

CHAPTER - II

2.00 REVIEW OF RELATED LITERATURE

2.01 INTRODUCTION

In this chapter, an attempt is made to highlight the findings of some of the studies conducted so far in correspondence system of education. Reviewing research done in the area of correspondence education, it was found that a number of studies have been conducted in U.K., U.S.A., Australia, Germany and in our country. These studies covered the different aspects of the Correspondence Education. So, an attempt has been made to classify the studies based on their focal areas. The studies conducted abroad and in India have been classified separately.

2.02. RESEARCH ABROAD

2.2.1 RESEARCH ON DISTANCE EDUCATION

Childs (1966)¹ was aware of a substantial growing world wide body of literature relating to correspondence instruction but research reports were still scarce. Holenberg (1977)² gave a review of what is know about the methods applied within distance study systems, what research has been achieved and what further studies are desirable. This attempt to survey the available

knowledge of distance education is advocated by Hølemberg. The I.C.C.E. Research Committee sent a questionnaire in 1976, asking for information on current or planned research projects in distance education. In all 53 research projects were reported, among which only one was reported on evaluation. The topics normally dealt with are comparative studies in distance groups and two-way communication in distance study.

Erdoes (1975)³ was dissatisfied with the particularity of distance education research and made a suggestion to I.C.C.E., as "the programme of research which in addition to information about the participating institutions would yield positive findings for the evaluation of the distance education as a method."

2.2.2 DISTANCE STUDY SYSTEM

Oliva (1977)⁴ says that "the distance study system was conceived in Phillipines as a delivery system for people who have no access to schools, colleges or university and yet for which education is indispensable to the development of rural areas.

Educators on the look out for alternative models which could reduce the physical, social and psychological distance that separate knowledge and the learner have in particular, turned

their attention to the possibility of using the communication media to extend education in both space and time and to diversify its objectives, content and form. The success of the open university concept has convinced many countries through out the world that distance teaching systems, based on the use of new technologies can make an effective contribution to the quantitative and qualitative improvement of higher education in the larger context of life long education.

2.2.3 RESEARCH ON CORRESPONDENCE EDUCATION

It is probably safe to say that if one were to make a list of areas of notable achievements in the correspondence field, researches would not head the list and the position has not improved since.

Harris (1967)⁵ comments on research in correspondence study that many independent study administrators express concern over the so called 'lack of research' and continue to hope that there will be more research in the future than in the past. Research and evaluation are considered an integral and permanent feature of the University's teaching system to yield continuous information regarding the quality of materials, course team performace, students performace and student's use of materials. Assessment identifies weak spots in the system and helps to identify

alternatives for improving the quality of the education provided.

2.2.4 STUDIES ON THE PROFILE OF DISTANT LEARNERS

In addition to being concerned with the goals, evaluation studies should describe the participants carefully for two reasons. First, the participants might have characteristics which would help to explain the success or failure of the programme. Secondly, it would make it possible to duplicate the study to know, whether or not the participants in various correspondence education programmes are similar. People with different characteristics should be affected differently by the programme. Then only comparisons of various programmes may lead to valid generalisations.

Studies were done by John Stone and Rivera (1965)⁶ with a large scale sample survey of the educational activities of American Educationists. The study reported that participation in correspondence course was heavily dominated by men (around 70%) Correspondence students in America tended to be young compared to other forms of adult education with 55 per cent under 35 years. Another sample survey (Peters, 1965)⁷ conducted in West Germany indicates that correspondence students in West Germany were younger than students in America with 56 per cent of them under 30 years.

Duke (1967)⁸ analysed the age, sex and occupation of one thousand students and found that half the total were in teaching profession. Robbins Report (Higher Secondary Report 1961 - 62) on the role of correspondence study in education and training for professional qualification found that the overwhelming majority of correspondence students for higher professional qualification was found in the commercial group.

An interesting finding has come from an American University Correspondence Division (Childs, 1966)⁹ that most of the men were under 35 years of age and enrolled with the main objective of obtaining a qualification while most of the women were over 35 years of age and had cultural objectives in mind rather than obtaining a qualification. Glatte and Wedell (1971)¹⁰ McIntosh (1978)¹¹ found that in U.K. very high percentage of correspondence education students belonged to around 30 years of age. Rumble and Borden (1983)¹² found in Costa Rica very higher percentage of students of distance university were below 25 years age group.

In the case of Open University U.K. the situation of 1971 i.e. 70 per cent men and 30 per cent women changed towards 56 per cent men and 44 per cent women by the year 1978 McIntosh (1981)¹³. Waniewics (1981)¹⁴ found that in Canada the largest percentage of students were women especially from 25 to 34 years of age group. A mail survey was carried out through a question-

naire on a randomly selected sample of 1823 students in the University of Waterloo correspondence programme (Canada). Results show that correspondence students are equally divided by sex, tend to be married in their thirties are employed full time in professional or managerial occupations (31% are teachers) are already well educated with 31 per cent holding university degrees and the major motives for enrolling is the opportunity to complete a degree. The great majority (87%) expressed high satisfaction with their experience of correspondence learning as it provided full time employment with study. Lack of personal contacts with instructors appears to lead to some uncertainties about course requirements.

Regarding marital status of correspondence course students, it was found that most of them were married and had children Meddleton (1965),^{14A} Schrarum (1967)¹⁵, Short (1967)¹⁶, Waniewics (1981)¹⁷, Glatter and Wedell (1971)¹⁸, McIntosh (1978)¹⁹, Rumble and Borden (1983)²⁰ and Peters (1965)²¹ revealed that the correspondence system attracted more urban based learners than the rural learners.

Glatter and Wedell (1971)²² in their studies related to employment and occupational background of correspondence course students revealed that 99 per cent of professional course students were employed where as only 69 per cent of students having employment in the case of general courses. Glatter and Wedell (1971)²³,

Mcintosh (1974)²⁴ found that the employed students were absorbed in several occupations like civil servants, industrial workers, library servant, teachers, medical and welfare servants, house wives, commerce and private sector oriented professionals clerical and office staff, administration and management personnels, shop-keepers, Armed forces personnels etc.,

The studies give different pictures about the academic background of correspondence learners. Mcintosh (1974)²⁵ found that one third of the first batch students of open university of U.K. entered without any formal education background and the rest from formal education background. Perry (1977)²⁶ found that during 1971 only 33 per cent students of the open university were fulfilling the minimum qualification requirements for entry into other British Universities. However, by the year 1975 the students percentage from such category had increased to 46.4 per cent.

2.2.5 NEEDS AND ASPIRATIONS OF LEARNERS

Perry (1977)²⁷ found that over five years period (1971-76) in the U.K. 64 per cent of the total population had known about the open university. From 1971-76 the percentage of men being aware of the open university increased from 33 per cent to 76 per cent and the percentage of women increased from 29

per cent to 58 per cent. Further in the stage of inception of the same institution, a sample survey of 3000 adults revealed that five per cent of the total respondents were very much interested in joining the open university courses and 0.9 per cent respondents stated definitely to be among first applicants.

Mcintosh (1978)²⁸ found that the motivation for improving of social status had promised many students to join the course. Sorgel (1966), Waniewics (1981)²⁹ found that the target group learners had the following reasons for joining the courses such as to improve upon academic qualifications to continue with higher education, use of leisure time to bring about personal development, to improve upon occupational efficiency, to be placed in higher jobs, and to bring about economic efficiency in terms of improvement of living condition. Waniewics analysed the motivational factors of students on the basis of age and sex. The study revealed that job related goals were the best motivating forces for most of young men 18 to 24 years and women of 25 to 44 years. The women of above 45 years age group stated that their joining was motivated by their hobbies, recreation and family concerns.

2.2.6 REASONS FOR THE CHOICE OF THE CORRESPONDENCE COURSE

There are few studies which identified the reasons for joining correspondence programme. Johnstone and Rivera (1965)³⁰

found that elder people were more likely than younger ones to prefer correspondence and the lower a person's socio economic status, the more likely he was to favour correspondence. About half of the correspondence course students surveyed in a Manchester project rated as important reasons for choosing a correspondence course, first that going to classes would be uneconomical of time for them and second, that the time available to study varied at different periods of the year.

A survey of (Aslaniam and Brickwell 1980)³¹ U.S. adult learners found that 83 per cent identified some past, present or future change in their lives as reasons to learn, only 17 per cent for the sake of learning itself, while for the overwhelming majority learning is utilization; people want some reward other than pleasure derived from learning. Career changes were noted by 46 per cent as their reasons for deciding to learn 13 per cent mentioned family concerns, 11 per cent identified problem related to their leisure patterns.

American and British studies indicate that correspondence students to a greater extent than other regular students have examinations and degrees as their aims. (Mathieson, 1971³²; Dohmen, 1976³³; Glatter and Wedell, 1971³⁴). The first reason for choosing correspondence study instead of other types was, that it was felt easier than unsupported self study systems to

plan and assess the progress made. The another reason was that it is easier to work at one's own pace and going to classes is "Uneconomical of time". Many preferred to study on their own to studying in a class with other people (Mcintosh, 1976³⁵; Glatter and Wedell, 1975³⁶). The younger students stressed with educational qualifications and jobs whereas reference to the general widening of knowledge increased with age. The reasons cited were convenience, adoptability, current and past lack of educational opportunity and the convenience of home based study in the case of house wives. Open university students seem to be goal oriented, for 75 per cent studied to qualify for promotion where as 13 per cent studied purely for academic interest (Holmberg, 1976³⁷).

In a study of European distance study institutions, Flinck (1979)³⁸ found that 55 per cent of the students were men, majority (68%) were between 21-40 years old, most of them aimed at attaining, competence for jobs whereas gaining social recognition had little to do with the study motive. The other reasons why students had chosen correspondence education were.

- The freedom offered to pace their study as they wanted to (83%)
- The support provided in planning the study and assessing progress (73%).

Ansere (1978)³⁹ reports that 'Occupational objectives weighted heaviest on the students' decisions to take up their studies. Within the occupational category career preparation was the most important, followed by career chance and advancement. Students continued learning in order to gain respect from peers and other members of society. The two dominant reasons for choosing a distance type were 'because correspondence study enables me to earn while studying; and because correspondence study enables me to study in my own time and at my own pace'.

2.2.7 DROP-OUTS

The problem of drop-out in correspondence education is universal. Peters (1965)⁴⁰ found that in West Germany 72 per cent dropped out. Sheath (1965)⁴¹ found that almost a third of students enrolled dropped out from the university of New England. Childs (1966)⁴² reported that the rate of drop out was 60 per cent in the U.S.A., Schrarnum (1967)⁴³ in his research identified that out of 15000 entrants to high school level correspondence courses in Japan 57 per cent dropped out by the fifth year. Bradt (1956)⁴⁴ and James and Wedemeyer (1959)⁴⁵ in their study revealed that very high percentage of dropouts failed to submit any assignments. Donohower (1968)⁴⁶, McIntosh (1968)⁴⁷ found that the distance from the place of residence of students to the

venue of the institutions, involvement in job and heavy work load were negatively related with course completion. The study also revealed that the percentage of women's completing the courses were higher than that of men.

2.2.8 CAUSES OF WASTAGE

James and Wademeyer (1959)⁴⁸ identified that lack of time was the major cause for non-completion of correspondence courses in Wisconsin University. The other factors identified for withdrawal from the correspondence courses were change in career, illness, death in the family etc., Sloan (1966)⁴⁹ in his survey of non completers in the University of Kentucky also found that lack of time was the single most important cause. Sheath (1965)⁵⁰ in his New England study also found that insufficient time for study as the most frequent cause 10 per cent of the reasons arose from weakness in the correspondence method.

Hughes (1955)⁵¹ studying the correspondence students of the university of Florida found that possession of clear vocational or academic objectives, previous experience of college level work, the need to complete work by a definite date and certain features of study techniques were significantly related to successful course completion.

Donohower (1967)⁵² studied the variables associated with correspondence study enrolment at University of Nevada and her findings confirm the importance of motivational level and good clarity in successful completion of courses through correspondence. James and Wedemeyer (1959)⁵³ found that the students' motivation and success in a course depended upon family attitudes and study conditions.

2.2.9 LEARNING STRATEGIES

Learning styles, learning strategies and learning orientations of the individual learner have 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)⁵⁴ explained why students fail to learn through distance education. According to these researchers, this was so because

- i. Students lacked necessary study skills;
- ii. Students have limited approaches;
- iii. Students choose their approaches to study and some students choose inappropriate and ineffective approach.
- iv. Students develop in their sophistication as learners, and some students are less developed than others.

Taylor, Gibbs and Morgan (1980)⁵⁵ 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. Academic orientation may be extrinsic and intrinsic. Extrinsic academic orientation means that the student is primarily interested in getting to the next step of the academic ladder while intrinsic academic orientation reflects the student's interest in the content of his study. Personal orientation has two sub-categories - compensation and broadening. Compensation means that the students wants to test his capacity. Broadening stands for student's goals of developing himself. Social orientation is largely intrinsic since the main reasons for studying is to have a "good-time" (socializing).

2.2.10 EVALUATION OF PROCESS VARIABLES

Once the learner is admitted, his relation with the distance learning centre is through;

- i. The curriculum that has been prescribed for the learner;
- ii. The different types of learning materials that have been prepared to disseminate instructions;
- iii. The different media which are made available to the learner for obtaining mastery over the learning materials;
- iv. The support services which the distance learning centres offer to the learners; and
- v. The system of evaluation and examinations which lead to certification respectively.

These sub-systems or components of distance education contribute towards success of the learner. The objectives underlying these components, quality of the components themselves and modalities through which these are offered to the learner-all play important roles in ensuring success in distance learning situation. Factors which are important in the process of distance learning 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/feed back (diagnostic and remedial) and guidance and support respectively.

Communication process in distance learning; The nature and degree of communication and interaction with the

organization, tutors and fellow students do significantly influence the quality of learning in distance learning situations from the point of view of learner. According to Baath (1980)⁵⁶, 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 submission. According to Baath and Mansson (1977)⁵⁷, the turn around time, i.e., the time elapsing between return happens to be a key variable in promoting two way interaction. They found that the interaction could be enhanced by continuous use of short questionnaire which becomes more specific as major difficulties are encountered by the students.

Beijer (1982)⁵⁸ experimented with audio cassettes in promoting interaction between the teacher and taught and found it to be much better by using this technique. Harris (1975)⁵⁹, found that the degree of interaction depended upon 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 Flink (1978)⁶⁰. Baath (1982)⁶¹ had reported that the degree of communication in distance learning systems can be greatly enhanced by using computers to analyse student responses and in student counselling.

2.2.11 EVALUATION OF INSTRUCTORS

Evaluation is a continuous process and it is the instructor who maintains the most personal and continuous contact with the learners for a feed-back that would contribute to programme improvement. A study revealed that the work of the 'correspondence tutor' was of crucial importance in enhancing students' motivation (Baath and Wangdhal, 1976)⁶². The instructors involved in correspondence education dialogue and discussion with more personal and supporting comments.

In a study of young adults' sources of inspiration for success in post secondary education in the United States, six out of ten students mentioned teachers have played a role in their success. Whether he interacts with students by mail, by phone, or in person the tutor is regarded as an important part of communication network in most distance education systems (Holmberg, 1975)⁶³ Glatter and Wedell (1971)⁶⁴ found that according to students, tutors were not good at identifying and explaining problems and often work with little personal interest.

Schrarnum (1967)⁶⁵ observes that the teacher is just a kind of stage manager for a number of learning activities such as radio and television programmes, films, programmed instructions, books, experiments, field trips etc. As the emphasis has

shifted from the teacher teaching to the student learning, the teacher's job is just to arrange a series of learning opportunities that will fit the individual students needs and capabilities and stimulate him to learn is the only way he can learn in his own way, at his own rate and by his own efforts. This is true in the case of the mature adult learners of correspondence education.

2.2.12 EVALUATION OF METHODS OF TEACHING

A few studies have been conducted to study the efficiency of certain methods of instruction over others. Kämpfer (1965)⁶⁶ conducted a study of the comparative effectiveness of self instructional methods of learning including programmed learning materials and the correspondence course techniques. It was found that the correspondence course students outscored the individualised instruction group but the difference between achievement scores was not significant. Willingham's (1971)⁶⁷ study aimed at studying comparative effectiveness of combination of different groups of methods viz.

- i. Students meeting tutors once in a week and taking correspondence study
- ii. Students meeting the instructors who used lecture cum discussion approaches three times a week
- iii. Students taking usual correspondence courses.

No significant difference could be marked in the achievement of students who under took these different methods of instruction.

Green (1967)⁶⁸ studied the effectiveness of correspondence study method by using Programmed Learning Materials, Television and Homeworks/assignments. The methods are found to be equally effective in comparison to conventional methods of teaching, as there did not exist any significant difference between the achievement scores of students undertaking studies through different methods. Mackenzie (1975)⁶⁹ observes two weaknesses of correspondence education, faulty concept of education and relatively naive conceptions of instruction as a technical process. The common purpose of the educating process is to facilitate learning by an individual and hence, how the learners learn, how to learn will be of primary concern. The effects of several methods has long been questioned and they need to be tested to determine the conditions under which they are most useful.

2.2.13 EVALUATION OF LESSON MATERIALS (LEARNING PACKAGES)

The acquisition of knowledge from text materials constitutes one of the major tasks of students at higher level of education. In correspondence courses the reliance on lesson materials as the primary mode of learning is even greater than in traditional educational programme. Learning in correspondence

education will thus depend to a large extent on how well the student can comprehend and retain from the text and their availability. But an equal burden falls on the lesson writers of correspondence courses since distinctive characteristics of a text quite apart from the complexity and content, greatly influence learning. This in turn, will have positive consequence for motivation. Comprehension of text is viewed as an active constructive process on the part of the correspondence learner. (Glatter and Wedell, 1971)⁷⁰ an overly explicit text is likely to provoke frustration.

Peters (1977)⁷¹ found printed lessons more useful than television and radio-teaching. A recent survey conducted by Holmberg (1985)⁷² reveals that out of 203 correspondence institute throughout the world, 138 institutes mainly depend on printed courses only. Correspondence lessons are basically a set of notes. They resemble the chapters of a book. But they are very different from a text book. According to Holmberg (1967)⁷³, "a text book gives all relevant facts and if it is a good text book it does so in a clear and logical way, but it does not teach which we must expect a correspondence lesson to do!" It guides and teaches by giving complete explanations with examples, by providing exercises of various kinds and by constantly referring to what the student has already learnt to master. Thus lessons should be so designed and prepared that they can teach the students the

method of approaching a subject or topic and help them to understand the given topic on their own. Lessons should stimulate and motivate them to learn further.

2.2.14 EVALUATION OF PERSONAL CONTACT PROGRAMME

The nature and scope of guidance and support services for the learners have been found to be important from the point of view of ensuring completion rates in distance education (Flinck, 1978)⁷⁴. Students support and guidance 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 respectively with each service having some unique advantages (Baath and Mansson, 1977⁷⁵; Flinck, 1978⁷⁶). However the success of these services depends to a large extent upon the involvement of the personnel associated with these services and upon the coverage and scope of support (Holmberg, 1981)⁷⁷.

Personal contact programmes are held mainly for the purpose of

- Practising Psycho-motor and verbal skills through personal communication;

- Facilitating the understandings of the communication process and human behaviour;
- Encouraging attitudes and habits of relevance for the study;
- Mutual inspiration and stimulation of fellow students;
- Training in co-operation.

One school of thinking finds personal contact programmes essential, another finds them necessary and even in some cases harmful. However, particularly in cases where course completion within a pre-determined period of time is a target, students using supplementary Personal Contact Programmes have often been found to be successful. Youth of school age on having correspondence education supplemented by oral course features. There is a tendency to set greater store on traditional correspondence education with increasing age (Beijer, 1972)⁷⁸. Evidence to the contrary as far as the age group are concerned has been reported by Wangahal, (1979)⁷⁹. Most distance systems use attractively presented self instructional packages. A great deal of time, effort and money is put into producing this package. A mass produced package of knowledge cannot be fitted to a student. Each adult student brings his own rigid frame of reference, what is required is a student based approach, which is inherently more difficult since students are infinitely valuable.

Hence mediation between mass produced unified package and the diverse students is required. Though the academic content of the course is common requirement for all students the interpretation of the course is even a variable that needs an individual approach requiring the mediation of a teacher (Sewart, 1981)⁸⁰.

The influence of supplementary face to face sessions on study success has further been studied by many (Lock Wood, 1979⁸¹; Miller, 1974⁸²; Smith, 1976⁸³) who testify to their effectiveness. General surveys of the problems and opportunities offered by combinations of distance study with Personal Contact Programmes are provided in Holmberg, (1976)⁸⁴ and Miller, (1974)⁸⁵. Wangdhal (1979)⁸⁶ reports that group contact can play a humanizing, motivating and instructional role in a distance learning systems.

2.2.15 EVALUATION OF STUDY CENTRES

In the Open University of United Kingdom, when a student commences his study he is assigned to a tutor-counsellor who is responsible for all tuition and counselling at one of the 260 local study centres in the United Kingdom. They will be available on a fairly regular basis of face to face contact and this contact will be extremely varied, ranging from strictly academic matters to the broader educational context. The contact

is also maintained by correspondence and telephone. It is this individualized and long standing relationship that breaks down the isolation of the home based student through the provision of sympathetic help in planning a beneficial work pattern in a highly complex system . Castro (1977)⁸⁷.

Study centre can offer facilities for laboratory instruction in addition to the provision of home experimental kits. Some centres house a terminal linked to a main frame computer. They can also provide a chance for student interaction ranging from academic study groups to purely social activities.

The richness and variety of the standard package allows students to study through a variety of media, such as counsellors, tutors, study centres, correspondence contacts, telephone contacts etc. A comprehensive analysis of the use of study centres and study centre net works, particularly in the Australian context has been made by Gough (1980)⁸⁸.

2.2.16 ACHIEVEMENT OF LEARNERS

The objective of an educational programme is basically to assist learners to acquire knowledge, understandings, skills and attitudes conducive to individual development and

the good of society. The assessment of the learning outcomes or achievements is regarded as a means of evaluating not only the standing of learners but also the instructional programme with a view to increasing its effectiveness.

One of the landmarks in evaluation practised and which remained for two decades as the most thorough and well documented account of a formative evaluation is the eight year study carried out under Tyler's direction (Smith and Tyler, 1952)⁸⁹. The means of appraising students' achievement and identifying weakness of the new learning programme were evaluated when achievements were not as expected, the instructional materials were assumed to be at fault and were modified. Feedback was thus in terms of achievement with a narrowed range of outcomes. This indicated how student's achievement could be used in modifying the programme. It became in fact, the classical evaluation strategy Pfeiffer, (1968)⁹⁰. Hence the researcher chose 'achievement' as the means of evaluating the correspondence system in order to increase its effectiveness.

Psychological factors also contribute to success in correspondence education. Among the different individual and background characteristics of learners in correspondence education, mention can be made of psychological factors like intelligence, abilities, level of motivation, reading and compre-

hension skills, degree of self confidence and self-direction, previous experience with distance education, aptitude for learning, cognitive and personality style. Lampikoski and Mantere (1978)¹¹ Baath (1979)⁹².

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 situations. [Glatter and Wedell (1971)⁹³, McIntosh (1976)⁹⁴ Ansere (1978)⁹⁵, Wangdhal (1979)⁹⁶, Flinck (1979)⁹⁷] Kanun (1968)⁹⁸ in his study conducted in Minnesota University revealed that the correspondence students grade points were higher than those of day scholars, evening course and summer students. However the studies conducted by Meddleton (1965)⁹⁹, Schrarum (1967)¹⁰⁰ revealed different results. i.e., the general correspondence students were often less able academically or less qualified than full time students.

Glatter and Wedell (1971)¹⁰¹ analysed the correspondence students academic background course wise. It was found that there was no difference between academic background of general and professional course students, summer and non summer students. Parson (1957)^{1½2} compared two groups, correspondence study group and a regular classroom group. These two groups were taught identical subjects. It was found that

performance of the correspondence course students was significantly better than the regular students. Childs (1964)¹⁰³ study also confirmed the same. Spencer (1964)¹⁰⁴ compared the grades of the students completing college credit through correspondence and by regular courses. It was found that the grades of the correspondence course students were better than the full time students at the Pennsylvania state university.

Kennelly (1962 - 65)¹⁰⁵ in his longitudinal study analysed the performance of the correspondence course students in their subsequent college career. They did better than the regular college population. Sheath (1967)¹⁰⁶ found that at the University of New England, Australia the over all pass rate in examination as well as merit passes of the internal and correspondence students were almost identical. The overall finding is that correspondence students perform as well or significantly better than the regular students.

Kaeley (1988)¹⁰⁷ compared the performance in Matriculation Mathematics course of face to face instructed students and distance study learners (DL) of the University of Papua, New Guinea (UPNG). The students joined preliminary year immediately after completing Grade 10 are abbreviated as SL and the students enrolled in preliminary year after remaining atleast one year away from studies abbreviated as NSL.

He considered three aspects of face to face and distance teaching modes. First, the performance in Mathematics of the three populations was described. Second, the matched pairs of NSLs and DLs achievement in Mathematics was compared. Third, the attrition rates of two modes of instruction were investigated. In the first instance the SLs and NSLs acquired higher mean scores both in achievement 1 and 2 than their DL counterparts. When the total populations were considered, the superior performance of the former population was largely due to their better academic background than the latter. When the background variables were controlled the matched pairs of DLs and NSLs samples did not show significant difference (at 0.05 level) in Mathematics performance. However the difference in the two categories of students re-appeared when the proportions of their drop outs were compared. There was considerably higher attrition rate among the DLs than that of NSLs.

He found that the superior performance and lower attrition rate of students in face to face instructing institutions than that of distance study set ups to be the result of their attracting better students. Ofcourse other factors can not be ruled out. This is so because the former are traditionally more acceptable as teaching institutions to the people than the latter. The performance of NSLs was better than that of DLs

when entire populations were considered. Such difference disappeared in the matched pairs. When proportions of drop-outs were compared, it again emerged. These difficulties seem to be due to the different background of the clientele of the two modes of teaching.

2.2.17 FEED-BACK IN CORRESPONDENCE EDUCATION

Another process, variables contributing to success in distance learning situations from the point of view of learner happens to be evaluation and feed-back (Rowntree, 1977)^{107 A}. Feedback is a term initially used in association with electronic or machine systems, to describe a self-regulatory device, such as thermostat in electronical heating system. It is now often used to describe " Knowledge of results, information received by the students on his performance or many kind of information about the effect of one's behaviour. It is the process of communication which provides information on how well a task has been performed or an objective has been achieved.

There has been a good deal of studies on the assignments and their importance in distance teaching system. Taylor (1969)¹⁰⁸ pointed out that students who submitted their assignments and were properly guided by the teachers did better in their examination than those who did not submit their

assignments. Kelly (1963)¹⁰⁹ found a direct relation between the drop out rate at the institute to the submission and evaluation of response sheet assignments. Glatter and Wedell (1971)¹¹⁰ found that students are discouraged if the teachers do not give guidance through the assignments. Some students felt that the teachers' comments do not explain faults clearly and they do not appear to take personal interest in the student's progress.

A good feedback must be immediate regular explanatory rather than judgemental, concise and clear written communication is the only feedback available to the distant learner. Success of the programme depends on prompt delivery and fast turn around of the assignments regularly submitted. Mitchell (1980)¹¹¹ has suggested that perhaps dead-lines should be set up on the institutions for the return of assignments. Examples of good pieces of work should be included with explanations of why they are good. Such practice provide yardsticks for learners of how they are performing relative to the rest of the group.

Opportunities should be provided to redeem themselves through resubmission of assignments. A non-assessable assignment for detailed comment could be sent early to allow the students to get the feel of the teacher's approach to the assignment (Mitchell, 1980)¹¹². Assignments sent should be

should be marked regularly with detailed comments and returned with minimum delay.

Local study centres, tutors, discussion groups and PCP provide scope for verbal feedback. Space on the assignments should be provided for the student and the teacher to write comments, which will enable both to engage in discussion about the assessment at a more personal level. Thus feedback is important in any teaching learning situation and it is all the more crucial in correspondence teaching. If feedback is "the life blood of learning" as Rountree (1977)¹¹³ puts it, its importance is definitely not reflected in the literature of distance education. From feedback the learner confirms, classifies and re-inforces his understanding. Good feedback corrects, redirects, motivates and encourages student. Similarly the feedback from the student to teacher enables him to diagnose learning problems and provide remediation, if necessary.

2.2.18 COMMUNICATION TECHNOLOGIES AND CORRESPONDENCE EDUCATION

The tremendous development of communication technology in recent years provided a wide choice to distant educators to integrate new media into the distance education teaching - learning processes. This led to a change of thinking among

distance educators and it was realized that even though the printed course material would continue to be the mainstay of the distance education system, integration of communication technology devices could greatly help in strengthening the teaching learning processes.

Wedemeyer (1963)¹¹⁴ says that "Institutions should make special efforts to make the correspondence education programme attractive by combining it with other media or formats as this approach will strengthen the correspondence programme. He states that technology has freed education from limitations of space, time and staff. These communication technologies have many and varied implications for correspondence education. Bates (1982)¹¹⁵ provides a fascinating review of the changing role of media. He records a clear trend away from broadcasting in distance education. Perraton (1982)¹¹⁶ finds this trend of going away from broadcastig disquieting and argues that the world's massive educational needs require recourse to the mass media and it is urgent for educators to broadcast more.

He hopes that radio will have a major educational role in the developing world. Bates (1982)¹¹⁷ concludes that audio-visual media are currently under exploited in distance learning systems partly because few of the staff of educational institutions have training in media, though the range of audio-

visual media suitable for distance education is rapidly increasing, such as video-discs, video and audio cassettes, telephones, videotex and computer. Shah (1982)¹¹⁸ argues that since radio and television are expensive and of questionable effectiveness, developing countries should stick to simple correspondence education. But Perraton (1982)¹¹⁹ reports on the successful use of radio in countries such as Tanzania and sees an important future for this medium in the developing world. Radio was first applied to education in the 1920's, and which continues to be in use, can be effective in instruction. The open university, in England and has drawn some conclusions about the pedagogical value of radio. It can pace student's through the instructional material of a course. It provides feed-back to the students. Students can carry out the corrections if any, in the printed material, Radio can also modify students' attitude by presenting materials in a novel way (Mackenzie, 1975)¹²⁰.

A project studied the use of radio in correspondence courses revealed that only 2 to 2.5 per cent of the respondents viewed the programmes successively from the first to the last. In terms of comprehension, 11.8% reported that the lecture was 'very well understood', 29.4% mostly understood and 35.8% understood a little (Sakamoto, 1981)¹²¹.

AUDIO CASSETTES : An obvious advantage of the audio cassettes over the radio programme is that they are under the control of the user, students can stop the player to take rest, make notes or can replay a difficult section. One more use of the cassettes, in the words of a student is: " I find the tapes very useful, in the particularly the discussion ones. It is definitely a 'contact' with the staff even though it is remote (Gough and McDonald, 1981)¹²² Massey University (New Zealand) tried using cassette tapes for tutorials in History. Groups of learners listened to a lecture on the tape. Then they would discuss the given questions and record the conclusions on tape. They send this tape to the University which sends its comments either again on tape or through mail (Gwynn, 1981).¹²³

Many students listened to tapes more than once, took notes and used them in preparation for assignments and for examination revision. Audio-cassettes integrated with correspondence material is a major area for development in distance education; they are cheap, easy to make and control, convenient for students and above all educationally effective (Durbridge, 1981)¹²⁴.

TELEVISION : Most of the countries now-a-days use television as an important medium for imparting education at different levels. Corey (1980)¹²⁵ described Japan as the

most successful country among those imparting education through television. He also added that Japan spends \$ 308 per year per student on television based education in comparison to \$ 540 per student for conventional school education. Chu and Schramm (1967)¹²⁶ showed that the students at all levels in almost every subject, learnt better through television than through traditional class room learning system. They also found that students favoured television for instruction at younger ages.

VIDEO-CASSETES AND VIDEO-DISCS : Television does not stop to answer question or adjust to individual differences. Broadcast distribution is not adequate for programme distribution since it forces the learner to adopt to a schedule that may have been drawn up thousand's of miles away. The viewer has no control over the speed of presentation. Some programme may require a second or even a third viewing for full comprehension which is impossible with broadcasting. Video-cassettes and Video-discs are superior in this respect from a pedagogical stand point. Group use of Video-cassettes in study centres enables students to draw out much more from the programmes than watching in isolation. Baath (1980)¹²⁷ observed that it is far cheaper to produce video-discs in mass quantities than to produce video-tapes.

COMPUTERS : Computer application for distance learning are Computer Assisted Instruction and Computer Managed Instruction (CMI) permits many pupils to interact on an individual basis with teaching materials stored in computer. Gilligan (1973)¹²⁸ used computer to teach 33 pupils of the first year biology class successfully, where as, an experimental investigation was conducted by Wood, Hartely, Lovell and others to use computer for special functions. Baath (1982)¹²⁹ describes how this application has been developed into a system of computer assisted tuition that is more popular than correction and comment by a tutor. Success with a similar system is reported by Beifer (1982)¹³⁰ has applied the same principle for counselling and guidance. A less controversial technology for interaction with students is the telephone. Its use also steadily expanding.

2.2.19 FINANCING OF DISTANCE EDUCATION

There are few studies which compare the cost-effectiveness of the programmes of distance education as also education under the conventional modes of teaching. Perraton (1981)¹³¹ discussing the educational uses of mass media studied the cost of multi-media courses using radio in a few countries of Africa. His findings are given in the table below:

| Project & Country | Year | Cost per enrollment in constant U.S. \$ 1978 | Educational level | Enrollment at the time of report | Comparison with cost of alternatives |
|---|------|--|-----------------------------|----------------------------------|---|
| Malawi Correspondence College | 1978 | 160 | Secondary | 2,800 | Cost per enrollment lower than school. Cost per graduate Higher than day school but lower than boarding school |
| South Korea Air Correspondence High School | 1977 | 64 | Secondary | 20,000 | Cost per enrollment and per graduate lower. |
| Kenya Dominican | 1977 | 322 | Secondary | 790 | Cost higher than alternative. |
| Republic Radio Santa Maria | 1975 | 5 | Primary/ Basic Adults | 20,000 | Cost of enrollment and per graduate lower than alternative. |

Perry (1976)¹³² came to the conclusion that, "however, one tries to make a comparison of the cost of educating a student in a conventional University and whatever basis are used for making those comparisons, one is forced to the conclusion that education through open university is relatively very cheap". According to a crude estimate reported by Perry was £ 2749 against a figure of £ 5250 per student in the comparable faculties of the conventional universities.

In another study, Wagner, Laidlow and Laylord, in their paper on the U.K. Open University assumed a consistency in the quality of graduates produced by the U.K. Open University and conventional U.K. Universities and on the basis of data available concluded that the Open University was cost efficient relative to conventional U.K. Universities.

Wagner (1973)¹³³ calculated the average recurring cost per equivalent undergraduat for the two types of universities. He took the total recurring cost divided it by the number of equivalent under graduates. The following table sums up the comparative cost estimates for the open and the conventional universities.

AVERAGE RECURRENT COSTS

| Recurrent Costs | Open Universities | Conventional Universities |
|--------------------------------|-------------------|---------------------------|
| Equivalent under graduates | 10,162,000 | 284,784,000 |
| Average Recurrent cost | ₡ 36,500 | ₡ 302,920 |
| Per equivalent under graduates | ₡ 287 | ₡ 940 |

In a similar study of costs at Costa Rican Universidad Estatal a Distancia, Rumble (1981)¹³⁴ showed that the average cost per year of U.S.\$ 795 (at 1980 price and exchange levels), compared very favourably with those found in two of the conventional campus based Universities, where they were 1301 (Universidad de costa Rica) and \$ 2,033 (Universidad Nacional). Muta (1985)¹³⁵ reported that the direct current expenditure (per student) of the University of Japan is 1/4, 1/3 and 2/3 of that of national universities, public universities and the day programme of private universities. Otsuka (1984)^{135A} reported that the direct current expenditure at the Radio and Television Universities in the peoples Republic of China is 2/3 that of full time students and 1/3 of part-time students.

Keegan (1985)¹³⁶ analysed the financial pattern of open universities (U.K.). The analysis of expenditure for 1983 revealed that 35% of total expenditure was for academic salaries and remuneration, about 44% for administration, operation and maintenance of estates, nearly 6% on course materials and 15% on television and radio. Its costs per student was £ 1,033. The fee charged from the students was £ 250. In other words, over 75% of the costs were borne by the state.

An analysis of expenditure of the Japanese University of the Air revealed that salaries and administrative expenses account for 43% of total expenditure, while the operating expenses and transmission costs account for nearly 49%. Miscellaneous expenditure account for about 8%. So far as income was concerned tuition fee and other income accounted for 12% of total income and the balance of 88 per cent received from State and the Society. Analysis of the pattern of funding by Spanish National Open University for Distance Education revealed that 35 per cent of the income was from the direct contribution of the Ministry of Education and Science and about 24 per cent from other agencies. Student fees, Sale of books and materials accounted for 41 per cent of total income. (Dutt, 1986)¹³⁷

2.03 RESEARCH IN INDIA

This section presents the review of researches conducted in the field of distance education in our country. The kind of flexible learning opportunity prevalent in India was in the form of external studies where the degrees were awarded on the basis of the performance of students at the examinations. There was no provision for instructional guidance and can be considered as similar to London external degree. Banaras Hindu University and Aligarh Muslim University are the old institutions which opened their courses in this way. Many Universities later emulated this and opened their doors for many people. However, none of these institutions offered any instructional guidance but the courses were open to all who had the minimum required qualifications without any kind of bar. Later, part-time facility on the campus during evening either daily or few days in a week was offered. The correspondence course system that gained popularity in other countries began to develop in India. An organised system of correspondence education has been established at the University level since 1962 in accordance with the U.G.C. guide lines. Development and the present status of correspondence education is given in detail in Chapter - 1.

First national seminar on Correspondence education jointly organised by the Indian University Association for Continuing Education and the University of Mysore in October 1972 at Mysore gave the following recommendations.¹³⁸

- i. There should be only one agency for correspondence education for any given level of University studies, in a region.
- ii. The Institutes must have a core staff of their own in each subject this category of staff as well as the other teachers must continue to be involved in active class-room teaching.
- iii. Some provisions should be made for giving assistance to students belonging to the schedule castes and scheduled tribes and other dis-advantaged sections of the community.
- iv. Post-graduate courses should be introduced only by the Universities which are well staffed and have over the years maintained and developed a tradition both of quality teaching and research.
- v. A close liaison between the University correspondence education agencies and All India Radio Stations should be developed for broadcasting programmes.
- vi. Wide network of study centres need to be established.

The conference of the Directors of Correspondence courses sponsored by the U.G.C. organised by the school of correspondence courses and continuing education, University of Delhi was held in Delhi on 10th, 11th and 12th October 1972.¹³⁹ Delegates have discussed the problems of individual institutions to general scope of correspondence education. Goel expressed the need of adopting essential features of correspondence courses from other countries which may prove useful in our conditions. Pandey emphasised the role of correspondence education in providing equality of opportunity in the field of education, the need for expanding its scope to inservice training and catering to the needs of certain other categories of people and vocations. Bakshigh Sing stressed the need for having a wide range of subject oriented, vocational and hobby course and inter-disciplinary courses with wider options. Dutt recommended greater facilities to the students to minimise their cost and also sought financial co-operation from U.G.C. and the Government. Ram discussed the role of radio as a support media for correspondence education and suggested how it could be made more useful.

National Seminar on Correspondence Education from October 4-6, 1976 was convened by Indian University Association for Continuing Education (IUACE) in collaboration with the Punjabi University, Patiala.¹⁴⁰ The Seminar adopted the following recommendations.

- i. Periodical reviews of correspondence course institutes and survey of the needs of the area should be carried out.
- ii. Correspondence courses should be broad based to include subject oriented, inter-disciplinary courses. Continuing education courses, in-service-training courses in different subjects, as also technical courses such as Engineering, Medical etc.,
- iii. Surplus funds of correspondence course institutes if any, should be used for development and stream lining of correspondence course and not diverted to general university funds.
- iv. The U.G.C and the Indian University Association for Continuing Education should request the Ministry of Information and Broadcasting to extend Radio/T.V. Programmes for Correspondence Course students. Efforts should be made to develop Common Programmes for students of different correspondence course institutes in social sciences etc. where there is so much common ground to be covered. In addition to the above, the seminar also gave certain recommendations related to the administrative aspects of institutes of correspondence courses.

2.3.1 RESEARCH ON CORRESPONDENCE EDUCATION

Bakshish Sing (1979)¹⁴¹ pointed out that one of the most important points which has been completely over looked so far in our country is the scientific evaluation and assessment of different aspects of correspondence education. Pandey (1973) covered the movement, expansion, subjects of studies offered, duration of studies, medium of instruction and teachers in his article on correspondence education. Sharada (1977) discussed the role of the teaching faculty in the existing correspondence education system covering the relationship with students and administration, teachers, academic personality, general problems of the teachers and the future outlook.

Manjit Singh (1976)¹⁴² stressed the need for studying the various aspects of correspondence education in depth and see how far the theoretical assumption behind this system have been fulfilled in practice, and how best we can improve upon the system so that it may be properly equipped to meet the changing needs of the society. Bushan and Sharma (1976)¹⁴³ developed a system of contact programme by analysing the system components and establishing the inter relationships of different components. They identified the following five

constituent elements.

- i. Planning at Directorate level.
- ii. Preparation of contact programme at the selected venue.
- iii. Execution of courses
- iv. Performance assessment and
- v. Winding up of contact programme.

Singh (1976)¹⁴⁴ reviewed the situation, clientele, patterns and radio-talks of correspondence education. He also advocated the autonomy in devising courses relevant to social needs, need for comprehensive survey to assess educational needs and for training and retraining correspondence course teachers. Balasubramanian (1976)¹⁴⁵ has reported the percentage of students who had successfully completed ranged from 39 per cent to 43 per cent from 1973 to 1976 and there was a decline in the dropout rate 45 per cent to 30 per cent.

Dutt (1977)¹⁴⁶ while explaining the role of the proposed open-university stressed the need for co-ordination and control of correspondence education. There were thirteen correspondence institutes in 1975-76 and they provided education to 72,490 students. A geographical distribution of correspondence courses revealed that there were states where not a single corres-

pondence institute has been started, and there were areas where quite a good number of institutes competing with each other for the same type of courses. He also observed that 72 per cent of the total enrolment in correspondence education was accounted for by four Universities, viz., Delhi, Madurai, Mysore and Punjab. He pointed out the lopsided development of correspondence education and several correspondence institutes were having a very low level of enrolment even after three years of their existence. He also analysed the trends of enrolment. The overall compound growth rate of enrolment in correspondence education was 85 per cent per annum during the five years period (1971-72 to 1975-76). However, the compound growth rate at the Post-graduate level was 13.1 per cent, at the Pre-university level it was 11.5 per cent and at the graduate level it was only 9.7 per cent per annum.

Singh (1976)¹⁴⁷ pointed out that, there is a great diversity in the functioning of various correspondence course institutes in India and as such there is an urgent need for a central co-ordinating body to ensure a planned development of correspondence course in accordance with our national policies and he also regretted that so far no serious attempt, had been made for finding out to what extent these courses have been successful.

2.3.2 STUDIES ON THE PROFILE OF DISTANT LEARNERS

Studies concerned with profile of distant learners are noted to the background variables like, age, sex, marital status, regional background, employment, occupation, social class and academic qualification. In this area a few sample surveys were conducted by Balasubramaniam (1976)¹⁴⁸ on CIEFL, Anand (1979)^{148A} on undergraduate students of Punjab University, Gomathi (1982)¹⁴⁹ and Pillai and Mohan (1983)¹⁵⁰ on the students from all the courses offered by the Madurai Kamaraj University. Dewal (1982)¹⁵¹ on the students of correspondence institutions at the secondary level. Sahoo (1985)¹⁵² on the students of Himachal Pradesh University. Regarding the reasons for joining the course Anand (1979)¹⁵³ revealed that the 98 per cent of the Pre University sample students of Punjab University joined the correspondence courses to improve their qualifications and the rest 2 per cent stated for their love for learning. The students stated that they preferred correspondence course because of the following reasons. Full time employment (43%), dropping out from the colleges for certain reasons (17%), non-availability of admissions in the regular college (14%) etc., 72 per cent of these students hoped to get better employment by undergoing higher studies and the rest 28 per cent hoped to pursue further studies.

Gomathi (1982)¹⁵⁴ in her research study of the participants evaluation of selected post-graduate courses of the correspondence education programme of the Madurai Kamaraj University found that the average age was 29.7 years. 75.2 per cent of the respondents were under 35 years of age, only 24.8 per cent were over 35. The average age for female was 29.6 years and the male mean was 29.8 years. 61 per cent of the students were males and 39 per cent were females. 54 per cent of the respondents were arts degree holders. Science and Commerce students were equally divided. 65 per cent of the correspondence students were employed mainly from white collar occupations. 45 per cent were teachers and 20 per cent from clerical category. 53.7 per cent of students were single and 46.3 per cent were married. Pillai and Mohan (1983)¹⁵⁵ stated more explicitly about the hopes of correspondence students of Madurai Kamaraj University, such as education (39%), social (18%), Psychological (17%), economic (16%) and occupational (9%). The indicators for these hopes were learners desire for

- i. Improving qualifications (26%)
- ii. Learning further (21%)
- iii. Getting financial benefits (11%)
- iv. Improving status (1.6%)
- v. Promoting career (6%)

- vi. Utilising leisure (5%)
- vii. Fulfilment of demands (5%)
- viii. Changing the occupations (5%)
- ix. Better job opportunities (4%)

The studies conducted on the background of learners of Punjab University, Madurai Kamaraj University, Himachal Pradesh University and CIEFL revealed that most of the students belonged to the age group of 20-30 (Anand, 1979)¹⁵⁶. Gomathi (1982)¹⁵⁷, Pillai and Mohan (1983)¹⁵⁸ found that the women students constituted around 40 per cent i.e. 36 per cent to 37 per cent (Pillai and Mohan, 1983)¹⁶⁰, 39 per cent (Gomathi, 1982)¹⁶¹ and 13 per cent women (Sahoo 1985)¹⁶². The SC and ST students' population was less than 10 per cent (Anand, 1979)¹⁶³, Pillai and Mohan, (1983)¹⁶⁴ and only 2 per cent (Sahoo 1985)¹⁶⁵, the ratio of married students to unmarried one was 1:3 (Anand 1979)¹⁶⁶; 5:5 (Gomathi, 1982)¹⁶⁷; 65 per cent students were employed (Pillai and Mohan, 1983)¹⁶⁸ and belonged to different vocations like teachers (27 %), administrative staff (11%), house wives (7%), self-employed (6%), bank employees (3%), business (2%) other educational services (2%), Army (2%) and employed in private undertakings (3%).

Dewal (1982)¹⁶⁹ found that there were more females registered in Delhi (25%) and the least in Rajasthan (2.2%). The percentage of SC & ST registrants was very low. Infact, there was no female ST students in Delhi and no SC or ST female registrants in Rajasthan. Most students in the three institutions Delhi, Bhopal and Ajmeer were in the age range of 18 to 21 years.

At secondary stage, Singh (1980)¹⁷⁰ and (1983)¹⁷¹ found that learners preferred correspondence course to regular schooling because of employment status of learners; involvement in household activities; non-availability of facility for schooling; and failures/or dropping out of regular courses. Studies conducted on University level students (Sahoo, 1985 and Muley et. al 1986) revealed that very large number of correspondence students decided to join the courses on their own.

Sahoo (1985)¹⁷² found that the employed students at the course completion stage was 74 per cent. The course wise position of employed students at course completion stage was M.Ed., 98 per cent, M.Com., 63 per cent, M.A. 52 per cent, B.A. 56 per cent and P.U.C. 52 per cent. Due to higher rate of drop-outs among employed students a variation might have been marked in employment and unemployment ratios of total students at entrance stage 79:21 and of students at course

completion stage 74:26. He also identified the different kinds of student Government employment (62%), semi-government employment (23%), private employment (11%) and self-employment (4%)

2.3.3 STUDIES ON DROPOUTS

Dropout rate has been studied by many researchers. The rates of dropouts in distance education have been studied by Balasubramaniam (1976)¹⁷³ as 57 to 66 per cent and by Koul (1982)¹⁷⁴ as 63 per cent. At B.A. courses in Delhi, Punjab, Panjabi, Bombay, Sri Venkateswara, Madurai, Meerut and dropout rate ranged between 8 per cent and 25 per cent. (Yadav and Sharma, 1988)¹⁷⁵ Sahoo (1985)¹⁷⁶ found that during the first semester 50 to 75 per cent of total dropouts of PG courses discontinued their studies. Koul (1982)¹⁷⁷ found that 43 per cent of total dropouts discontinued their studies at the very outset, at zero lesson level. The dropout rate of distance education institution was found higher than that regular courses (Gupta, 1986)¹⁷⁸.

Mostly the dropouts belonged to upper age groups with larger gap of time between their last qualifying examinations and admissions to present courses, poorer academic family background, rural areas and employed ones (Sahoo, 1985)¹⁷⁹. In the case of dropouts men's ratio was higher than that of women,

(Koul, 1982¹⁸⁰ and Sahoo, 1985¹⁸¹). The main reasons for the dropouts were: Responsibility of home and place of work; lack of availability of time to pursue studies non attendance of contact programme; lack of proper teacher student interactions; non-availability of reference materials; submission of required number of assignments and difficulties in studying the lesson scripts. (Koul, 1982¹⁸² and Sahoo, 1985¹⁸³). Non payment of semester fees was also a main reason for discontinuing the studies (Balasubramaniam, 1976)¹⁸⁴. While Koul (1982)¹⁸⁵ found that in CIEFL 20 per cent dropouts aspire to continue with their studies again. Sixty nine per cent dropouts of the Himachal Pradesh University were interested to rejoin the correspondence courses provided certain improvement were brought about in the system. The dropouts needed improvements in managerial, instructional and evaluation system of distance education (Koul, 1982¹⁸⁶ and Sahoo, 1985¹⁸⁷).

2.3.4 EVALUATION OF INSTRUCTIONAL PROCESSES

Most of the studies conducted so far in Indian on correspondence education have focussed attention on description of correspondence system of instruction, reaction of students and teachers, comparison of achievement etc., The following are the studies coming under this category. Shashi (1972)¹⁸⁸

on University of Delhi, Bushan and Sharma (1976)¹⁸⁹ on PCP of Himachal Pradesh University, Dutt (1976)¹⁹⁰ on seven different Universities of India, Anand (1979)¹⁹¹ on Panjab University, Biswal (1979)¹⁹² on all the directorates of 24 Universities of India, Mathur (1979)¹⁹³ on Punjab University, Punjab (1980)¹⁹⁴, Pandey (1980)¹⁹⁵ on seven Universities of India, Gomathi (1982)¹⁹⁶ and Pillai and Mohan (1983)¹⁹⁷ on Madurai Kamaraj University, Vydehi (1984)¹⁹⁸ on S.V. University and Sarwal (1984)¹⁹⁹ on CIEFL. Bhardwaj (1985)²⁰⁰ on the effectiveness of AIR, Muley (1986)²⁰¹ on all correspondence courses in Indian Universities, Saraswathy (1986)²⁰² on the status of correspondence courses in India, Sahoo (1985)²⁰³ on Himachal Pradesh University, Khan (1986)²⁰⁴ on teaching of English through correspondence and a Chib (1988)²⁰⁵ on the postal library service to distance learners. The findings of the above mentioned studies are given below under various headings such as instructors, packages, PCPs etc.,

2.3.5 EVALUATION OF INSTRUCTORS

Biswal (1979)²⁰⁶ surveyed the academic staff pattern of all the 24 universities and found that the pattern remained more or less similar in all universities where as differences were marked with regard to administrative staff pattern.

He also focused the problems faced by the heads of the institutions and teachers. His study revealed that, - identification of experts to write the lessons, selection of appropriate number of teachers for evaluation of assignments, a delay in receiving the assignments from students and evaluation of assignments, lack of co-ordination between directorates and regular teaching departments of the University; In-sufficient time provided for writing lessons, excess number of assignments given for correction and limited time provided for completing specified courses during PCP were the problems for most of the teachers of all the directorates.

The teachers of correspondence education should be given training in formulating proper questions, evaluating, writing radio-talks, and presenting the important information in a condensed form while lecturing. (Pillai and Mohan 1985)²⁰⁷ Sahoo (1985)²⁰⁸ studied the professional positions of teachers and their involvement in instruction at different levels. The study revealed that almost all senior rank teachers who were involved in teaching programmes of Directorate of Correspondence Course belonged to outside organisations. The instructional facilities of Directorate of Correspondence Course was not at par with the positions of teaching staff of the teaching departments of the university. He also found that the seven per

cent of the correspondence course staff intend to leave their positions and join in the formal departments. The teachers highlighted that their joining in formal departments would help them in improvement of research activities (100%) being in touch with changes taking place in own discipline (60%), getting better chances for further promotion (30%) and saving time and energy that were spent for claiming rights and privileges from authorities (10%). Gomathy (1982)^{208A} found that the instructors contribute to the achievement of learners. There was significant relationship between the participants assessment of Instructors' and 'achievement'.

None of the teachers were formally trained in performing instructional activities of distance education most of the internal faculty members of correspondence institutions had expressed willingness to undergo such training courses (Khan, 1982²⁰⁹; Sahoo, 1985²¹⁰; and Koul, 1982²¹¹). The teachers of correspondence courses did not get equal status at par with university teachers to most of the universities. Their representation in different academic bodies have been neglected to a large extent (Muley, 1986)²¹².

2.3.6 EVALUATION OF LESSON MATERIALS (LEARNING PACKAGES)

Correspondence education is based on the supply of instructional materials (lesson) for home study. Regarding the usefulness of these materials it was found that in all cases most of the students appreciated them (Anand, 1979²¹³ ; Biswal, 1979²¹⁴ ; Gomathi, 1982²¹⁵; Pillai and Mohan 1983²¹⁶). Majority of students and dropouts reacted about their difficulties in study of lesson scripts. A large number of students (41%) of six universities found crowded schedules in the lessons and faced difficulties in studying all the lessons. Moreover, irregular despatch system of lessons created problems for students (Singh, 1980²²¹ and 1983²¹⁸, Dewal, 1982²¹⁹; Koul, 1982²²⁰; Khan, 1982²²¹; Sahoo, 1985²²², and Muley et al 1986²²³). The chief medium of instruction in correspondence education is the 'Printed Word' in the form of lesson scripts, especially in our country where other technological medium such as Television, Audio and Video Cassettes Computers are not still very popular. Eighty one per cent of respondents have found the 'lesson scripts' as the most useful component and 15.5 per cent useful. Thus 97 per cent reported that of all the components of lesson scripts were most useful. (Pillai and Mohan 1983²²⁴). Gomathi (1982)²²⁵ found that the lesson units of Madurai Kamaraj University need to be improved. 40 per cent of the students felt

that the syllabus should be reduced. 78 per cent wanted the lesson units to be sent in a serial order to enable them to come prepared for a discussion during the seminar. 48 per cent desired for a model answer to be included in lesson units, while 52 per cent found the language was difficult to understand and full of spelling mistakes. She also found that there was no relationship between the participant's assessment of lesson units and achievement.

Sahoo (1985)²²⁶ studied the usefulness of study materials (lessons), student's difficulties with lesson scripts, teachers opinion on the quality of lesson scripts, system of despatching lessons, and the production aspects of correspondence texts of Himachal Pradesh University. The utilities of lesson scripts perceived by the students were, getting comprehensive ideas about the subjects (54%) getting broad outline of what was to be studied (4%) and helping students in quick preparation for examination (48%). Sixty six per cent of students found difficulties in studying with lesson scripts. Reasons for such difficulties were given as; lack of explanations with examples (42%); definitions and terms in the lessons were not adequately clarified (40%), too many printing mistakes (38%), no clarity in presentation of charts and graphs etc. 45 per cent to 70 per cent of teachers stated that lesson were adequate to some

extent in terms of their introduction, content coverage, up dated nature, systematic presentation of the content and clarification of concepts. While reacting to the present form of despatch of lessons 39 per cent students found it most useful and 55 per cent students perceived its usefulness to some extent. Teachers were asked to react to the factors related to the production of lessons. Factors like lack of time, appropriate guidelines and orientation for production of materials, academic incentives, payments of remuneration affected the activities of producers of correspondence materials adversely. Vydehi (1984)²²⁷ evolved an alternative "student active instructional format" and devised the new type of distance teaching materials such as "access devices" for Part-I English at I year degree level used by Sri Venkateswara University. She also tried out the newly prepared distance teaching materials. The assessment of the relative effectiveness of both the old-type and new-type distance teaching materials indicated that the performance of the subjects who worked on the new type distance teaching materials was better than that of the subjects who worked on old type distance teaching materials. Khan (1982)²²⁸ analysed about 46 lessons in English written for under graduate distant learners prepared by six major correspondence institutes of the country covering prose, poetry, drama, shortstory, comprehension. This analysis revealed that almost all institutes

follow a set pattern like

- a. Introduction of the authors and his life,
- b. Summary,
- c. Study notes; hints and guide lines to difficult words and expressions,
- d. Model questions and answers, and
- e. Questions for response sheet/assignments.

At no stage in any lesson was the interest of the students aroused to motivate them. He also prepared a model lesson incorporating the required features.

2.3.7 EVALUATION OF PERSONAL CONTACT PROGRAMME

Dutt (1976)²²⁹ and Biswal (1979)²³⁰ found that all the institutes of correspondence courses had provision of PCPs for all the courses. Anand (1979)²³¹ analysed the PCP attendance of Panjab University from each zone around 40 per cent of Pre-university sent their consent to attend the PCP and around 18 per cent students turned up on the first day of registration. However, the attendance gradually decreased over 10 days duration of PCP i.e. only 40% of the registered students or first day remained present till the 10th day. In all the cases (Anand, 1979²³², Biswal, 1979²³³, Mathur, 1979²³⁴ Pillai and Mohan 1983²³⁵, Muley, 1986²³⁶, Gomathi, 1982²³⁷

most of the students had expressed positive reaction towards the usefulness of PCP. Mathur's (1979)²³⁸ study had identified such usefulness in the following ways.

- To help in the preparation for examination
- To cover important and major topics of the syllabus
- To have deeper understanding over the subjects and
- Solving other academic problems. These usefulness coincide with the reasons for which the students attended PCP.

There are few studies which analysed the opinion of students regarding PCP. Bushan and Sharma (1976)²³⁹ found that the M.Ed., students of Himachal Pradesh University welcomed the compulsion in attendance of PCP. Anand (1979)²⁴⁰ and Mathur (1979)²⁴¹ found that the students of Panjab University was not in favour PCPs. Regarding attendance most of the Panjab University students opined for organisation of PCP twice in a session with seven days duration each whereas in Himachal Pradesh University most of the M.Ed., students opined for fifteen days duration of PCP in each semester (Bushan and Sharma, 1976)²⁴². Other common results as reflected by the above studies of PCP were that; most of the students preferred coverage of all the topics in gist during the PCP while giving importance to difficult topics, lectures should be followed by discussion; correspondence institute should arrange boarding and lodging for the students;

library facility be made available during PCP; experts in various field should be invited to deliver lectures in PCP. Gomathi (1982)²⁴³ found the relationship between 'contact seminar' and the achievement was significant. At school level distance education programme Singh (1983)²⁴⁴ found that only 5 per cent students attended PCP throughout and 5 per cent students attended partially. However, Dewal (1982)²⁴⁵ found that in three distance education institutions at school level 50 per cent students attended PCPs.

Sahoo, (1985)²⁴⁶ studied the various aspects of PCPs such as venue, attendance, duration, organisation of instruction during PCPs, library/study facilities, organisational problems and other activities related to PCP. The study revealed that the Directorate of Correspondence Course has been organising PCP Centres in various regions of Himachal Pradesh, other neighbouring states and in some Southern Indian States. 68 per cent of non-attendants of PCP could not attend because of magnitude of the distance between students' places of residence and PCP centres. The size of the attendance in voluntary attendance courses was lower (33%) than that of compulsory attendance course in each centre (80%).

Khan (1982)²⁴⁷ found that 85 per cent agreed that contact programme classes are essential to understand lesson

in English, whereas nine per cent did not think so. Students who attended PCP said that they did so because of the reasons such as clarifying the doubts; chance to meet the teacher in person and chance to meet other classmates.

2.3.8 EVALUATION OF ASSIGNMENTS

Two way communication between the learner and the centre/tutor is mainly based on the assignments and response sheets. Anand (1979)²⁴⁸ and Sharma (1973)²⁴⁹ found the turn around time i.e., the time elapsing between student's despatch of assignments, completion and return happens to be a key variable in promoting two-way interaction. The lesser the time, greater the interaction. Through continuous evaluation and feedback during the course it becomes possible to diagnose the difficulties faced by the learner. Prognostic or remedial measures and guidance subsequently follow. Gupta, (1981)²⁵⁰ Dutt (1976)²⁵¹ analysed the rate of submission of assignments of Delhi University during 1974-75 and found that 45.37 per cent students submitted atleast 3 assignments per head and nearly 55 per cent students did not submit a single assignment. In the case of Himachal Pradesh University and Kashmir University assignment system had been found to be useful by most of the students (Biswal 1979²⁵²). Where as in the case of Madurai

Kamaraj University less than 40 per cent of the respondents found the assignments and response sheets as contributing to the success of the programme, 26.88 per cent and 29.96 per cent respondents and 38.92 per cent and 38.99 per cent respondents considered assignments and response sheets as more useful and useful respectively (Pillai and Mohan, 1983)²⁵³.

Gomathi (1982)²⁵⁴ found that there was no significant relationship between response sheets and achievement when all the participants were taken, and it was significant in the case of females. Kumar et al (1986)²⁵⁵ revealed that most of the correspondence students of Regional Colleges of Education were not appreciative of the procedure followed in evaluating assignments. Distance education institutions did not make serious efforts to clarify students doubts (Dewal, 1982²⁵⁶; Nagaraja, 1982²⁵⁷; Sahoo, 1985²⁵⁸). Sahoo (1985)²⁵⁹ found that the checked assignments did not reach the students in time. Only eighteen per cent students in total and only three per cent in B.A. got back their responses sheets in evaluated form with in reasonable time. (One month of submission). Around 32 per cent of students got them back with in two months and 45 per cent of students got them back just before the examination. It is interesting to note that 1-9 per cent Post-graduate students and 33 per cent B.A. students got them back after the

examinations of their respective courses were over. If the assignments are properly valued and commented upon, the number of dropouts from the institute could be reduced. Khan (1982)²⁶⁰ found a direct relationship between the non-return of assignment and dropouts from the institutes.

2.3.9 EVALUATION OF STUDY CENTRES AND LIBRARY FACILITIES

Only very few studies have been conducted in connection with the study centres. Gomathi (1982)²⁶¹ found the relationship between 'study centres' and achievement was significant among the urban population and it was not significant among the rural residents. Pillai and Mohan (1983)²⁶² studied the usefulness of various components of correspondence education. They found that only 5.95 per cent and 14.28 per cent students rated study centres as more useful and useful respectively. Study centres do not help the students as 80 per cent have rated them as least useful. As there were only two study centres, one at Palayamkottai and another at Nagarcoil. Students from other areas were not able to avail of this facility. Provision of adequate libraries, book-banks, despatch of reference materials were found in negligible condition (Sahoo, 1985²⁶³; Balasubramaniam, 1986²⁶⁴; Muley et al 1986²⁶⁵). Chib (1988)²⁶⁶ analysed the usefulness of Postal Library Service (PLS). The

Directorate of Panjab University after a decade of its existence started a Postal Library Service (PLS). In the year 1984-85 only 468 out of 5587 students i.e., 8.41 per cent of relevant students availed themselves of the service. For the years 1985-86 and 1986-87 this percentage increases to 11.33 per cent and 14.90 per cent respectively. At the graduate courses the PLS has been popular among B.Com., students. Within three years, the percentage of B.Com., learners using PLS has more than doubled. In the case of Master's degree students the percentage of PLS users has gone up from 14.09 per cent (1984-85) to 22.6 per cent (1985-86) and 30.41 per cent (1986-87).

2.3.10 EDUCATIONAL TECHNOLOGY AND CORRESPONDENCE

EDUCATION

In general there were little supplement of Radio broadcast programmes. Only six universities are having radio-talks as one of the support systems. Cassettes have been used to correct pronunciation and delivery in the teaching of languages (Muley, et al 1986)²⁸⁷. Nagaraju (1982)²⁶⁸ witnessed usefulness of radio programmes in inservice teacher training programme of Kerala States. However he found that all the trainees did not listen to all the radio programmes of the training course. In the case of one study on PLM (Mallick, 1964)²⁶⁹ the effec-

tiveness of PLM was identified as best materials of instruction in distance education system. Vydehi (1984)²⁷⁰ had evaluated the presentation of first year degree general English course of Sri Venkateswara University with regard to satisfaction of students needs, attainment of objectives of course, and nature of the instructional process and evaluation procedures adopted. Analysis aims of English teaching, methods of instruction, reaction of students and teachers and observation of PCP were done to locate weaknesses of the present structure of curriculum. An alternative students active instructional format and a new type of distance teaching materials were prepared. A comparison of student taking conventional approach and modified approach revealed results in favour of the modified approach. A similar kind of study was undertaken by Sarwal (1984)²⁷¹ for preparation of teacher training correspondence course units for English language teaching in CIEFL. Koul (1988)²⁷² had reported about development of special training programmes for distance education teachers in CIEFL, Hyderabad. It was found that 15 weeks programmes were effective than 4 weeks programme with regard to degree of comprehension, degree of interest and degree of understanding of students.

2.3.11 ACHIEVEMENT OF LEARNERS

The studies which are related to the achievement of correspondence course students reflected divergent facts regarding the strength of correspondence instruction in comparison with formal system of instruction in India. Sashi (1972)²⁷³ found that there was no significant difference between the achievement of undergraduate students of correspondence and regular streams of Delhi. Pandey (1980)²⁷⁴ also found no significant difference between the achievement of learners belong to the two systems. Anand (1979)²⁷⁵ found that in the Panjab University the Pass percentage of correspondence students were lower than that of overall university level with regard to pre-university and B.A. I year courses whereas the facts were reverse with regard to B.A. II and B.A. III year courses. The second class holders percentages were higher in the cases of pre-university, B.A., I and B.A., III year courses of correspondence streams.

Biswal (1979)²⁷⁶ found in certain universities like the Panjab University, Rajasthan University, Madurai Kamaraj University the differences in pass percentage was completely in favour of formal education. But in the Regional Colleges of Education Ajmeer, Bhubaneswar, Bhopal University and Sri Venkateswara University the pass percentages was in favour

of correspondence education. Pandey (1980)²⁷⁷ found that at over all course levels in Meerut, Delhi, Panjab, Punjabi, Bombay, Sri Venkateswara and Madurai Kamaraj Universities, the pass percentage of correspondence streams were higher than those of regular streams. Further, it was found that the proportion of third division holders was higher in correspondence stream than that of regular stream. Comparatively the regular streams produced more graduates with first and second divisions.

Sahoo (1985)²⁷⁸ found that correspondence system performed poorly as compared with the regular stream with regard to the achievement of students. The total pass percentages for different regular post-graduate courses varied from 53.22 to 78.81, the total pass percentages for different post-graduate correspondence courses varied from 20.48 to 49.59. The year wise analysis also proved that the (For the years 1971-81) pass percentages for all regular post graduate courses were higher than those of correspondence post graduate courses. He also found in all first, second and third divisions the performance of regular students were comparatively better than those of correspondence students.

The achievement of a random sample of 125 students of correspondence course and 250 students belonging regular course was compared. It was found that, in the University examination

where all the students take the same examination and valuation is done after coding the answer books to maintain anonymity of the candidates, students belonging to correspondence course fared significantly better than those belonging to private colleges in five of the seven subjects. Correspondence course students scored significantly better than those belonging to government colleges in two subjects. Students of correspondence course scored better than students of Government colleges in Philosophical and Sociological Foundations of Education and Telugu. (Paper I - "Mean 48.38, G.C. Mean 44.91, S.D. CC 8.94 S.D. G.C. 8.89. Level of significance 3.08 at .01 level; Telugu Mean CC. 49.80, G.C. Mean 42.72, S.D.C.C. 12.04 S.D.G.C. 7.83 t-3.53"). Students of correspondence course scored significantly less than those of Government Colleges in English. In practical work also students of correspondence course performed better than those belonging to Government and Private Colleges. (Venkata Rami Reddy 1986)²⁷⁹

Gupta (1985)²⁸⁰ compared the achievements of correspondence and regular streams. The comparative position of standards reveals sad state of affairs. The pass percentage of the students of correspondence education was found lower than the students of colleges and departments. On the contrary the drop-out percentage of the students of correspondence education was found higher than the students of college and departments.

2.3.12 FINANCING OF DISTANCE EDUCATION

In the context of management of correspondence educational institutions, "Finance" has been identified as one of the major components. There are few studies which deal with the financing of distance education. The institutional costs incurred per student of correspondence education have been very cheaper than that of the regular system of higher education (Biswal, 1979²⁸¹; and Pandey, 1980²⁸²). Dutt (1978)²⁸³ compared average fee per student and average expenditure per student in Rajasthan, Himachal Pradesh, Panjab and Delhi Universities. The study revealed that only in the case of Delhi University the expenditure per student was higher than the fee charged per student. He compared the fee and expenditure per student. Fee per student was Rs.215.8 in 1973-74, rose to 228 in 1975-76 and has come down to Rs.209.4 in 1976-77. As against it, expenditure per student enrolled has gone up from Rs.192.4 in 1973-74 to Rs.326.9 in 1976-77. Whereas in Rajasthan University average fee per student was Rs.410.2 and average expenditure per student Rs.213.8. The average fee per student was Rs.398.5 and expenditure per student was Rs.260.3 in the Himachal Pradesh and in Chandigarh average fee per student was Rs.236.9 and expenditure per student was Rs.316.1. The major areas of expenditure in all the universities had been salary of teaching and non-teaching

staff; expenditure on preparation of learning materials; payment for PCP and library.

While commenting upon the less expensive nature of correspondence course and the nature of courses provided at present Gupta (1978)²⁸⁴ had apprehended the cheap education through correspondence only widens the economic inequality in India. Pandey (1980)²⁸⁵ found that the Unit costs of correspondence courses were very much lower than those of regular courses. His study also revealed that,

- There was significant difference between two streams with regard to recurring income, correspondence courses supported themselves without government subsidy and mostly depended on student's contribution. However with regard to non-recurring income no difference was marked between two streams. On total income, there existed difference between two streams;
- The differences in recurring and non-recurring expenditure of regular and correspondence education were not different although their heads of expenditure were not similar;
- Significant difference existed between per student expenditure as direct cost, indirect cost and total cost enrolled and appeared level, whereas no significant difference was marked with regard to direct cost per

student for pass level. However, there existed difference between the per student expenditure on indirect cost and total cost at pass level;

- There was no difference in terms of wastage cost per student at direct, indirect and total levels of two streams.
- The direct cost per student (failure) was not significant, but indirect cost and total cost per student (failure) were significant between two streams, and
- At all enrolled, appeared, passed and graduation level, the correspondence education was found to be more economical, as the total cost benefit per student was Rs.2823.14 at under graduate stage for the year 1978.

Sahoo (1985)²⁸⁶ found that the major portion of the Directorate of Correspondence Course's income has been provided by the student's contribution. The private cost analysis of students reflected that the expenditure for correspondence education came to be very much lower than that of regular courses. Analysis of per capita student expenditure reveals that rate of growth of enrollment has not equally affected all aspects of expenditure, with regard to expenditure on administrative personal aspects, the per capita expenditure went up during 1979-80 to Rs.100.96 from 93.53 during 1978-79. The per-capita academic

expenditure of Rs.240.20 during 1978-79 was reduced to Rs.221.77 during 1979-80. The instruction related expenditure of regular post-graduates students was higher than that of correspondence course students.

Dutt (1980)²⁸⁷ in his study, cost and efficiency of the different techniques of education in Delhi University compared the financing of the different systems. The study revealed an inequitable system under which the under privileged students pay a larger proportion of the cost of the programme as tuition fees than the privileged students (Full time students). The subsidy was 24 per cent to 30 per cent of total cost of the correspondence system whereas it was as high as 77 per cent to 85 per cent of total cost of formal system of education.

Dutt (1986)²⁸⁸ found that the correlation co-efficient between enrollment and Unit costs of distance education was negative though not significant (0.26) for 17 Units. It implies that besides enrolment, a number of other factors such as staff-student ratio, number of course under preparation and operation, the extent of development of student support services are the other powerful factors influencing costs. A comparative study of unit costs in the school of correspondence courses and colleges affiliated to Delhi University revealed that Unit cost in regular college was Rs.3,516 and the average fee charged was Rs.257. The element

of state subsidy was of the order of Rs.3,260. As against it the unit cost in school of correspondence course was Rs.522 and the average fee income was Rs.259.

An analysis of Andhra Pradesh Open University finance reveals that the University received recurrent grant of Rs.50 lakhs for 3 years (1983-84 to 85-86) and a non-recurring grant of Rs.107 lakhs during 1984-86. The grant was totally inadequate keeping in view of the fact that the University provides distance education facilities to nearly 23,000 students. U.G.C. has not provided any capital grant to APOU, since state grants are inadequate much of the burden is being transferred to the students in the form of higher tuition and other fees a situation which militates against our concept of equality of opportunity (Dutt, 1986)²⁸⁹.

Agarwal (1986)²⁹⁰ compared the Unit cost of Entrepreneurial Development Training Programmes (EDTPs) conducted by Small Industry Service Institute (SISI), Karnal through regular class room lectures and a All India Manufacturer's organisation (AIMO), New Delhi providing 'EDTP' through correspondence course. The study revealed that the unit cost of AIMO New Delhi. (Correspondence) has been higher by 39 per cent than that of SISI Karnal (regular). This seems to have been due to a higher unit personal cost in AIMO New Delhi than that of SISI Karnal.

2.04 RATIONALE FOR THE STUDY

The importance and popularity of Distance Education in India demands a considerable amount of analytical work through research studies so that the weakness of the system could be suitably corrected and the system may be made more effective and credible. The research studies conducted so far and discussed in the chapter under various headings focused on any one of the following areas or a cluster of them.

1. Growth of the System: Policies, course structure, levels and nature of courses, enrolment and organisation.
2. Learners : their profile, assessment of needs, reasons for joining the course, reasons for joining in the correspondence system, their background and characteristics, their attitudes towards the system.
3. Dropouts : rate of dropouts, reasons for dropping out, characteristics of drop-outs.
4. Industrial Process : teachers, their nature of work, course development, production, lesson materials, assignments, response sheet, personal contact programmes, study centres, library facilities instructional management.

5. Out-put : analysis of academic achievement comparison of achievement of students of correspondence course and formal systems, impact of correspondence education.
6. Costs : institutional costs, private costs, opportunity costs, unit costs, cost comparison, cost-benefit analysis, financial management of institutions.

The studies mentioned in the above areas can also be brought under four major categories based on the institutes/Directorates of correspondence courses and aspects taken for their studies.

1. Studies related to a particular aspect of the distance education of any are university such as lessons, PCP, dropout etc. Balasubramaniam, (1976); Anand, (1979); Panda, (1980); Koul, (1982); Vydehi, (1984); Sarwal, (1984); Reddy, (1986); Agarwal, (1986); Gupta, (1987); Dutt, (1988).
2. Studies concentrated more on the particular aspect of distance education in various universities. Yadav and Sharma, (1988); Khan, (1982); Dutt, (1986).

3. Studies conducted inconnection with the different aspects of the distance education of various universities. Dutt, (1976, 1977, 1978); Singh, (1978); Biswal, (1979); Pandey, (1980); Balasubramaniam, (1986); Muley, et al (1986); Sudame and Pugazhenthii, (1986); Sahoo, (1989).
4. Studies conducted inconnection with all aspects of distance education of particular university. Gomathi, (1982); Pillai and Mohan, (1983); Sahoo, (1985).

The studies stated in item number 1. Concentrated more on one aspect of distance education. These studies conducted inconnection with certain specific problem without studying the system as a whole. So these are not able to help the people concerned to get solution for several problems faced by their institution. Ofcourse, these studies have provided first-hand information about the various aspects of the system. Studies stated in second and third categories covered various universities. So they were not able to go indepth about the functioning of a particular institute/directorate of correspondence education. Therefore what sort of study needed is comprehensive investigations covering all aspects in an inter-connected manner to suggest ways

for improvement. A handful of studies have been conducted looking at the intricate relationship of influential factors in single institutional programmes. (Gomathi, 1982; Pillai and Mohan, 1983; and Sahoo, 1985).

Gomathi, (1982) had restricted her study conducted in Madurai Kamaraj University in two ways. The first one was evaluation done by the participants. Second was evaluation restricted only with that of post-graduate courses. So she did not study the organisational and management aspects of the courses, teachers evaluation of various components, dropouts and successful students' reaction etc. Teacher training programme was not included in her study.

The study by Pillai and Mohan, (1983) was only an illuminative type and not a comprehensive one. They studied the impact by obtaining the reactions from the students who had completed the courses and the performance with the help of three point rating scale and opinionnaire. So these studies have not studied the functioning of different aspects of the correspondence system, since they are beyond the scope of their studies. As a result, deeper understanding of the system and solution for several problems faced by the institution could be possible only by taking a study which is holistic in nature. The contribution made by the above mentioned studies acted as the source/basis for this research.

The study conducted by Sahoo, (1985) in Himachal Pradesh University followed the holistic model of investigation. He studied all aspects and analysed the input, process and output of correspondence education of Himachal Pradesh University. His findings cannot be generalised for all institutions due to the variation in organisational set-up, management of the system, courses offered, and modus operandi of the instructional processes.

So, for proper understanding of a system, deep knowledge about the intricate relationships and dynamics existing between internal and external forces of given set up is very essential. This would require an in-depth study at the institution level. Moreover there were only few studies related to English language teaching through correspondence system. But there were no comprehensive study in this area. So this type of study related to a particular programme viz., teacher education need to be conducted in order to streamline functioning of these courses through distance education.

The teacher education programme being professional in nature through correspondence system has also generated a lot of disagreement and debate about its relevance and efficacy among many educationists. But no comprehensive study has been taken so far to evaluate the effectiveness of this professional

training programme through the correspondence system.

What are the motivating factors that prompt the students to join and continue the B.Ed./M.Ed. courses? What are the reasons for joining in correspondence course than in the formal system? What is the rate of dropout? What are the factors responsible for discontinuing studies? How far the system has been successful in preparing the would be teachers? How does the ICC & CE provide learning activities inconnection with the typical aspects of the teacher education programme Viz., teaching practice programme, dissertation etc? How does the ICC & CE develop skills required for the teaching profession? How do the professional course distant learners perform in the examinations in comparison with the formal college students? What are the limitations in the existing frame work of the system? What are the remedial measures required for improving the system? These questions which are unanswered so far have been taken as basis for the study. The present study has directed its attempt to answer the above mentioned questions by undertaking a systematic evaluation. Such an evaluation is likely to help in identifying the strengths and weaknesses of the programme, thereby providing scope for further modifications and development. Hence, this study attempts to investigate the academic, administrative and financial aspects of teacher education programme through the correspondence system of the Madurai Kamaraj University.

The next chapter deals with the methodology of sample selection, tool construction and data collection procedures.

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