range of a distance learner is 20—45 years. These findings also hold good for the distance learners in developing countries (Ansere, 1978; Anand, 1982).

2. Among the different individual and background characteristics that have been found to contribute positively to success in distance education, mention can be made of psychological factors like intelligence, abilities, level of motivation, reading and comprehension skills, degree of self-confidence and self-direction, previous experience with distance education, aptitude for learning, cognitive and personality style. (Knowels, 1970; Lampikoski and Mantere, 1978; Baath, 1979; Bowlay, 1979; Coldeway, 1982; Finkel, 1982; Woodley, 1982; Rekkedal, 1982; Gomathi, 1984).

3. The time-and-resource availability, season of admission and favourable attitudes to distance education have been found to be positively related to success in distance learning (Glatter and Wedell, 1971; McIntosh, 1976; Freeman, 1976; Goorhuis, 1977; Ansere, 1978; Wanghal, 1979; Flink, 1979; Rekkedal, 1981, Taylor and White, 1982; Verma, 1983).

4. Learning styles, learning strategies and individual learning orientations have also been found to be of crucial importance to success in distance education. Summarizing a number of studies on the above aspects,

Gibbs, Marton and Taylor (1982) explained why students fail to learn through distance education. According to these researchers, this was because (i) students lacked the necessary study skills; (ii) students have limited study approaches; (iii) students themselves choose their approaches to study and some choose inappropriate and ineffective approaches (iv) students can actually develop in their sophistication as learners and some students fail to do so. Marton (1975), Marton and Saljo (1976) and Taylor, Gibbs and Morgan (1980) have found that students learning at a distance relate to their studies in different ways according to their respective orientations. Four main kinds of orientations; (a) vocational; (b) academic; (c) personal; and (d) social have been found to be present. Vocational orientation is of two kinds; qualification and training. Students aiming at gaining qualifications are not primarily interested in the content of the course but rather in passing it; in other words, they are extrinsically motivated. Those intrinsically motivated are interested in the content of the study. Personal orientation has two subcategories — compensation and broadening. Compensation means that the student wants to test his capacity. Broadening stands for student's goals of developing himself. Social orientation is largely intrinsic since the main reason for studying is to have a "good time" (socializing). According to Marton and Svensson (1981), how a student sets about learning is a function of his idea of learning which, in turn, is dependent upon his orientation to studies.

5. Readiness and motivation of the learner have been found to be positively related with success in distance learning situations (Mathiesson, 1971; McIntosh et al, 1977; Coldeway, 1982; Finkel, 1982). Rekkedal found that prior successful completion of correspondence courses is a sure barrier to dropping out. Similarly, it is more difficult for the out-of-touch students to successfully complete a distance learning course as compared to those who are in touch. According to Woodley (1982), students who pass with good grades in a prior course that is recommended or a prerequisite, are less likely to drop out of the subsequent course as they are better motivated.

6. The objectives and expectations of students from a particular institution and or academic programme have also been found to be significant factors relating to success (Morgan, Taylor and Gibbs, 1981). Every learner opts to take admission in a course after having matched his objectives with his expectations. If these match, success rate is enhanced.

It follows from the above review that distance learning can be made more effective if the entry behaviour of learners is also taken into consideration. In the given model, learner characteristics that need to be considered have been identified as input variables. As Smith (1982) has aptly observed, "..... because learning is a personal, idiosyncratic activity and because quality of learning is important (for distance learners), our wits and resources must continually be channelled into improving both products and processes. In fact, the product (consisting of course materials in different media) must be designed and delivered in such a way that the learning process is as rich and stimulating as it can be for individual students".

Process variables: research evidence

Once the learner with his characteristics, style, abilities and unique background, decides to study at a distance, he has to form linkages with the system itself. These linkages have also been identified in the model. On the one hand, there are admission criteria and entrance tests prescribed by the learning centres. These must be fulfilled before the learner can proceed with his studies. Once he is admitted, his relation with the distance learning centre is through: (1) the curriculum that has been prescribed for the learner; (2) the different types of learning materials that have been prepared to disseminate that curriculum; (3) the different media which are made available to enhance the learner's mastery of the learning materials; (4) the support services which any distance learning centres in the system offer to the learners; and (5) the system of evaluation and examinations which lead to certification (if provided). No one can under-estimate the contribution of each of these subsystems or components towards ensuring success for the learner. The objectives underlying these components, the quality of the components themselves and the modalities through which these are offered to the learner—all play important roles in ensuring success in distance learning. However, the distance learner has no direct control over any of these components. Even though he is paying for his course and for the services offered with it, he is least involved in how these subsystems are managed, since he is mostly on the receiving end. What, however, is important from the point of view of the learner is the actual process whereby he is led to the attainment of the course objectives which are in consonance with his learner's expectations/objectives. Factors which are important in the process of distance learning have been represented in the model as process variables. These are: communication and interaction with the tutor and fellow students; type of learning (educational/vocational/practical) experiences; degree of independence and autonomy in learning; continuous evaluation/feedback (diagnostic and remedial) and guidance and support

respectively. On the basis of researches conducted in the field, the following generalizations can be arrived at:

1. The nature and degree of communication and interaction with the organization, tutors and fellow students (socialization) do significantly influence the quality of learning in distance learning situations from the point of view of learners. According to Baath (1980), two-way communication between the learner and the centre/tutor is dependent upon "submission density" *i.e.* the density of the postal contact brought about by means of assignment submission. According to Rekkedal (1973), Baath and Mansson (1977), Anand (1978) and Sharma and Sharma (1984), the turn around time, *i.e.*, the time elapsing between student's despatch of assignments, marking and return is a key variable in promoting two-way interaction. The shorter the time, the greater the interaction. Kloeden and McDonald (1981) found that the interaction could be enhanced by continuous use of short questionnaires which become more specific as major difficulties are encountered by the students. Valkyser (1980), Durbridge (1981), Bell *et al* (1982) and Bradley (1982) experimented with audio-cassettes in promoting interaction between the teacher and the taught and found it to be much better by using this technique. Harris (1975), Gibbs and Durbridge (1976) and Fritsch (1980; 1981) found that the degree of interaction depended upon a tutor's status, qualifications, attitudes and influence on students. Significant success in promoting two-way communication in distance learning situations through telephone tutoring combined with correspondence education has been reported by Holloway and Hammond (1975), Turok (1977) and Flink (1978). In recent years, Lampikoski and Mantere (1976), Baath and Mansson (1977), Graff (1977), Lambert (1977), Mollers (1981), Wright and Haines (1981), Freeman (1982) and Baath (1982) have reported that the degree of communication in distance learning systems can be greatly enhanced by using computers to analyze student responses and in student counselling.

2. The type of learning (educational, practical and vocational) experiences provided significantly influences the quality of learning from the learner's point of view (Jayagopal, 1981; Vaidya, 1984). A number of studies conducted at the Open University in Britain have shown that the provision of kits, diverse study material, computer access and opportunities for face-to-face contacts can ensure better learner participation and motivation and contribute to higher completion rates in the course (Hawkridge, 1978; Bates, 1984).

3. Success in distance learning programmes has been found to be significantly dependent upon the extent of independence or autonomy in learning accorded to the distance learners (Moore, 1972). The issue as to how much student autonomy should be provided in distance learning situation has, however, been much debated in recent years (Smith, 1982). Whether there should be a tight control or structure or total student centredness (wherein the individual is helped by the tutors to take responsibility for his own learning by determining his skills and choosing his own programmes) and who should be responsible or accountable for the total educational process that the students experience are subjects of controversy still. However, too tight control on the one hand or absolute student autonomy on the other may have to give way to a middle path whereby one does not suffer at the cost of another (Wedemeyer, 1981).

4. Another process variable contributing to success in distance learning from the point of view of the learner is assessment and feedback (Grahm, 1969, Rowntree 1977, Gupta 1978). Through continuous assessment and feedback during the course, it becomes possible to diagnose the difficulties being faced by the learner. Prognostic or remedial measures and guidance can subsequently follow (Gupta, 1981). The evaluation machinery inbuilt in a system of distance education can also determine the nature and scope of guidance and support services to the learners. Suffice it to say that assessment has to be diverse and flexible in accordance with the diversity within the learning population of the distance learning institution. As aptly remarked by Sewart (1978), each student brings his own frame of reference into the learning process and a uniform package of assessment cannot be fitted to one and all. Whether the distance learning system is based on 'pedagogy' or 'androgogy' (Coldeway, 1982), the assessment techniques must take into cognizance the different orientations to learning of the students (Morgan, Taylor, Svensson, 1982). On the basis of current practices, it can be said that too little assessment is as bad as too much; and whatever the mode of evaluation, the results must be given to the learner as soon as possible so that he may perceive it as an important component in the process of his self-development and attaining satisfaction therefrom (Gupta, 1984; Gunasekaran, 1984).

5. The nature and scope of guidance and support services for learners have been found to be important from the point of view of ensuring completion rates in distance education (Hawkridge, 1978). The population of distance learning institutions is characterised by extreme diversity and this calls for different treatment on a variety of levels with reference to student

support and guidance. These may take a form of face-to-face contact sessions, telephone counselling, computer counselling, mobile learning centres, study centres equipped with computer terminals, communication by means of audio-cassettes, tele-conference, postal library, study circles, professional counsellors and computer guidance systems, with each service having some unique advantages (Logan et al, 1970; Lampikoski and Mantere, 1976; Baath and Mansson, 1977; Anand, 1978; Rayman et al, 1978; Flink, 1978; Thornton and Mitchell, 1978; Valkyser, 1980; Lockwood and Cooper, 1980; Dodds, Guiton and Lawrence, 1981; Robinson, 1981; Fritsch, 1982; Smith, 1982; Cochran and Meech, 1982; Meakin, 1982; Kinkirn, 1982; Salter, 1982; Caron, 1982; Bates, 1984). However, the success of these services depends to a large extent upon the involvement of the personnel associated with them and upon the coverage and scope of support (Holmberg, 1981).

Learning outcomes: research evidence

The end-of-course assessment and certification are very important factors for the learner since these represent the outcome of the learning process It is for this reason that this has been shown separately in the given model. With the number of institutions offering different courses through distance education increasing greatly in recent years, the questions of comparability, accreditation, standards and equivalence have assumed importance (Gupta, 1977). There are some students who may not accord much importance to these aspects, but for a majority of learners, the perceived market value of their certificate, degree or diploma in their future growth and professional advancement is of vital importance. Studies of the enrolment trends in Britain's Open University, as also in similar institutions in other countries reveal that the courses offered by conventional universities and or statutory bodies of higher education have higher market credibility even though these courses may not be of a very high standard (Gupta, 1982).

For some, perhaps many learners, the outcomes from a distance learning programme, apart from the certificate, diploma or degree, may be satisfaction and incentive/motivation for further growth and learning. Studies conducted at the UK Open University have revealed that if a particular programme has resulted in satisfactory experiences on the part of the learner, there is every probability that he/she might enrol for a subsequent programme through distance education. This satisfaction is also likely to

be passed on to the other members of the family and the circle of friends and acquaintances so that the number of prospective learners through distance learning techniques may increase. This would imply an increase in clients of those distance learning institutions which have a good reputation among learners.

SUMMING UP

It can be seen, therefore, that the proposed model highlights those variables upon which success in distance learning eventually depends from the point of view of the learner. Howsoever good the curriculum or the learning material or the media or the support services, unless these benefit the learner directly and significantly, the effectiveness of the system cannot be termed as high. It is the conviction of the present writer that distance learning institutions especially in developing countries may have to change their style of functioning drastically from being 'pedagogy based' to being 'androgogy' based. And for this, the learner will have to be made the focal point in distance learning systems. There is nonetheless a great need to initiate more research efforts to study learner aptitude interactions so as to throw more light on learners' characteristics and their learning strategies with a view to matching these with the different institutional inputs and practices for learner satisfaction and success. It is in this context that the model proposed may prove helpful to prospective researchers as much still remains to be done in the direction of making distance education learner-centred.

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