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EDITORIAL

The higher level Distance Education in India is Channelised through two broad streams--Open Universities and the Directorates of Correspondence Courses. The former have been set-up through Parliamentary/State Legislative statutes, and as such enjoy complete autonomy in all academic, administrative and financial matters as conventional universities do. However, they are tagged to the Indira Gandhi National Open University. The latter not only provides to them financial support but also academic guidance by helping them (if anyone of them so requests) in the planning and designing of study programmes. They may also borrow from it any number of its existing study programmes or even the study materials thereof. The idea is to promote and proliferate distance education programmes in as many regions and through as many languages of the country as possible.

The other stream consists of the Directorates/Schools/Departments of Correspondence Courses. These are attached and affiliated to the conventional universities and as such confine their study programmes, by and large, to the traditional Bachelor's and Masters Degree Courses in various disciplines of Arts, Commerce and Science. Of late, they too have begun proliferating their activities to job-oriented and non-traditional courses but, again, within the ambit of their university structure. These institutes are controlled and financed by their respective universities and do not, therefore, enjoy autonomy to design their study programmes much less to undertake any other innovative activity. Similarly, their administrative and financial competence is also limited. Above all, their role in higher decision-making bodies of their respective universities is marginal. As regards fiscal support to their study programmes and other infrastructural facilities, they (being the adjuncts of conventional universities) depend upon the University Grants Commission which has been entrusted with the responsibility of developing and funding conventional education. (Though the Parliamentary statute governing the Indira Gandhi National Open University vests in it the power of maintaining, developing and funding Distance Education in all its manifestations, the existing arrangement of the U.G.C. giving financial support to conventional universities to develop Distance Education through their Directorates/Departments of Correspondence Courses has been left intact at least for the time being.)

This dichotomy in the system which is there less by design than by the exigencies of the situation, seriously hampers its proper development. It shuts the system into two watertight compartments which, though espousing a common objectives, do not have much to do with each other. Not to speak of their working hand in hand with each other, their relationship is in fact strained with mutual suspicion and acrimony. The Directorates in particular nurse the grievance that the creation of the Open Universities has pushed them into a secondary position. They had expected (and even demanded) that whenever Distance Education were to be given a place of dignity in the overall system of education, their services to the nation would be duly recognised and they would be rescued from their internal and external difficulties. Instead, new institutions (open universities) were super-imposed on them which not only perpetuated their existing problems but also created many more for them. A state of uncertainty suspense and confusion was let loose upon them.

One of the main problems of these Directorates is that they do not have the benefit of the advice and guidance of some benefactor. Though opened and managed by their respective universities, they are looked upon by their parents more as illegitimate children and less as lawful heirs for carrying and propagating their message. Having failed to fully grasp the true philosophy of distance education, these universities tend to treat and mould these departments of theirs into their own conventional image, and thus fail to properly appreciate their problems. Whenever the Directorates manage to 'earn' some money by applying a squeeze in their faculty positions and other infrastructural facilities, the over-assertive external authorities of their universities rob them of their surplus, thereby denying to them the opportunity of strengthening their students services. And wherever the Directorates are able to create in the initial stages a respectable size of their own faculty (thereby assuring to themselves some degree of academic

self-sufficiency and also at the same time maintaining reasonable quality of instruction) and other infra-structural facilities and, as a result, face financial difficulties, their universities do not look kindly upon them. Instead, they are dubbed as spend thrust children and a drain on their finances. Thus, both ways the Directorates are at a loss—whether they earn profits or go into loss. The cumulative effect is that the whole of the system runs into doldrums.

Even with this given situation, they can be assured of a better future, provided the University Grants Commission appreciates their position and helps them with monetary assistance. But at that level too the things are far from satisfactory. Despite the fact that these Directorates bear the brunt of university/college education to the extent of 10 per cent of the whole of the student population at the higher education level, the U.G.C. sets apart for them less than even one per cent of its total funds. In this way, we find that there is a total lack of appreciation of the problems of Distance Education from the top to the bottom. This state of affairs calls for an urgent review and redress.

Another area where the absence of a supra-university authority is acutely felt is the development and growth of these Directorates. A look at the educational map of India reveals that while the northern and the southern regions of the country have a large number of these institutions, the eastern and the central regions are almost bereft of them. In the former two regions the Directorates are situated in close proximity to one another. More glaringly, these Directorate make provisions for identical types of study programmes. To illustrate, the Directorate of Shilma, Chandigarh, Patiala (located on one linear strip of 150 km) provide for Bachelor's and Master's degree programmes in literature (English, Hindi and Punjabi), social sciences (Political Science, Economics, History and Public Administration) and Commerce.

This type of uncoordinated development of both the institutions and the study programmes has seriously told upon the health not only of the individual institutes but of the system of distance education at large. The multiplication of effort in the preparation and maintenance of one and the same type of courses of study has resulted in the wastage of the precious resources, on the one hand, and the poor quality of instruction, on the other. Compelled by the resource constraint, these institutions are in a position neither of maintaining a senior faculty (capable of producing quality lesson scripts) nor of paying handsome remuneration to outside script writers. Besides, they do not have good libraries of their own, not to talk of audio/video facilities. Had they been able to pool their resources and then concentrate on a fewer number of courses they would have certainly projected a high image of themselves. If the IGNOU has carved out for itself a dignified place in the world of higher education of the country, the secret lies, among other things, in the quality of its study programmes. The total impact of this whole development is that Distance Education has, by and large, failed to project a good image of itself. Even though it provides a supplementary channel for higher education by absorbing the overflow from colleges and university teaching departments, no respectable person likes to send his ward to a Directorate of Correspondence Courses. For, education that is imparted through them is considered second grade. If the IGNOU has succeeded in erecting the image of Distance Education, it has done so largely with regard to that segment of this system which is directly managed by it. The Directorates and even the State Open Universities continue to project the same image as they had been doing earlier.

In conclusion, it may be observed that it is high time that all such problems of Distance Education in general and of the Directorates in particular are suitably taken care of. Preferably, it would be better if the whole of this system in all its manifestations is subjected to a comprehensive review through a high level committee of experts. We must ensure that this highly useful channel of mass education does not deviate from its lofty goal and, instead, effectively answers the needs and aspirations of the future generations for higher education. It may be added that this system, if properly managed, can also suitably handle high level technical education (medicine and engineering not excluded) on a mass scale for which there is a growing demand. If we succeed in doing so we can weed out tens of substandard medical, engineering and such other colleges that have of late mushroomed in the country.

SOME ASPECTS OF LESSON WRITING IN ENGLISH

Satyapal Anand

1. If teaching of English through distance education channels has to be effective enough, it is essential that the teacher should form a clear conception of the aims of English teaching and learning. It is essential that he should be able to say, in categorical and unequivocal terms, what goal he is trying to reach in his teaching and what knowledge, abilities and skills he is striving to impart to his alumni.

2. The two main elements in language learning are (i) learning to read the language; and (ii) learning to use the language in speech and writing. In actual teaching practice in schools and colleges, these two streams often merge and run together, but in a distance education channel, because of the compulsions of separate examination in Paper 'A' (Text and Comprehension) and Paper 'B' (Applied Grammar, Composition & Translation), the distance educator has to prepare separate lessons covering the syllabus and prescribed courses of study. This is an academic, artificial distinction which does not exist in face to face education where one can be easily related to the other and even taught in collateral conjunction. While in theory, speaking, reading and writing may be regarded as three separate entities, in the reality of the classroom they are but aspects of the same process and are developed together in the same breath, as it were by the teacher. It is not so in the distance education medium.

3. It is in this context that I shall, for the moment, ask you to bear with me for two dogmatic assertions which I am going to make.

(a) The ability to read does not arise naturally and inevitably from the ability to speak and write English, and

its *vice-versa* that a skilled speaker or writer of English is not necessarily a skilled reader of English;

(b) In the existing set-up in the field of distance education, because of the non-availability of audio-visual aids, it is not possible to teach, through the print-medium, anything by way of spoken English.

4. This said, one can safely assume the cut-and-dried solution to the problem of teaching English to the distance alumni, i.e. to aim at the ability and skill in reading and writing English, assuming that this activity might, in future, help him to learn to speak English. However, this assumption places the distance alumnus at a disadvantage vis-a-vis his regular counterpart. Educational theories, like philosophic theories, generally arise out of the social, economic and political conditions of the time, and these conditions are such that the power to speak and write English is a *sine qua non* in every educated man. So the notion presented in (b) above would seem unacceptable to any one with unbeglamoured sense of reality. The distance educator, therefore, tries to fall back upon the much-maligned spoken word through Personal Contact Programme (PCP), Sunday Classes (SC), Radio Lessons, and (if possible) on such electronic gadgets as can easily be employed in the Institute itself where local and distant students can visit. Nonetheless, there is no harm in accepting the situation as it is. Spoken English, in the existing set-up *cannot* be taught through the distance education medium; except in cases where language labs can turn out tapes through mass production for use by the students who may own cassette players.

5. In the learning process there are two chronological stages. In the first stage, the teacher expounds and teaches some items or unit of knowledge. At the end of that stage, if the teaching has been effective, the student arrives at a point where he has assimilated the mechanism of the language employed for imparting knowledge, and is ready to experiment with it at his own level- without reference to the teacher, but with special reference to a given lesson. Distance education alumnus, sitting at a distance from his teacher, studies independently in the privacy of his home and the only aids he has at hand are his text books, a set of 'Notes' in lesson form and a dictionary and, if available, a radio lesson or two, which he may or may not be able to benefit from. He has to be treated as an 'independent learner', and as such his predicament in that lonely ivorytower of his own should be appreciated.

6. Broadly categorised, lessons in English comprise 'Text' and 'General English'. Text is sub-divided into Poetry, Prose, One-Act Play or a Full Length Play, Short Story & Essay, or some other extract or excerpt from a longer prose composition. In 'General English' are included Applied Grammar, Composition, Comprehension and Translation. Each one of these sub-sections has a definite method of presentation in a lesson. (For obvious reasons of spaces), I will take up only two portions of our syllabus for a short but intense scrutiny, viz. *Prose and Poetry*.

7. There are certain general but categorical imperatives for lesson writers. It may be understood that a lesson is not a quicsecent interlude, but a study unit complete in the totality of its approach to the subject. Since Indian learners of English have learned to associate sound and symbol in their native language, it does not follow that they know how to extract the full meaning from what they see in print, a self-explanatory method has to be adopted. Though it might seem arbitrary, I identify the following parts :-

a) *Selection* of suitable material at an appropriate level of reading difficulty for a particular group of students; selection of the right amount of material for the time available and for arousing and maintaining interest in the context of the text ;

b) *Preparation* by the teacher who checks on : the necessary background information; words which need explaining (and how best to explain them, by picture, graph, cartoon, English definition or synonym, or translation in the student's mother tongue); obscurity of meaning or allusion; and the most effective way to arouse interest in this particular text.

The teacher or teachers preparing the material can often slip some of the unfamiliar vocabulary into the explanatory part and exhort the students to consult a dictionary if he has not understood these words or refer to a preceding lesson. The teacher, grasping the difficulty of a student who may not be able to procure or buy a dictionary, may centre a self-correcting exercise around a semantic area germane to the reading text, thus not only introducing useful vocabulary but also preparing students unobtrusively for intelligent guessing when they are face to face with the text. A review of certain grammatical features may refresh the student's memory so that comprehension is not impeded by structural complexity.

(c) *Introduction* of the material to the students. This introduction may take the form of provision of back-ground information or some explanation of cultural differences, either directly, with the aid of a picture or, indirectly

during some other activity when the students may have been given the opportunity of finding out information, which will be useful for a later reading lesson. Sometimes the introduction will take the form of a provocative discussion on a question which is reviewed in the reading text, with the students then reading more alertly as they find out how the author has viewed the problem. This approach is particularly valuable when a writer is developing difficult concepts or setting out a complicated discussion of ideas. Stimulating the students' own thinking about the central issue or problem helps them to anticipate the probable meaning of unfamiliar vocabulary and to perceive disguised cognates and borrowed words in the matrix of the development of ideas.

8. After having identified some of the imperatives which govern the 'Self-explanatory method', we now come to the reading text proper. The following points may be kept in view :-

(a) Enough *vocabulary* aids have to be given. It will be good if these are given in the margin for quick eye-catching relief, instead of a long list at the end. Various tests may be designed, inside the body of the lesson, to know the student's capacity of comprehension. These tests need not be on the pattern of the Annual Examination Question Paper, and the students should be informed that it is for their self-assessment that these tests have been designed. Correct answers should be appended invariably. (appended but printed upsidedown in the form of quiz-solutions for students to do their own assessment.)

(b) *Content questions* should be asked as directly as possible.

(c) *Implication questions* should be asked without repeating the material in the content questions.

(d) *Multiple-choice questions* should be set either in short alternative phrases or in large statements.

9 PROSE TEXT

A) According to the Direct Method, as we are taught in professional courses, the English text is central to the teaching and study throughout the course. It provides, or should provide (a) all the words, phrases or idioms of which the student has to acquire a knowledge and command, i.e. all the reproductive vocabulary properly graded in difficulty, (b) all the expressions which the student has to learn to read but not to use, i.e. recognition vocabulary; & (c) all the grammatical constructions to be learnt and properly graded. Clearly, a text which fulfills these requirements should simplify greatly the study of English. Instead of separate texts for teaching the use of English reading, Grammar and Composition, only one text would be required. In practice, however, these requirements have not been fulfilled.

B) The Language Frequency List standardised by Institutes of English in various parts of the country for Secondary School level is compiled only for reading purposes. What is required in India is a language frequency list compiled from the point of view of language to use and not language only to read. Secondly, vocabulary is treated in respect of word frequency as consist-

ing only of isolated, disconnected words. English is a living language where words are used in multiplicity of dimensional meanings. Hence the difficulty. The prescribed text books by Boards and other governing bodies, indeed, are the distance educators' bane, as is the case of Institutes of Correspondence Courses run by universities. But the distance educator engaged in the task has to make the best of a bad bargain.

10. POETRY TEXT

A) It is business of the poetry lesson-so the teacher thinks-to explain the difficult language, to straighten out the difficult grammatical constructions, and to make clear to the distance education alumni the difficult subject matter. And so the instructional material on poetry is generally designed. Geared to the task of minute examination of words and phrases and rendering in prose of the thought and the language of the poem, this method, however sound in a classroom situation, falls short of the requirements of distance education. Indeed, all these ingredients together with the conventional discussion of the historical details of the poet and the poem, making usual poetry lesson, have failed to deliver the goods. The normal format preferred by many distance education institutes in India is as follows.

- a) Introduction to the poet and his age (1-2 paragraphs)
- b) Introduction to his/her work (1 paragraph)
- c) Introduction to the poem (1-2 paragraphs) : by way of background information.

- d) Central Idea or Theme or Main Sequence of Thought (2-3 paragraphs.)
- e) A free summary or stanza-wise paraphrase of the poem by way of textual understanding.
- f) A list of difficult words and expressions in glossary form.
- g) A model examination question solved, (approach, material, length).
- h) One or two model passages explained with Reference to the Context.

Having thus treated the poem at textual and contextual levels the lesson-writer is satisfied...But poetry is much more than mere text and context. Poetry is beauty ; beauty of form, beauty of language, beauty of thought, mood or feeling. The poetry lesson that does not leave the pupil with some insight into the delightening of the emotions, some lifting of the soul towards spiritual or aesthetic modes of being, is a lesson that has missed its aim.

B) In a workshop for teachers of English at the Pre-University level engaged in writing lessons for the Panjab University, directed by the present author, a number of short pieces were selected for intensive workshop practice. Some of these resulted in delightful work-models which were later used by the University. Indeed, one piece titled "What Punctuation Says" (not connected with poetry) found a place in one of the Foundations.

English Courses of the Open University of U.K. Sarojini Naidu's delightful lyric The Palanquin Bearers (only the 1st Stanza) is taken up for detailed discussion which may lead to the formulation of a model distance education lesson by the participants in this workshop.

C) For obvious reason (the straight-jacket of the style and format of the Annual Examination question paper, which we all dread) the present author does not dispute the efficacy of 'Central Idea', 'Summary', 'Model Examination Question', and 'Explanation with Reference to the Context', or any such conventional format for a living and concrete model for the students to emulate. These are essential purely from the examination point of view. What, indeed, is essential is that the study of the poem should not start with the explanation of words and gram-

matical forms which the students may find difficult. To give explanation separate place in the lesson is to take them out of their context and thus to add to their difficulty. Thus, it follows that a good lesson writer would go straight to the heart of the poem-the beautiful scene or the story or the idea. Let the students pick out the words, phrases, lines, as they go along. The second or practical aim is to teach them to render into prose the words of the poem - to summarise it. For this, a conventional paraphrase will do.

WORKSHOP MODEL (POETRY)

Palanquin Bearers

Comprehension Text

*Lightly, O lightly we bear her along,
She sways like a flower in the wind of our song,
She skims like a bird on the foam of a stream,
She floats like a laugh from the lips of a dream,
Waily, O gaily we glide and we sing,
We bear her along like a pearl on a string*

Comment: First comes reading. By the sheer compulsions of the distance education medium, oral reading by a teacher is not possible unless it is in the Personal Contact Programme classroom situation. However, it has to be stressed in the lesson that oral reading by the student himself is of utmost importance. He is told to remember that poetry is essentially music; it is primarily not a written thing, but a thing to be read aloud and recited; it does not exist for him unless he has read it aloud and felt the pulsating music and beauty of its language.

Now let us discuss the approach to writing a lesson on this stanza:

Aim: To lead the students to appreciate the notice that inspired the poet-the picture of a group of four or six palanquin bearers, and to lead the students to appreciate the beauty of this picture, indeed to lead them to picture mentally the scene so beautifully described in the stanza, and to appreciate how the words describe it.

Approach: Make a drawing of a palanquin for those who have not seen it. One may find a good photograph for use in the lesson. Let them be told in the lesson that we are going to read a poem which is a song sung by the bearers of a palanquin. Inside the palanquin is a lady, possibly a bride. If the palanquin is heavy, the bearers will groan; if it is light, the bearers will be happy. If the palanquin is heavy, they will sing a sad song, if light, a happy song. If they do not like the job they are doing, i. e. carrying a burden on their shoulders, they will not sing, but complain. So they like their pleasant job.

Appreciation: One can choose a thousand different ways of making the students appreciate the poem. But a direct question-answer format would be the best, depending on the subject matter. Look at the following

- a) Do they sing a song? (Yes)
- b) What words show that they sing a happy song? (Gaily, O gaily). (The poet repeats the word 'gaily'; for emphasis).
- c) Why do they sing a happy song? Because the palanquin is heavy? (No: because it is light)
- d) What words show that the palanquin is light? (Lightly, O lightly we bear her along: we bear her along like a pearl on a string)
- e) What does the flower do? Answer in one word (sway)
- f) What does the bird do? (skim)
- g) What does the laugh do? (float)
- h) Do the bearers walk heavily? (No, they glide).
- i) Are these things light or heavy? (They are, light).

After this one can begin with another set of questions

- A) Who bears whom? (The palanquin bearers bear a lady in their palanquin)
- B) What does the poet compare her with? (flower, bird, laugh and a pearl)
- C) Are these things light? (Yes, they are)

Vocabulary: Pick out 'skim', 'float', 'glide', 'sing', 'bear',..... as verbs. Explain their usage in sentences. If these have been used metaphorically (as 'skim', 'float', and 'glide', are), explain their dictionary meaning. Pick out 'bird', 'flower', 'stream', 'laugh', 'lips', 'dream', 'pearl', & 'string', as nouns. Explain their usage in sentences not connected with the text.

Paraphrase: After this one can attempt a paraphrase. A formal paraphrase is necessary from the examination point of view and cannot be avoided, but it will be suitable if the students are asked to attempt another paraphrase, all by themselves, by giving them the following lamp-post points in the form of a running composition.

The bearers of the palanquin are happy; they run smoothly and lightly, they sing. They do these things because the lady in the palanquin is light and beautiful and because they love their job. The lady (or bride) is like a bird that flies lightly over a stream, she is like a laugh in a dream; she is like a pearl.

TEACHING SPOKEN ENGLISH IN THE DISTANCE EDUCATION SYSTEM

Iqbal Kaur

The present paper aims at establishing the need for teaching spoken English as one of the communication skills i.e. the skills that are needed to get one's meaning across, to do things in the second language, to say what one really wants to say.

It discusses the controversial question of standards for spoken English in India. It also tries to highlight the relevance of distance mode of education for imparting speaking skills and considers the role of media, (*print as well as non-print*) in enabling learners acquire proficiency in spoken English.

The paper also covers the area of course content and discusses whether Phonetics should or should not be a part of the course content of a course in spoken English. The organization of the paper is as follows: it falls into five sections:

Section I, emphasizes the need and relevance of teaching/learning English in the present Indian context. It also has for its focus the desperate need for developing speaking skills which form an essential component of ELT.

Section II highlights the decisions regarding the variety of English to be taught. Should it be Indian English or should it be British R.P. ?

Section III brings us to the usefulness of distance education system for courses in spoken English and insists on teacher-training.

With **Section IV** the paper comes to planning and designing the course content. It advocates a Basic course in the initial stages- a course which is to be offered to all the learners irrespective of their specific needs. The specific needs can be taken care of when the Basic Course has been mastered.

Section V considers the media (*print as well as*

non-print) through which a distance education system in India can hope to impart speaking skills and concludes with a request to IGNOU to start courses in spoken English.

Appendix 1 gives a tentative framework for a Basic Course.

Appendix 2 gives some pronunciation exercises included in *English Through Reading* by W.W.S. Bhasker & N.S. Prabhu, a special edition prescribed for the students of B.A. Part I English (communication skills) at the Panjab, Punjabi and Guru Nanak Dev University.

I

English is a very useful language in which all sorts of information is encoded. It serves as a 'Window on the world'. It is the language which makes nearly all contemporary knowledge available. Since English is the language of science and technology, it is important for industrial and economic development. Our scientists, technologists, engineers and doctors need English not only to have an access to professional literature in English, but also to communicate with their counterparts in other parts of the world. The continuation of English seems important if our science and technology are to be truly international.

English is used not only for international communication but for international communication too. It is the language used by all India Institute as well as the language preferred by all-India seminars, conferences, workshops etc. It is the language preferred by the legal and banking systems, commerce and defence. In some states of India and in some dis-

ciplines, English continues to be the medium of instruction.

It is for these reasons that English occupies a significant place in our school and college curriculum and continues to be taught as a compulsory course upto the degree level. It is true that in certain states of India, it has lost its position of medium of instruction, and has been replaced by regional languages, but even in these states, English has not lost its significance, especially as the *'library language'*.

At the individual level, English still serves as *'the language of opportunity'*. Ability in English is an asset to any individual seeking socio-economic advancement. An individual with a good command on English is supposed to have an edge over others with same abilities and no command on English. We all know that good jobs in all fields call primarily for efficient communication skills in English. So, equipping our students with these skills has to be the primary objective of our English Courses.

So far as the teaching of English as a Second/ foreign language is concerned, the needs of our society have changed and are still changing. The aim in English language teaching today is no longer to introduce the English culture to the Indians but to impart the communication skills. A workshop on English studies sponsored by the UGC was held at Mysore from Oct. 28-30, 1976. A report of this workshop says :

It is clear that English will have important functions in communications of diverse types. The skills of communication, oral as well as written, both expressive and receptive will continue to be at a premium, and teaching will have to try to impart a certain minimal competence in these skills.

A National workshop was conducted by UGC in 1977 in collaboration with the central Institute of English and Foreign Language, Hyderabad to bring several reforms in syllabus. These workshop emphasized the need and

relevance of need based English courses and courses in spoken English. We no longer aim at teaching literature. The focus in ELT, as has been said earlier, has shifted to the teaching of skills-reading skills, writing skill, listening skills and speaking skills. Contemporary communicative approaches to language teaching are concerned with enabling the learner to understand how language really functions to communicate meaning.

A good deal of emphasis is to be laid on the learning of spoken English, besides acquiring the other skills because the aim is to be able to use English for communication, for a free uninhibited, confident exchange of ideas. If this is the objective, acquiring just grammatical competence is not enough. The learners are rather to be enabled to make a situationally appropriate use of English, to acquire communicative competence and hence the significance of imparting speaking skills-an area which has remained neglected till now.

The need for giving due weightage to spoken English cannot be lost sight of, for another very significant reason i.e. English in many schools and colleges, no longer enjoys the status of medium of instructions. So, our students have little exposure to spoken English. Much to one's despair, in some schools, colleges (*and even universities*) teachers of English too really very heavily on the regional language. The students either do not have enough exposure to English or they have an exposure to incorrect English and we are well aware of the significance of exposure of the learner to the language being taught.

Teaching speaking skills is essential also because the current orthography of English is notoriously deficient in its capacity for showing clearly the pronunciation that a word of sequence of words should have¹ (please see *appendix II*). It is not difficult for us to realise that there is a marked difference between written English and spoken English, between sound and spelling. Hence, to neglect the man-

ner of speaking a language, its pronunciation that is- can only produce a lop sided course of language study- as lop sided as if one were to neglect its spelling or its grammar²

Even where the aim is to give our students competence to use English as a 'library language', it is neither possible nor desirable to impart only the skill of reading comprehension in English without some training in other skills as well. It is for these reasons that a vast majority of people now-a-days are quite anxious to acquire mastery on pronunciation of English and there is an ever growing demand for the courses in spoken English. Delivering the Inaugural Address at the UGC National workshop on Syllabus Reform in English held at the Central Institute of English and Foreign Languages, Hyderabad from March 24-26, 1977, Prof. Satish Chandra, the then Chairman of University Grants Commission, stated that we are faced with a challenge to-day i.e. the challenge of:

Vast numbers of students with very inadequate or with very little English, who need to be equipped quickly with a reasonable competence in the use of English. The situation is far from ideal. But if we don't take effective measures to deal with the situation, the teaching of English in our colleges and universities will be devoid of all social and economic relevance and will be no more than a ritual.

He confessed that the teachers of English in India have a very difficult task to perform. They are confronted with students who have no English or very little English. They have to devote quite a bit of their time to remedial teaching. All this offers a tremendous challenge, which we as teachers have to face.

Professor Ramesh Mohan, the then Director of Central Institute of English and Foreign Languages, Hyderabad also stated in his welcome address made on the same occasion,

Since English continues to be a language of opportunity offering better prospects in life for those who acquire a good proficiency in it, in order to avoid the continuance of a small privileged English-knowing elite in the country, a situation which is fraught with dangerous social consequences, and which has been responsible for a great deal of the hostility against English, we have to take urgent steps to devise effective methods of teaching English for a large majority of handicapped students, particularly from the backward and weaker section of society, who otherwise intelligent and gifted enter the colleges without any or with inadequate knowledge of English. They are handicapped because they have not had the advantage of good schooling, which those coming from affluent sections of society who have been to good schools or English medium schools, have. Most of these are first generation learners. Not that every one of these should be given high-level training in English. What I mean is that our system should be able to provide equality of opportunity to all for learning English adequately for their specific needs and purposes to avoid the social imbalance which the knowledge of English by only a privileged few has brought about. Our universities and our technological institution, where the medium of instruction still continues to be English, have a special responsibility towards their students, some of whom now come from scheduled castes and backward tribes, and who do not have adequate proficiency in English. They must take urgent steps to give them all the facilities which are needed to enable them to make up for their initial deficiencies in this respect by organising crash courses, remedial courses,

and so on. Here is a great challenge which our university departments of English need to face in devising programmes for English as an instrument of education.

Now, who exactly could be the people desiring a course in spoken English i.e. which categories of people really a course like this or who could be the target learners for a course in spoken English?

I would like to list parents at No.1. Exposure to the language to be learnt plays a significant role in language learning. But, unfortunately our children, most of them, either have no exposure to English at home or they have exposure not to correct English but to an incorrect one. I am aware of several highly placed parents pronounce the word 'subject' as 'suhbjeet', 'concept' as 'konsept', 'content' as 'kontent', 'absent' as 'absent', 'sentence' as 'sentens', 'servant' as 'servant', 'England' as 'Englund', 'project' as 'projeckt', 'Canada' as 'Kanada', 'comma' as 'i ka : ma:'. These drastic mistakes of pronunciation are repeated by the children and if the children happen to be the students of good convent school or good public schools, they often enjoy making fun of their parents for their pronunciation of English. There are experts who feel that 'Faulty habits of speech once fixed, the odds are all against the foreign learner's ever acquiring the proper ones'. This is what forces me to advocate a *Special Course in Spoken English for Parents* which will not only give more confidence to the parents themselves but will also provide to the young children exposure to good spoken English which will certainly help the children speak correct English.

It would be a good idea to have a *Special Course in Spoken English* for Teacher of English also. I have already stated that exposure to good spoken English is essential for learning good spoken English. But, unfortunately, our children lack good models at home as well as at schools.

In most of our schools and colleges, teachers, (including even the teachers of

English) do not possess a good command on English and hence feel shy of speaking English. So, the tendency is to rely on native language as far as possible.

Is it not depressing that even the teachers of English feel diffident in speaking English?

Where do then students find exposure to good spoken English? *Nowhere indeed;*

So, I think it is essential for the teachers, especially those involved in the teaching of English, to undergo courses in spoken English.

One of the most critical elements in considering the implementation of a syllabus is the teacher, in particular his training and proficiency in the target language.⁴

At this juncture, let me emphasise, within parentheses though, that a DT needs not only proficiency in the target language, he also needs training in distances teaching which is quite different from conventional face-to-face teaching and has a work culture of its own. A teacher who has done a course in spoken English through distance education system will have double gains. He will not just improve his spoken English but will also have some understanding of the nature of the distance mode of education.

The next aspirants to the courses in spoken English will be the students themselves. The students may need to undergo remedial courses, bridge courses as well as special courses.

Then, the doctors, engineers, scientists, lawyers, librarians, sales representatives etc. may also aspire to take up courses in spoken English. These learners with diverse well-defined needs will need a well-constructed needs based syllabus. Any ESP courses requires needs analysis. This will ensure relevance in education -awareness of the diverse and specific needs of the learners. We have to take account of the learners' attitudes and motivation and to allow them to express their ideas and feelings through English.

II

Before we really start a course in spoken English, we have to take a difficult but crucial decision i.e. *which English* is to be taught and what should be the *standards* for spoken English in India.

The question of the standards of pronunciation to be laid down for foreign speakers of English is of particular importance in the world of today but it is a very controversial matter.⁵

However, before we really decide upon the course content we must be sure of the kind of English we are going to teach. Since all the learners will not aim at the same competence in spoken English, the answer to this question will come primarily from the learner. He will have to tell us what he is trying to learn English for i.e. what he really wants to do with it. Haliday McIntosh and Strevens point out that one of the most important changes that took place in the period between 1950 and 1960 was the acceptance that to speak like an Englishman was not the obvious and only aim in teaching English to overseas learners (as far as speaking ability was imparted at all).⁶

If the aim is intelligibility within India, it is enough for the learner to acquire proficiency in speaking Indian English but if international intelligibility is the aim, he must acquire British English pronunciation. Let me confess that it is not an easy task and we should not have a native-like command on spoken English as our target, except in some rare cases. (Teachers of English, for example, must try to acquire a native-like command on spoken English). It is enough for the majority of Indian learners to aim at 'Educated Indian English' though all forms of Indian English cannot be accepted as models. But if the aim is international intelligibility we should try to bring in the following phonetic features:-

1. Correct patterns of English word accent and sentence stress will have to be maintained.
2. The consonants /p, g, v, and w/ should be acquired.
3. The voiceless plosives /p/, /t/, /k/, are to be aspirated. This means that these are to be pronounced with a puff of breath after their release-at the beginning of accented syllables.
4. The English vowels and diphthongs should be given correct length.
5. The consonant /r/ at the end of a word is pronounced if the word that follows it begins with a vowel.
6. The learner is to be enabled to use weak forms where required. He is to be made aware of the fact that:

The weak forms are weakened pronunciations of certain frequently occurring words whose function in the sentence is structural rather than semantic. As it is normal for such words to be unstressed, they are particularly subject to weakening influences. This being so, the weak form must be regarded as their normal pronunciation, but unfortunately, in the artificial speech that is to be heard in many classrooms, the weakened pronunciation is used far too seldom.⁷

III

What could be the mode of offering a course in spoken English for our target learners?

Without wasting any time on stressing the usefulness of the distance education system, let me have to declare that our only hope lies in the system of distance education. A face-to-face course in spoken English may not succeed for the following reasons:-

1. The adult seekers of a course in spoken English may not find time to join regular classes where face-to-face teaching/ learning takes place.
2. Even those who can spare time for this project may be conscious of their ranks, status,

age etc. and hence may feel shy of attending a course like this.

3. There can be cases where neither of these reasons prevents the adults from attending regular classes for spoken English but the long distance between the home and the class-room may pose problems, especially in the case of women, the invalids and the people living in remote areas.

4. Besides, there can be adults who do wish to improve their spoken English but whose budget does not permit them to do so. We cannot just ignore these people. Rather

It is important that special opportunities are made available to help the weaker sections of our society to acquire an adequate competence in English so that they do not remain forever disadvantaged in areas of higher education and in terms of upwards social mobility⁸

5. Those who are in service may get transfer orders while the course is on the hence may have to discontinue their studies.

6. Teachers with a fairly good command on spoken English may not be available everywhere and hence more harm than help may be done by exposing the learners to wrong models.

7. It may not be possible to run several different courses in spoken English to meet the diverse needs through face-to-face teaching system.

8. Last, but obviously not the least, the regular class-room face-to-face teaching can not meet the ever-growing demands for courses in spoken English.

I believe, distance education system has an answer to all these problems. It allows the learner to learn at his own pace and without disturbing his other major obligations. A learner learning through the system of DE has no fears of feeling humiliated while trying to learn spoken English. Besides, the girls, the old, the invalid and the handicapped can also do this course through DE because it does not involve much

learning around. The economically weak can benefit by because it does not strain their budget much. Unforeseen circumstances like mid-term transfers etc. do not create any problems. Many teachers with a great competence in spoken English are not required. So, the distance education system alone can make it possible in our present circumstances, to run different courses for learners with different needs and this system alone can cater to the needs of a vast majority of people in India.

Challenge of Education-A Policy Perspective published by the Ministry of Education, Govt. of India in August, 1985 makes it clear that in an information-rich and technology-intensive society, the focus should shift from teacher-centred programmes to learner-centred programmes which are organised to develop in the learners the ability 'to learn how to learn'.

I am not trying to suggest that the distance education system has some magic wand which enables it surmount all the problems. It has its own constraints and restraints. Yet let me repeat myself that this system alone has an answer to the problem of making divorces specialised courses in spoken English available.

IV

When all these decisions are taken we come to *planning and designing the course content*.

Should a course in spoken English begin by teaching phonetics?

This is a relevant question which may disturb us. To my mind, although we are not to give the learner an elaborate courses in phonetics, yet we cannot altogether exclude phonetics from a courses in spoken English. If we do not give the learner any training in phonetics, how do we hope to teach him the difference between /v/ and /w/, for example. Our problems, in case we donot give them any idea of phonetics are going to increase manifold rather than to get solved. A good pronunciation can certainly be acquired more easily and more quickly through effective phonetic training than without it.

So, whatever the objectives of the learner in learning how to speak good English and whatever his problems, every learner is to be acquainted first of all with the sound system of English language. The difference between English sound and spelling must be stressed and the learner enabled to acquire the vowel sounds and the consonant sounds of the target language. He must also be enabled to use proper accent and stress and understand the rules of stress shift.

The diversities of the needs of learners can be catered to when this has been achieved. We, in the field of linguistics, are aware of the concept of register. The register needed by a doctor will be different from the one needed by an engineer, lawyer or a laboratory assistant. So, the register that the learner really needs must be provided to him.

Before I shift to the *materials* and methodology part of a course in spoken English, I would like to emphasize that before planning and designing such a course, the course designer must be aware of the EB i.e. the Entrance Behaviour of the learner and must be very clear about the DTB (i.e. the Desired Terminal Behaviour) of the learner. In other words, he must know what the learner already knows and what he really wants to do at the end of the course. As the course designer comes to focus on EB and DTB, he will realize that in most of the cases, some kind of remedial work is required before the course actually begins. The learner will have to be enabled to discontinue the wrong habits which have already been established, though as has been said earlier, it is quite difficult task.

So far as the teaching materials are concerned, in the existing Indian scene, we have to rely, to a great extent, on the *print media*. Through the print materials, we can introduce the sound system of English language to the students, drawing their attention to the difference in English sounds and spelling. They can also be introduced to the IPA (International Phonetic Alphabet). While teaching them the phonetic

symbols, we may give them the equivalent sound in their L I. It implies that the teacher should know their LI too. The concept of minimal pairs can be made clear to them and they can be given minimal pairs drills which they can do on their own. For example, to establish the vowel sounds /i/ and /is/, the students can be asked to say, one after the other, the pairs of words like sit/seat, pill/peel, fill/feel, hit/heat etc. They can then be asked to indicate the vowel sounds contained in the given words. When the sound system is mastered, the students can be enabled to master phonetic transcription and then to place accent on right syllables and use weak forms where required.

Since our aim is to enable the learners use English language, we must teach them the significance of sentence stress and intonation. The printed materials can include as models some conversations, which the learners are likely to need in very day life. The learners must learn how to greet people, how to ask for favour, how to regret inability to attend a function, how to thank people, how express joy and so on. Beginning with short conversations, the materials can go on to more detailed conversations. But the course producer must ensure that the learner will find the given conversations relevant to his needs.

The print materials should be self-instructional i.e. as far as possible they should have a teacher built into these. When the learner has had sufficient exposure to these conversations, he can be asked to write some conversations on the given topics. But the topics should be meaningful to the learner. These exercises can be carefully corrected by the teacher and the suggestions offered to the learner.

The learners must be enabled to use a pronouncing dictionary so that they can turn to it whenever in need and can learn the correct pronunciation of words, even in the absence of a teacher.

The printed materials can be accompanied with detailed instructions for self-study as well as the self-check exercises.

But however good the print materials may be *Personal Contact Programmes* are an integral part of any distance education course. The need and significance of PCP is still greater when a course in speaking skills is in question. The learner is bound to encounter difficulties which can be solved only by personal, face-to-face discussions. However, it is extremely important to ensure that the learner is exposed to a very good model of spoken English.

It must also be stressed that a personal contact programme for a course in spoken English is bound to be pretty different from a PCP in any other course. During the PCPs, situations are to be created for the learners in which they have to communicate. While creating situations for communication, the teacher must keep in mind the speech-act theory, particularly the work of Searle(1969:76) Searle(1976) makes the claim that all the things we do with words can be classified under five headings :

- Representatives, which commit the speaker to the truth of some proposition. This class would include acts like *inform, claim, state*.
- Directives, which are attempts to get the learner to do something *Order, request, Command, are commissives*.
- Expressives, which express psychological states. Searle cites as examples of expressives, *congratulate, apologise and thank*.
- Declaratives, which depend on extra linguistic instructions and rituals.

To this list can be added questions which can be listed as Elicitations.

According to the Report or UGC National Workshop(1977), the emphasis in teaching spoken English should be 'on the improvement of the student's skills in the reception and production of English speech in contextual use, on the individual's reception of or

response to a situation, the meaning intended, and the tonal note that is struck rather than on the articulatory mechanics of the language'.

Since a course in spoken English does not rely on lecture method, it is suggested that the classes should be very small, as small as 10-12 students per class so that it is possible to involve all the students in any meaningful activity.

It was recommended that the exercises should be designed to extend the student's range and his control over the use of the voice and his awareness of related non-verbal forms. Exercises can practice projection, pausing, pacing, the use of volume and pitch as well as attempt to increase the student's awareness of the spoken form in contrast to the written'.

V

PCP no doubt have to be an integral component of a course in spoken English in the distance mode of education. But much will still remain to be done. There will be a need to reinforce what has already been taught. The learner being at a distance from the teacher, reinforcement can be done primarily through the *electronic media* which can meet diverse needs of a vast number of learners. Audio and video cassettes are becoming increasingly popular in India now and I am sure we can hope to integrate these with the print materials. These cassettes can be placed at the study centres and thus even those who do not afford to buy them or do not have a video at home can make use of these. Through these cassettes the learners can be exposed to a much better model of spoken English than is possible in our class-room situation. In fact, in our context, this is the best way of exposing the learner to native speakers of English. Besides, the learner can use these cassettes at his convenience and as many times as he wants to. He may focus on the parts where he feels he

needs more practice. This possibility does not exist in a class-room situation where the teacher cannot just go on repeating himself endlessly or to go on solving individual problems. Not only this a class-room situation requires a fixed time schedule to be followed. While learning a foreign language it always pays to be familiar with the culture to which it relates. Video and television can play an effective role in presenting English culture to the learners besides helping them speak good English.

Variety and newness of electronic media excite and motivate students for learning. *Exercises for practice and drills* can be built into these cassettes in case of the formal teaching programmes. If the teacher is present while the cassettes is being used, he can switch off the cassettes as and when he feels he should explain certain points.

Thus, different media serve different educational needs and therefore I suggest that the print and non-print media should be built into the curriculum in an inseparable fashion. It can play an integrative role to compensate the absence of the normal teacher learner relationship in the distance education system and provide for the varying needs of the learners. The additional media may bring in certain levels of understanding that would not otherwise be possible.

Radio broadcast can also play a significant role in teaching spoken English through distance education system. The topic on which talks will be required should be decided before the course begins and it possible, the schedule of the radio talks should be sent to the learner along with the syllabus.

The national policy on education 1986 recognising the need of distance education observes :-

Modern communication technologies have the potential to by pass several stages and sequences in the process of development encountered in earlier decades. Both the constraints of time and distance at once become manageable. In order to avoid structural dualism, modern educational technology must reach out to the most distant areas and the most deprived sections or beneficiaries, simultaneously with the areas of comparative affluence and ready availability.

If the resources permit, it would be ideal to have language laboratories, atleast at the institute of the university offering a course in spoken English. These language-labs can be used during the PCPs and also otherwise as when the learners can manage to reach the language laboratory.

But do we have to wait for the language labs to be established before we can really think of offering a course in spoken English?

I do not think I need answer this question. Let us ask ourselves as to how we feel when during a National Seminar/Conference/Workshop etc. an academicians of a very high rank mispronounces words of daily use.

I am sure we can make a real good start with whatever humble resources we in India have at the moment. Indira Gandhi National Open University can also be requested to start courses in spoken English.

REFERENCES

1. Peter MacCarthy. 'Phonetic Tanscription and the Teaching of Pronunciation' in *ELT selections 2* (ed) W.R.Lee. OUP, London, 1967, P.136.
2. Peter MacCarthy. 'Pronunciation Teaching : Theory and Practice' in *ELT Selections 1*(ed) W.R. Lee OUP,London 1967, P.107.
3. Peter MacCarthy *ELT Selections 2* op.cit p.138.
4. Patricia R.Furey. 'Considerations in The Assessment of Language Syllabuses'in *Trends in Language Syllabus Design* (ed) John A.S.Read, Singapore University Press, 1984, P.21
5. R. K. Bansal. *The Intelligibility of Indian English*, CIEFL Monograph No 4 CIEFL, Hyderabad,1969 p.7
6. Halliday , M.A.K.Strevens, P.D. and McIntosh A (1964) *The Linguistic Sciences and Language Teaching* Longman 1964, P.203.
7. Roger Kingdom. 'Teaching the Weak Forms' in *ELT 1* .op cit, p.117.
8. S.K.Verma. 'English in India : Problems and Prospectus' In *University News* Vol. XXVII No.9., February 27,1989, P.3.

APPENDIX 1.

Basic Course in Spoken English

- Vowel and Consonant sounds of English.
- Minimal Pair drills.
- Introduction to IPA Symbols.
- Phonetic Transcription.
- Word Accent and Sentence Stress.
- Accent and Rhythm in connected speech.
- Use of weak forms.
- Using Pronouncing Dictionary.
- Marking the difference between English sounds and spelling.

The best method of exposing the students to the possibilities of speech communication is the reading of a contemporary plays which is meaningful to the learner. The teacher can first allow for informal conversation and later can ask the learner present short reports.

- Acting out real-life situations. For example, congratulating someone on his success, wishing somebody a happy birthday, offering condolence on the death of a friend's father etc.
- Mock interviews can also be arranged.
- Reading a prose passage.
- Listening comprehension must also be developed. students can be asked to listen to an audio cassette and report what they have heard. During PCPs, the teacher can manage to give the learners exercise to develop their listening comprehension. They can be made to listen to a conversation and to present reports.

APPENDIX II.

Given below are the exercises in pronunciation included in *English Through Reading*. Vol. I by W.S. Bhasker & N.S. Prabhu, special Edition for the Panjab, Punjabi and Guru Nanak Dev University students.

1. Practice saying the following words with the correct stress. You must stress the syllabus immediately after the stress mark ().

- | | | |
|---------------|---------------|---------------|
| 1. calculate. | 2. possible. | 3. efficient. |
| 4. 'scientist | 5. man 'Kind. | |

2. Here is a list of words ending in 'ed'. The 'ed' is pronounced /d/or/t/or/id.

Examples : 'loved' /d/; 'walked' /t/; 'hated' /id/. Now arrange the words in three sets under /d/or/t/or/id/

- | | | | |
|------------|-----------|-----------|------------|
| 1. turne d | 2. hoped | 3. called | 4. asked |
| 5. printed | 6. heated | 7. wanted | 8. looked. |

3. In the following words 'th' is pronounced /θ/ as in 'thin' or /ð/ as in 'that'. Arrange them in two lists under /θ/ and /ð/.

- | | | | | | |
|-----------|-------------|----------|-------------|---------|------------|
| 1. either | 2. anything | 3. think | 4. thousand | 5. then | 6. throne. |
|-----------|-------------|----------|-------------|---------|------------|

4. In the following words letters in italics are pronounced /ð/ as in 'paper' or /ʒ/ as in 'further'. Arrange the words in two lists under /ð/ or /ʒ/.

- | | | | | |
|------------|-----------|----------|----------|-------------|
| 1. certain | 2. atomic | 3. earth | 4. world | 5. internal |
|------------|-----------|----------|----------|-------------|

5. In the following words 'ex' is pronounced /iks/ or /igz/. Arrange them in two lists under 'iks' and 'igz'.

Examples : 'extract' /iks/; 'exhaust' /igz/

- | | | | | |
|------------|-----------|----------|-------------|-----------|
| 1. example | 2. expose | 3. exist | 4. exchange | 5. exact. |
|------------|-----------|----------|-------------|-----------|

6. We have seen how long sentences can be spoken with the right a) stress and rhythm by saying them in successive groups from the end. We can also learn to speak long sentences by saying them in successive groups from the beginning.

There are 'no' problems) in the production) of such a do'mestic' robot) to which we don't' have already) the 'glimmering of a so'lution.

Notice that the groups are marked off by a)

Now say (1) There are no problems. (2) There are no problems in the production (3) There are no problems in the production of such a domestic robot .(4) There are no problems in the production of such a domestic robot to which we don't have already (5) There are no problems in the production of such a domestic robot to which we don't have already the glimmering of a solution.

Now mark sentence stress and group divisions in these sentences and practice saying them.

1. The machine would have to be able to move about in a house designed for human beings and would therefore probably have to go through a normal door.

2. Helping the housewife by eliminating the routine operations is the outstanding human need in the developed countries that calls for solution.

(b) A limited number of words. Change their stress pattern according to their grammatical function. *Examples.*

Noun	Verb
'Object	O'bject.
'Protest	Pr'otest.

Now practise saying the following words after marking their stress :

Noun	Verb
1. subject	subject.
2. contrast	contrast
3. conduct	conduct.
4. present	present.

Notice : The change in pronunciation from noun to verb.

7. We have seen how the stress shifts in some words according to their grammatical function. Here is a further list of such words Arrange them under Noun, Verb and Adjective and mark stress.

1. desert	6. absent
2. export	7. torment
3. produce	8. invalid
4. content	9. rebel
5. alternate	10. segment

Practise saying these words with right stress and pronunciation.

Notice the changes in pronunciation with the shift in stress.

8. We have seen that in speaking sentences we stress only certain words in them. When we wish to emphasize a particular word in a sentence for the sake of contrast or to give prominence to the idea expressed by it, we have to say that word with more emphasis than the other words. *Example :*

(I was talking about birth rate.

In this sentence 'I', 'talk' and 'birth' can be said with equal emphasis, or any one of them can be selected for special emphasis.

'I was' talking about 'birth rate (with special emphasis on I) would mean' It was I and not someone else who was talking about birth rate'.

'I was ' talking about 'birth rate (with special emphasis on talk) would mean 'I was just talking about birth rate and not doing anything else about it'.

'I was ' talking about 'birth rate (with special emphasis on birth would mean' I was talking about birth rate and not about something else (or some other kind of rate)'.

Notice that in this sentence 'was' is not normally stressed, we can however stress it if we wish it to be an answer to someone who has said: 'You are not talking about birth rate.'

Now explain the different meanings we get when special emphasis is given to particular words in the following sentences:

1. You have heard of birth control.
2. Scientists are at work stamping out malaria.
3. You may talk about Japanese agriculture.

We have seen how stress shifts in certain words according to the change in their grammatical function. Stress also shifts in certain words as a change in form accompanies a change in grammatical functions.

1. 'family fa'miliar famili'arity
- 2.
- 3.

8 (a) We have seen how certain words in a sentence can be given emphasis for contrast. Other words may be spoken with extra stress because we are using them to emphasize a particular point. Such words may be adjectives like 'enormous', 'wonderful', etc., adverbs like 'extremely', 'particularly', etc. plural nouns like 'thousands', 'quantities', etc., and verbs like 'love', 'rush', etc. examples :

1. That was a *lovely* present.
2. That's *tremendously* interesting.
3. There were *hundreds* of children.

Now practise saying the following sentences with extra emphasis on words of the kind described above:

1. This invention is just fantastic
- 2.
- 3.
- 4.
- 5.
- 6.

Mark stress in the following groups of words and practice saying them with the right pronunciation:

1. industry industrious industrialization

The letter 'o' or diphthong 'ou' is pronounced /ɔ/, /ʌ/, or /o/ in the following words. Arrange the words into three columns under /ɔ/, /ʌ/ and /o/

1. conceal
2. atomic
3. cough
4. worry.

Pronunciation key is given at the end of this book. The vowels and consonants are listed in their phonetic symbols. The key words in which these are used alongwith the Transcription of the key word using IPA symbols are also given.

Use of Audio-Visual Media in the Teaching of Shakespeare's Hamlet in the Distance Education System

Avtar Singh

Communication is a systematic way of designing, carrying out and evaluating the total process of learning and designing in terms of specific objectives based on research and employing a combination of human and non-human resources to bring about more effective instruction. The term 'communication media' has been in vogue for the last one decade or so, and has come to be used in our country recently. At first it was understood to mean hardware sophisticated machines such as television, video tape-recorders, computers etc. Subsequently, people felt that it was another word for the simple term 'audio-visual aids'. So the widespread acceptance and application of this definition belongs to the future. An Anthony Bates puts it:

The reason why it is important to use a wide range of media including audio-visual media, is that different media serve different educational functions. Thus using a medium broadens the range and effectiveness of distance education.¹

Communication media, therefore, is the application of systems, techniques and resources, and can be broadly characterised by the educational needs of the learners, their background perceptions and environment, the instructional objectives of the educational processes and the subject-content required to be given to the learners.²

As part of a broader effort to achieve social justice and to establish a closed linkage between higher education and national development goals, there has been a growing concern in many parts of the world to provide access to higher

educational institutions to the academically ignored categories of people. The traditional university education has gradually come to redefine its function: the public it serves, its programmes and consequently its organisation and methods. The traditional communication media which dominates the formal system of education is the word of mouth whereas in the distance teaching system it has wider scope.

The success of the Open University concept has convinced many countries that the 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 lifelong education. Referring to the media, the National Policy on Education (1986) clearly recognises.

Modern communication technologies have the potential to by-pass several stages and sequences... and must reach out to the most distant areas and the most deprived sections of beneficiaries simultaneously with the areas of comparative affluence and ready availability.³

Educators on the look out for alternative models which could reduce the physical, social and psychological distance that separates knowledge and the learner have, therefore, turned their attention to the possibility of using the communication media to extend education in both space and time to diversify its objectives, content and form.

It is necessary to distinguish between those components of the distance education process that are more dependent on physical arrange-

ments and equipment and those that emphasize course content and the way material is presented to achieve effective learning. The hardware aspect refers to the application of engineering principles or instruments useful in the process of distance teaching. It comprises such teaching aids as slide projectors, tape-recorders, motion pictures, computers, television, film projectors, etc. However, the use of these aids in distance teaching system does not imply any mechanisation of the teaching-learning process. Indeed the aids help in transmitting, amplifying, distributing, recording and reproducing education materials with a dramatic increase in the teacher's impact on the distance learner. The software aspect of educational technology refers to the course content and its related concepts and theories and it may as well be called course ware. While print material is provided for all courses, adoption of other communication technologies like radio, television, audio and video depends on circumstances and the nature of the courses.

In a distance teaching system, the main aim is to convey the message in a form which enables the student to grasp it, understand it, and store it. Teaching aids like audio-visuals contribute enormously to the communication process in the teaching and learning situation by making the subject matter more easily comprehensible, and increasing at the same time, the retention factor. They establish an effective contact between the people who want to learn and whatever it is that they wish to learn. So the communication media constitutes what might be called home learning system-- the telephone and appropriate interfacing equipment, the learner's own television, film audio and video tapes and cassettes. It makes the distance learners proceed in their own speed or go over material more than once if they wish to. It involves active involvement of learners in teaching-learning activity, greater dissemination of ideas and knowledge, increased retention of information, usually accompanied by increased motivation to learn. In this way, thorough details

in research and structured programming in the communication process are ensured. There is concrete basis for conceptual thinking and thereby reducing the meaningless word-responses of students. A continuity of thought that is especially true of motion pictures is maintained and the distance learners gain the reality of experience which stimulates self-activity on the part of pupils. Furthermore, they have the potential of promoting activities such as self-evaluation. Appropriate application of communication media for the distance learners can thus help to reduce the effects of such detrimental factors as fear of not being able to keep up or unwillingness to ask questions in case they should turn out to be stupid.

Educational media are used as enrichment material at the disposal of the teacher. The role of the teacher is changed by the use of such media. He primarily decides at the initial stage whether and in what way to use media within the usual system of student-teacher interaction though the production of the programme depends on coordination and team work. Usually we find the usage of media in the context of the teacher-oriented learning pattern. So the education media are a means of transmitting didactically structured learning material usually according to the direct teaching method. The role of the teacher, as far as he is present, is essentially different -- he has given a part of his teaching functions to the media system. The greater part of the learning activities takes place without the teacher being present. In this way, education can take place at home and is facilitated by interaction in two way audio-visual distance education between a teaching and a large number of remote students.

Of all forms of literature, drama is the only genre which can be successfully relayed through any media, be it radio, television, slide-projector, tape-recorder, audio-cassette recorder, educational television (ETV) or the Satellite Instructional Television Experiment (SITE). The Plays

of Sophocles, Shakespeare, Bernard Shaw, O'Neill, Tennessee Williams, Edward Albee, Arthur Niller and Kalidas will be a rewarding experience for the distant learners when presented through the communication media. This paper endeavours to employ radio and television to teach Shakespeare's *Hamlet*.

As we all know in *Hamlet* Shakespeare depicts the story of murder, sudden violence and the slower but more deadly reaction to that violence. It is a play concerned with a son's revenge for the murder of his father. The motive force of the story turns upon the murder of Hamlet's father by his own brother Claudius, who, by marrying his wife, has added the sins of adultery and incest to the crime of murder. The conventional framework of the plot is further reinforced by the introduction of the ghost of *Hamlet's* father who appears to the young Prince to reveal to him the diabolical truth of his father's death and charged him with the responsibility of avenging the death. Hamlet is not only the most brilliant of Shakespeare's tragedies but one of the saddest since the hero is not destroyed by any evil in his nature but by a kind of misplaced good. The enigmatic problem of Hamlet's delay in taking revenge is one of the unresolved mysteries of this great Shakespearean tragedy. The entire play is a dramatic essay in mystery, that is to say, it is so constructed that the more it is examined the more there is to discover.

Broadly speaking, a distance teacher can determine the following issues in the play that confront almost every reader:

- i) Shakespeare's concept of tragedy with special reference to *Hamlet*.
- ii) Problem of procrastination.
- iii) Hamlet's madness or 'antic disposition'.
- iv) Role of the ghost or the supernatural element in the play.
- v) Hamlet's comparison with Laertes and Fortinbras.

- vi) Significance of opening scene, closet scene and the grave-digger's scene.
- vii) Hamlet's soliloquies.
- viii) Play within a play or 'Murder of Gonzago' in *Hamlet*.

No doubt the distance learner will have access to the printed material in the form of lessons on all these aspects. The role of communication media is both supplementary and complementary. And when we think of teaching *Hamlet* through the media, our first target is the radio which is the cheapest and the most easily accessible of all these means.

It is the only hope in the near future for any meaningful programme of mass education through mass communication.⁴

Hans U. Grundia emphasizes two aspects of radio as the communication media:

radio broadcast for direct consumption or recording of radio broadcast to be stored and used in much the same way as audio material which has to be put directly on to the cassettes by the producer without the intervention of broadcasting.⁵

Like other plays in vernacular languages, drama version of *Hamlet* can be relayed on the radio. All the above mentioned topics can be covered in the form of radio talks of 15 to 20 minutes duration. Hamlet's soliloquies stand out as essential pillars of the dramatic structure and could be a feast for students if broadcast independently followed by expert commentary. In these speeches Hamlet, with relentless sincerity, settles accounts with himself in thoughts that spring from the very depths of his being. Out of a total of some 280 lines of soliloquy spoken in the play, over 200 are spoken by Hamlet. These solo speeches have made him the most celebrated as also the most enigmatic figure in the drama of the world. There are seven soliloquies of Hamlet

which cover many subjects such as love, filial reverence, revenge, hypocrisy, woman's inconstancy and his own bitter self-reproaches. An active distant learner can be stimulated by these self-communings which become a landmark in the depiction of inner struggle and in the general progress of action. These lyrical notes enrich the spiritual and poetic quality of the play.

The question of Hamlet's procrastination has puzzled many a critic. There is ambivalence about the problem and every theory contains partial truth. For such topics panel discussion will be very useful when broadcast on radio. One speaker could present Hamlet's internal difficulties that he sees bright, sharp and threatening swords of the Swiss bodyguards that always protect the body of Claudius, and since he himself is single handed, he cannot achieve his revenge immediately. The act of being unprovable has shattered his power to act. The second speaker in the panel discussion can build up the argument about internal factors such as his brooding nature and his conscience and show how virtue too becomes a flaw in a peculiar tragic situation. That Hamlet was restrained by conscience or a moral scruple would look more plausible. There is also a view that Hamlet delays because the idea of revenge is repugnant to his conscience. We behold the Christian struggling with the natural man. The panel discussion can stimulate through such formats. The synthesis of the above arguments can also be built up by a third speaker who may say that after considering all these views and the text we come to know that there has been certainly a delay on the part of Hamlet in doing his duty. The causes of delay are numerous--mainly his fine and highly sensitive conscience, his deep-lying understood moral scruples, his view of confirming the guilt of his enemy before the action is justly taken, his deep and profound melancholy, his thought-sickness, his reflective and speculative habit, and his truthful and essentially good nature. The delay can be justified before the play-scene but after that there seems to be no apparent reason.

There is one function of the broadcast programmes that deserves attention. While they are not pace-makers for the course design, the programmes accelerate the pace of student's progress. Together with the due dates for assignments on various aspects of Hamlet, the regular transmission of the broadcast programmes will serve to keep the students working at the pace of the course. To make the medium more flexible, the distance teaching institutes should make audio-tapes of the play so as to make them available to the students. This will provide considerable freedom to the students and can be used by them at any time and place convenient to the learners. The distance learner can review the learning material by replaying the tapes as often as needed. While preparing the audio-tapes, the needs and interests of potential listeners should be kept in mind.

From radio we move to the television as an instructional aid to distance learners. As a combination of sound and pictures, television provides for the most effective temporal and spatial transmission of reality to its viewers. It combines the best elements of radio and film. W. Schramm considers television as 'one of the glamour boys' of the media.⁶ Film and television communicate by means of an audio-visual languages which, while related to spoken and written language, possesses a grammar and vocabulary of its own.

The sensation of immediacy and actuality causes the pupils receiving the programmes to realise that they are seeking and hearing life in the making. The best example of ETV in Britain, and one of the best in the world, is the Open University which provides a systematic series of courses with the help of BBC. In a developing country like India, television can be a very important medium because distances are great and educational facilities are few. Indian scientists have made a forceful case for video teaching:

as a method of self-study especially for weak students, as a means for teacher training, as a means for bring-

ing industrial processes to the class room particularly and for continuing education in the off-campus environment.⁷

Educational television is capable of making distance learners learn more efficiently and can be resourcefully used as an aid to the lessons sent by correspondence, as a self-sufficient set of lessons covering the entire syllabi in a particular course and as a stimulant for further exploration. Television programmes can promote the development of pupils' power of observation, insight, practical understanding of lessons, and reflective thinking. The audio-visual techniques as an effective aid to the distance teaching and learning process have an immense potential in a developing country like India.

The Satellite Instructional Television Experiment (SITE) has come to be recognized as a landmark in the history of mass-communication and mass-education in India. Three important capabilities of satellite transmission that are of particular interest for distance education are : (i) Satellites allow a visual link as well as an audio link between visual locations in virtually any part of the world, hence permitting a relatively cheap and convenient form of 'video conferencing', (ii) they can be used to broadcast educational material to a large number of people in one area, and (iii) they can be used to disseminate specialized material to widely scattered individuals living in geographically isolated areas. 'A network of communication through satellite is easy and far more economical.'⁸

The entire play *Hamlet* can be filmed (as has been done by the BBC) and telecast repeatedly. Films used in television have a definite advantage over ordinary sound films because they can be edited and brought up-to-date by dubbing in a new sound track.

The cognitive faculties respond more effectively to the visual scenes than its audio version

only. For example the part played by the ghost in *Hamlet* who appears twice—first to acquaint the hero with the foul play about the Old King Hamlet's death and secondly in the closet scene "to whet thy almost blunted purpose" can create an excellent impact on the distance learner on television.⁹

It has been argued that if *Hamlet's* soliloquies are removed, there is no procrastination. Each of these soliloquies can be serialized so that the students note *Hamlet's* expression and his changing states of the conflict through the sequence of soliloquies. A dialogue on the soliloquies accompanied by appropriate visual support can clarify many doubts in the minds of the target audience.

Prominent Shakespearean critics and producers can also be interviewed in which consecutive and well prepared questions concerning the play may be asked. The guest speakers answer the questions with detailed explanations and illustrations wherever necessary. *Hamlet's* madness has been a source of controversy ever since the play was written. Different view-point relating to the hero's madness—whether it is actual or acquired one—can be discussed by the guest speakers.

Quiz Programme followed by 'quick-check exercise' on *Hamlet* can be most rewarding from the learner's point of view. It can be arranged both on radio and television. This programme will require two parties, the distance teacher and a few students. The teacher may frame questions regarding the sources of the play, the origin of the story, its characters, certain prominent dialogues, nature of soliloquies and the scenes in which they appear, the purpose of Hecuba play, role of Rosencrantz and Guildenstern, etc. The participants may be shown certain slides and drawing charts and they can compete to give the right answers. The vital part of these programmes is the audience participation. The target audience may in future be given a chance to

appear as contestants in a subsequent programme on Hamlet and these programmes can be stored in the form of video tapes. A television quiz is however different from the radio quiz as the questions are presented visually. A quiz on Hamlet may include the following type of questions ranging indiscriminately through the whole play:

1. Whom does Polonius send to Paris 'to make inquiry' of Laertes' behaviour there?
2. What was Ophelia doing in her chamber when Hamlet visited her in a distraught and unkempt state?
3. 'The lady doth protest too much, methinks'. To whom is Queen Gertrude referring?
4. How many days had Hamlet been at sea before his ship was attacked by pirates?
5. What is the last line spoken by Hamlet before he dies?
6. When the ghost tells Hamlet that his father's body was covered with a 'lazer-like' scab, what does he mean?
7. What does queen Gertrude exclaim when Hamlet plunges his sword through the arras in her bedchamber?
8. In the carnage of the final scene, who declares himself to have been fatally wounded because of his 'own treachery'?
9. Hamlet concludes his soliloquy, 'O, what a rogue and peasant slave am I!', with the famous line beginning, 'the play's the thing...'; complete this line.
10. To which country do Fortinbras and his men 'go to gain a little patch of ground'?¹⁰

The important scenes from the play can also be serialized on television. The really significant scenes in *Hamlet* are the opening scene or 'the exposition', Hamlet's meeting with the ghost where he resolves to 'sweep to his revenge', the closet scene in which Hamlet speaks 'dragons' to his mother Gertrude and where the cunning fool Polonius gets killed, the Nunnery scene in which Hamlet snubs Ophelia for not differentiating the matters to be discussed with a

father and a lover, the prayer scene in which Claudius wants to pray but he cannot:

My words fly up, my thoughts remain
below. Words without thoughts never
to Heaven go.

and which shows Hamlet's procrastination in christian terms:

Now might I do it, pat; now he is praying.
And now I'll do't. And so he goes to heaven-
And so am I revenged? That would be scanned.
A villain kills my father; and for that
I, his only son, do this same Willain send
To heaven.

(Act III, Sc.iii)

Better impact can be created on the television by the presentation of grave-diggers scene in which Hamlet exchanges fun and jokes with the grave-diggers and then plunges into the grave of Ophelia along with Leartes with the remarks:

I loved Ophelia: forty thousand
brothers could not, With their quan-
tity of love make up my sum.

(Act V, Sc. i)

Similarly an impressive video tape can be made of the last scene which constitutes the fighting sequence between Hamlet and Leartes, the foul play with regard to the sword fight, the Queen Gertrude taking the poisoned cup of wine, Hamlet's receiving a fatal blow, killing of Laertes, the exposure and killing of Claudius by the same poisoned sword, and the return of Fortinbras to the throne of Denmark and Hamlet's final desire in which he appeals to Horatio to vindicate his position before the public:

O God, Horatio, what a wounded
name

Things standing thus unknown, shall
live

behind me.

If thou did'st ever hold me in thy heart,

Absent thee from felicity awhile,
And in this harsh world draw thy
breath in pain to tell my story.
(Act V, Sc. ii)

The sheer poetry of Shakespeare's play and the surprisingly new possibilities of language can be incorporated in the TV script of the scenes. The language of the King and the Queen, of Laertes and Polonius is characterised by a conventional mode of speech. But Hamlet's nature can only find expression in a wholly new language. Hamlet's imagery shows us that whenever he thinks and speaks, he is at the same time a visionary, for whom the living things of the world about him embody and symbolize thought. His first monologue may show this; the short space of time which lies between his father's death and his mother's remarriage is to him a series of pictures taken from real life.

A little month or ere those shoes were old
With which she followed my poor father's body
Like Niobe all tears....
Ere yet the salt of most unrighteous tears
Had left the flushing in her galled eyes,...

(Act I, Sc.ii)

or a little later, addressing Monatio:

the funeral baked means
Did coldly furnish forth the marriage tables.
(Act I, Sc.ii)

The TV script must emphasize the fact that Hamlet's language reveals the hero's wide educational background, his many-sidedness and the extraordinary range of his experience. The metaphors taken from natural sciences are specially frequent in Hamlet's language again emphasize his power of observation, his critical, objective way of looking at things. But Hamlet is also at home in classical antiquity or Greek mythology, in the terminology of law, he is not only familiar with the theatre and with acting but also with the fine arts, with falconry and hunting, with the soldier's trade and strategy, with the

courtier's way of life. The distance teacher should lay stress that all these spheres disclosing Hamlet's personality as that of a 'courtier, soldier and scholar' turns them to living account by a fit application of situations, persons and moods. Hamlet commands so many levels of expression that he can attune his diction as well as his imagery to the situation and to the person to whom he is speaking. This adaptability and versatility is a significant feature of Hamlet's use of language.

A simulated classroom can also be created and the teaching of the play can be performed. This format is very easy and economical. A detailed lecture on all the relevant aspects of the text followed by possible questions from the students could be produced and the video tape made. An introductory lecture on Shakespeare's world-view and his concept of tragedy in the simulated classroom can prepare the learner better to receive the play. Similarly Hamlet's comparison with Fortinbras who is prepared to stake his life for 'an egg shell' and Laertes who shakes heaven and earth after the death of Polonius are topics which could be elaborated in this make-believe classroom. A teacher can also discuss the roles played by Ophelia and Gertrude in intensifying the agony of Hamlet. Of course, the production of simulated programmes needs complete script rehearsal before they are produced.

Thus the communication media can play a positive role in making distance teaching and learning effective. But to the rewarding and successful the distance teaching institutes must chalk out their programmes in a big way. The students ought to be informed about the topics to be covered through the radio and television respectively along with the dates and timings so that they could respond, seek clarifications and elaborations. Where the concentration of students is sufficient, learning centers with radio and video equipment and a programme library should be set up. The University Grants Commission should be approached to give liberal grants for this purpose.

However, the radio script and TV script will serve only part of the purpose as the production aspect is equally important. This depends on the availability of resources, technical know-how, expert panels and the skilled staff. The communication media has to be much ahead of planning, coordination and management required in the use of educational media. The preparation of simple or sophisticated teaching aids requires an interesting manner of teaching and communicating to the specified target audience. Involvement of the best people in different subject areas in the preparation of filmstrip and radio script will ensure better results. In developed countries top scientists are actively involved in such exercises. Various kinds of people must interact together to create the culture of imparting distance education through communication media ---- people who know the subject, teachers, education administrators and persons in industry. This will require a loosely-knit federation of interests and organization including broadcasters, Government departments, management interests, institutions imparting distance education, experts from the Universities and other groups.

Every effort should be made to ensure that the programmes complement rather than duplicate the printed material otherwise the viewers, who tend to be more conscious of time, will not watch more than one or two programmes before abandoning them for textbooks that cover the same ground.

The preceding discussion thus revolves round some of the challenges facing those who are engaged in imparting distance education whether they be broadcasters, educationists or planners. We must re-plan our broadcast resources since broadcasting whether on radio or television is in a position to make a unique contribution towards education at all levels. Any future allocation of channels and frequencies or redistribution of national and local facilities, should take into account the educational needs of India--- both formal and informal.

The methods to be used---programmed instruction, group discussion, or the scholastic and empirical approach to the learning material--- will depend on the whole teaching-learning pattern and cannot be decided in isolation. While using a particular media, it should be ensured that teachers have the necessary training relevant to the use of the chosen media.

In distance teaching system the consideration of the situation of the learners should be central. He is usually isolated, he seldom has reference material at his disposal, he is perhaps tired after a long day at work, he has a family and his external learning conditions are insufficient etc. The main function of communication media used in distance study units is to anticipate his difficulties, reassure him by self-controlling tests, give him a clear picture of what he is going to learn and how he should do it, i.e., now he should learn to learn

NOTES AND REFERENCES

1. Anthony W. Bates, ed., *The Role of Technology in Distance Education* (London: Groom Helm, 1984) p.240.
2. Several countries are utilizing such media in their educational process. Most notable uses are being made in the U.S.A., Britain's Open University, and U.S.S.R. In India,UGC and CBSE are making use of the media in imparting education.
3. *National Policy of Education* ---1986, Ministry of Human Resource Development, Government of India, New Delhi. pp.15-16
4. Satyapal Anand, *University Without Walls: Correspondence Education in India* (New Delhi: Vikas, 1979), p.149.
5. Hans U.Grundin, "Radio" in Bates, ed., *The Role of Technology in Distance Education*,op.cit., p.69.
6. W.Schramm, *Big Media, Little Media* (California: Institute of Communication Research, Stanford University, 1977), p.138
7. Shashi Gulati and Manoj Datta, "Preparation of Audio and video Teaching Aids in Engineering Education and Students' Response: A Case Study". This paper wasprescated at the International Conference on New Technologies in Higher Education organised by the Association of Indian Universities in 1985.
8. Association of Indian Universities, "Utilisation of INSAT 1B for Higher Education: Report of the Task Force, "New Delhi, 1984.
9. William Shakespeare, *Hamlet* (1600), Act II, Scene iv. All future citations to the play will beindicated in parenthesis along with the text of the paper.
10. Answers to the quiz are given below:

1. Reynaldo	II. i. 1
2. Sewing	II. i. 75
3. The Player Queen	III. ii. 218
4. Two days	IV. vi. 15
5. 'The rest is silence'	V. ii. 358
6. Resembling leprosy (derived from the parable of Lamasus)	I. v. 56
8. Laertes	V. ii. 306
9. 'Wherein I'll catech the conscience of the king'	II. iv. 609
10. Poland	IV. iv.15

Language Courses In Distance Education And Regular Set-up - A Study Of Examinations Result

Ravi K. Mahajan

"When the correspondence study programme was introduced in the country, there was widespread feeling that it would lower the educational standard. A survey by the University Grants Commission regarding the attainment of correspondence students has established that the performance of correspondence students compares favourably with that of the students of regular colleges". A review of Annual Reports of Panjab University reveals that in every academic session 7 to 9 students from the Directorate of Correspondence Courses have been getting first three positions in the University examinations. However, this phenomenon has largely been confined to the post-graduate courses and conjectures doubting favourable comparability of performance of students in Distance Education with their counterparts in the Regular set-up in the global context are often put forth (data on pass percentages for the Universities of Delhi, Meerut, Bombay and Kurukshetra as shared by National Institute for Educational Planning and Administration, during a seminar on 'Developing Mechanism for Networking Among Distance Education Institutes' in Sept. 1989 also echo's the same).

Nonetheless, while ascertaining the performance of students in Distance Education, the problem of drop-outs emerges with prominence. Chander et. al. (1985) establish that the problem of drop-outs is universal and conclude from their study that age, sex, marital-status and residential area (within campus and out-side campus) have no significant influence on drop-out behaviour, however, the drop-out tendency has been found more amongst 'unemployed students' than 'employed students'. As regards the influence of motivation on 'drop-outs' and

'persistence rates' Chander et. al. (1985) categorised student's motivation as 'tangible' or 'intangible' depending on whether their objective is 'Material and attainable' or 'emotional and uncertain' and found that the intangibly motivated students had more tendency to drop-out than tangibly motivated students.

Mahajan (1987) in his study on the impact of duration of stay in the instructional process on performance found that the longer duration of stay of a student in the instructional process (as measured by the time period between the date on which a student take admission for a course in the Directorate and the commencement of examinations) does not guarantee her/his definite success in the university examinations. Nevertheless, there are not many empirical studies which could provide enough feed back on the performance of students in distance education, in general, and their comparison with students in the regular set-up, in particular (Sujatha, 1988).

In the present paper an attempt has been made to understand some peculiar quantifiable features, such as Cancellations, Drop-Outs, Successful Completion, emerging from the examination results of enrollees, in Distance Education and in the Regular Set-up where drop-out is understood in the sense of absenting from examinations only. The scope of the study has been confined to the post-graduate courses in the languages viz., English, Hindi and Punjabi being run through Distance Education by the Directorate of Correspondence Courses and University Departments (i.e. the Regular set-up) in the Panjab University. The primary data for the study has been collected from the university gazettes for the two sessions 1988-89 and 1989-90. The results of the study are being discussed

in the following sections.

1. The table (No. 1.1) gives course-wise information on enrolments in Distance Education (DE) and University Departments (DPT), where enrolment has been worked out from university gazettes.

Table No. 1.1

Session	1988-89			1989-90		
	Pbi	Hi	E	Pbi	Hi	E
DE	314	344	599	385	409	704
DPT	51	55	102	63	76	110

(Where Pbi. stands for Punjabi, Hi. stands for Hindi and E. stands for English)

The global comparison of enrolment suggests that the enrolment in the three language courses in Distance Education and University Department has, by and large, been in the ratio of 1:6.

The sex-wise enrolment in Distance Education and University Departments in various courses is given in the following table (No 1.2)

Table No. 1.2

Session	1988-89			1989-90		
	Male	Female	Total	Male	Female	Total
Pbi DE	158	156	314	196	189	385
DPT	30	21	51	35	28	63

chi-sq. = 0.87

chi sq. = 0.46

Hi DE	163	181	344	154	255	409
DPT	10	45	55	24	52	76

chi sq. = 10.87

chi sq. = 0.98

Eng DE	271	328	599	314	390	704
DPT	31	71	102	31	79	110

chi sq. = 7.81

chi sq. = 9.50

The sex-wise comparisons based on absolute numbers suggests that, except for the course in Punjabi, the enrolments have been dominated by female students both in Distance Education and University Departments. The statistically significant values of chi-square for the courses in Hindi and English, suggest that contrary to theoretical expectations of equi-likely distribution of frequencies, there have been 'more male and less female' in Distance Education and 'less male and more female' in University Department. This aspect, in view of the fact that the enrolments in the University Departments though limited are governed largely by previous academic scores, bespeaks not only for a better previous academic attainments amongst female students but also about the distinct desire amongst them to enhance their educational qualifications.

The following table (No. 2.1) gives course-wise information on Cancellations, Absentees, Indecisive-Results and Successful completion in the two streams of education (figures in the parenthesis give respective percentages).

Table No 2.1

Session	1988-89			1989-1990		
	Pbi	Hi	Eng	Pbi	Hi	Eng

Cancellations

DE	11	35	116	17	40	109
	(3.51)	(10.17)	(19.37)	(4.41)	(9.78)	(15.48)

DPT	---	---	---	---	1	---
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Absent

DE	38	45	149	47	62	181
	(12.14)	(13.08)	(24.87)	(12.21)	(15.16)	(25.71)

DPT	1	2	15	1	0	9
	(1.96)	(3.64)	(14.71)	(1.59)	---	(8.18)

Indecisive Results

DE	44	37	36	72	73	48
	(14.05)	(10.75)	(6.01)	(18.7)	(17.85)	(6.82)

DPT	7	4	12	27	7	23
	(13.73)	(7.27)	(11.76)	(42.86)	(9.2)	(20.1)

Successful Completion							
DE	166	129	96	153	148	81	
	(53.03)	—	(16.03)	(39.74)	(36.19)	(11.51)	
DPT	40	45	64	31	66	56	
	(78.43)	(81.82)	(62.74)	(49.20)	(86.8)	(5.10)	
Fail							
DE	54	98	202	96	86	285	
	(17.25)	(28.46)	(33.72)	(24.94)	(21.03)	(40.48)	
DPT	3	4	11	4	2	22	
	(5.88)	(7.27)	(10.78)	(6.35)	(2.63)	(20.0)	
Total							
DE	313	344	599	385	409	704	
DPT	51	55	102	63	76	110	

The table manifests wide disparities in the ratio on Cancellations, Absentees and Successful completions/Failures between students in the two streams of education. For instance, the phenomenon of Cancellation of enrolments has been found to be peculiar in Distance Education and almost absent in University Departments. It might be because students seeking enrolment in University Departments often get opportunities to prowl after clarifications on eligibility criterion and get the same adequately and immediately matched with their own credentials while submitting enrolment forms or appearing for interviews, the opportunity which a majority of students residing at distant places from the headquarters of the institute of Distance Education could seldom avail of, instead they might be taking chances by submitting enrolment forms and get enrolled though provisionally in technical terms. Apropos of absention incidences, students enrolled in Distance Education in comparison to their counterparts in University Departments have shown more tendency towards absention from examinations.

By the same sign, within Distance Education course-wise variations have also been found in 'Cancellations' and

'Absentees'. For instance, these have been maximum in the course of English and minimum in the course of Punjabi.

As regards 'indecisiveness' in results emerging out of R.L's, U.M.C., C.S. etc., at the first instance of the declaration of result, the data does not provide any clear picture. For instance, in 1988-89 no difference has been found in 'the indecisiveness of results' between students in Distance Education and University Departments, but the differences have been found in the session 1989-90.

Further, the ratios of successful completion/failures have been at variance not only between the two streams of education but also within the streams. In the global context, maximum failures have been found in the course of English in Distance Education.

3. In this section an exclusive sex-wise analyses on examination results, for Distance Education have been carried out. The following tables give statistical information pertaining to sex-wise distribution of students on Cancellation, Absentees and Successful completion/Failures.

Table No 3.

Session	1988-89			1989-90		
Sex	Male	Female	Total	Male	Female	Total
Punjabi						
Cancellation	6	5	11	7	10	17
Non-cancellation	152	151	303	189	179	368
Hindi						
Cancellation	22	13	35	20	20	40
Non-cancellation	141	168	309	134	235	369
	Chi sq = 3.72			Chi sq = 2.83		
English						
Cancellation	63	53	116	57	52	109
Non-cancellation	208	275	483	257	338	595
	Chi sq = 4.38			Chi sq = 3.10		

Table No. 3.2
Sex and Course-wise Absentees in DE

Session Sex	1988-90			1989-90		
	Male	Female	Total	Male	Female	Total
Punjabi						
Absentees	16	22	38	24	23	47
Non-absentees	136	129	265	165	156	321
	chi sq. = 1.16			chi sq. = 0.0		
Hindi						
Absentees	18	27	45	24	38	62
Non-absentees	123	141	264	110	197	307
	chi sq. = 0.65			chi sq. = 0.19		
English						
Absentees	77	72	149	101	80	181
Non-absentees	131	203	334	156	258	414
	chi sq. = 6.48			chi sq. = 16.67		

Table No.3.3

Session Sex	1988-89			1989-90		
	Male	Female	Total	Male	Female	Total
Punjabi						
Pass	71	95	166	50	103	153
Fail	39	15	54	71	25	96
	chi sq. = 14.14			chi sq. = 84.67		
Hindi						
Pass	52	77	129	40	108	148
Fail	53	45	98	46	40	86
English						
Pass	13	83	96	19	62	81
Fail	96	106	202	111	174	285
	chi sq. = 32.36			chi sq. = 6.12		

The table (No. 3.1) indicates that invariably in all the courses the percentage of cancellations have been higher for male students than for female students. Further, it is only in the course of English that the sex-wise differences between 'Absentees' and 'Non-Absentees' have been

found to be significant, where amongst male students the tendency of absents from examinations has been found to be more than their female counterparts (Table No. 3.2)

As regards the successful completion of the courses at the first instance of declaration of

examination results, the highly significant values of chi-square are indicative of sex-wise variation in the absolute number of Passing/Failing students in the examination (Table No. 3.3). On the whole in all the courses results have been found to be in favour of female students. To be more precise while the pass percentage of male students has been ranging from 12% (English, 1988-89) to 64% (Punjabi, 1988-89), it has been 26% (English, 1989-90) to 86% (Punjabi, 1988-89) for female students.

4. If successful completion is assumed to be ultimate in all the educational ventures from the

viewpoint of adequate harnessing of resources, then taking into account ingredients like Cancellations, Absentees, Failures, etc., the courses being run through Distance Education can be argued to be less provident in comparison to the courses being run through University Departments. The study not being longitudinal and confined to the quantitative aspects of examination results, has some obvious inherent limitations. Notwithstanding the limitations, the study suggests an elements of seriousness on the part of female students towards attaining educational qualifications.

References

1. The Annual Report (1976-77), Directorate of Correspondence Courses, Panjab University.
2. Chander, J. et. al. A(1985) *Drop-outs in the system of Distance Education- A Report*, University of Kerala.
3. Mahajan, Ravi K. (1987), 'A study in Performance and Duration of Instructional Process of students in Distance Education', *Pakistan Journal of Distance Education*, Vol. IV, No. II.
4. Sujatha, K. (1988), *Research on Distance Education in India*, Indian Journal of Distance Education. Vol II.

Socio-Economic Status And Mathematics Performance Of Distance Learners, Internal, Mature Age And Regular Students In A Developing Country

G. S. Kaeley

I

INTRODUCTION

1.1 Educational Background in Papua New Guinea:

Papua New Guinea is the largest newly emerging country of the island states of the South Pacific. In 1980 (National Census) the population of Papua New Guinea was just over three million people, with an average annual population growth rate of 2.3 per cent. Formal education was first introduced in the Papuan Region by missionaries in the 1870s (Department of Education, 1985:1). It remained minimal up to the second world war. Real growth in education began when the Department of Education was formed in 1946 (Department of Education, 1985).

In the 1950s the main aim of the colonial education department was to provide primary education to the indigenous people of Papua New Guinea. However, some arrangements were made by the authorities to provide scholarships to Papua New Guineans nationals to go for secondary education at boarding schools in Australia. With this provision, the number of Papua New Guineans with complete secondary education remained below 100 up to 1960. Mid 1960s saw the first three Papua New Guinean graduates, who studied in Australia. Under pressure from the United Nations Mission in 1962 and the suggestions of the World Bank Team (1964) which reviewed the Territory's economic progress in 1963, the government policy toward post-primary education started to change (Bachus *et al*, 1985:5).

TABLE I
Schooling statistics (national) 1960--1980 (National Planning Office, 1984: 127)

Type of school	1960		1970		1980	
	Institutions	Student	Institutions	Students	Institutions	Student
Community	1141	88679	1557	208419	2045	284089
Provincial High	39	2064	62	17929	97	38205
National High	0	0	0	0	4	1562
University	0	0	2	772	2	3043

The increase in the formal educational institutions and number of students since 1960 is shown in Table I.

In 1989 there were 2503 community schools, 123 provincial high schools and four national high schools (Department of Education, 1989).

However there are large numbers who never have the opportunity to enter the formal education system or who drop out along the way (National Planning Office, 1984).

Papua New Guinea had its first doctorate in the early 1980s. The total number of doctorates in the 1980s remained in two digit number.

1.2 Problems of Learning Mathematics in PAPUA NEW GUINEA:

Mathematics is a difficult subject both to teach and to learn due to its hierarchical nature (Skemp, 1971). The learning of mathematics becomes more problematic to Papua New Guinean students due to their cultural background (Lancy, 1983). There is ample evidence that, in Papua New Guinea, the development of numeracy and of fluency and literacy in English lag behind rates of progress taken for granted elsewhere, possibly because of the historical recency of the forms of knowledge on which the curriculum is based and of the rarity in the population of persons who have had the opportunity to master those forms of knowledge and to set attainable models for the next generation (Bacchus *et al*, 1985:75). Thus the mastery levels of basic skills for the average Matriculation entrant judged by some are between two and six years below the nominal level (Bacchus *et al*, 1985:84). The difficulties of learning mathematics become more acute for mature students due to the break in their studies (Fredrick *et al* 1984). The distance students face even more problem in the learning of mathematics due to non-contiguous mode of teaching (Holmberg, 1990). This compounding of problems causes

very serious problems in the learning of mathematics for mature Papua New Guinean students.

1.3 The Objectives of the Study:

The objectives of this investigation were to study the effect of socio-economic status (SES) variables on post-secondary mathematics performance of face-to-face instructed and distance study students of the University of Papua New Guinea.

Although the material used in the paper derives in the main, from a comprehensive research programme conducted at the University of Papua New Guinea, the paper does not discuss the research programme in detail, but draws selectively on it to illustrate the findings.

1.4 Background to the Study:

Mathematics is offered as one of the subjects in Matriculation at the University of Papua New Guinea, which can be achieved either through Preliminary Year (PY) or through Matriculation Studies (MS). The mathematics course for PY was conducted for internal students by the Department of Mathematics and the course for MS was offered to the external students by the Department of Extension Studies. External students were taught through correspondence, supplemented with weekly two hour tutorials at university centres around the country.

The population of this study was 1984 and 1985 intakes of PY and MS. It was divided up into three groups. There were internal students studying in PY and external students doing MS. The internal students were further divided into two categories; those students who joined PY immediately after completing Grade 10 called school leavers (SL), and those entrants who enrolled in PY after a year or more away from studies termed non school leavers (NSLs). External students called distance learners (DLs), were at least 21 years of age and had a minimum of two years work experience. There was high attrition rate among mature students, especially

the DLs, as 41 per cent of DLs and 17 per cent of NSLs dropped out during the year. More details about their background are shown in Table II later.

Students' mathematics performance, in the one year course, was determined by continuous assessment in the form of assignments, tests, and a final examination. At the time of the study, the assignments weighted 20 per cent, tests 30 per cent, and the final examination 50 per cent. Performance was assessed twice during their course. The first assessment called achievement 1 was given at the end of the first semester, and the second assessment known as achievement 2 was given at the end of the year and covered the whole year's work.

1.5 Previous Work:

In the literature a number of studies are found which examined the effect of different aspects of students' SES measures on students performance. They include the following studies from Papua New Guinea which have been conducted on students of different grade levels: Nelson (1966/67), Jones and Pope (1974), Thomas (1976), Weeks (1977, 1978, 1985), Silvey (1978), Tuppen (1981) and Wilson (1986). The results of the investigations which are particularly relevant to the present study from Papua New Guinea and other countries are analysed below.

The children of educated, and professional and sub professional parents have much higher chance of going to post-secondary institutions than the sons and daughters of uneducated, subsistence farmer parents (Nelson 1966/67). Tuppen (1981) reported similar disparities among the students of 10 high schools at Grade 10 level, though his distribution based on fathers' education and occupation was more equitable than Thomas' (1976) two national high schools students. His as well as weeks (1985) findings indicate that the educational disparities are slowly being corrected in the country.

Tuppen (1981) also studied the relationship between the fathers' occupations and

education, and the students assessments. Students whose fathers never went to school did worse than those whose fathers had some schooling. Students whose fathers had education and a high status job did better than others. Fathers level of education showed the most significant differences on a number of assessment and test variables. Fathers occupation correlated significantly with psychological tests, but not with subject scores in the Mid Year Rating Examination (MYRE)1 or school Certificate. Tuppen also examined the relationship of mothers' education to students performance. The students whose mothers had some education did worse on Grade 8 mathematics than those whose mothers had no education, but they did significantly better on MYRE science and two psychological tests. Fathers' education seemed a better predictor than mothers' education.

In Papua New Guinea the well to do parents normally speak english or pidgin at their homes, which the uneducated and subsistence farmer ones communicate in tok ples. Tuppen (1981) and Wilson (1986) studied the relationship of language spoken at home to students performance at Grade 10 and Foundation Year level respectively. The former found that the students who spoke english at home performed better only in english and in science than their counterparts. The latter noted that the mature students who spoke english at their homes got lower scores in mathematics and science subjects than others. Her further probing into the problem showed that these students were those who spoke english in their spouses' families and not in their parents' homes.

The following two overseas studies seem to be relevant to this paper.

In the South West USA, Carry (1962:48) investigated the scholastic achievement of 360 sixth grade students based on intellectual ability and SES. He found that achievement in arith-

metic seemed to be relatively free from the influence of social and economic conditions. No significant differences were found within any of the intellectual ability groups.

In India Chopra (1967:360) took father's occupation as a measure of SES and found the children of professionals doing significantly better than the children of others. Similar results have been noted in other developed countries by James and Pafford (1973:41).

It is possible that all the SES measures correlating with academic achievement of regular students also apply to mature students as well. However, there is one difference in the latter. Many of them have their own families and live independently of their parents. The effects of parental SES measures on their educational performance is there, but it tends to be moderated by their own home environment. Secondly, most mature students belong to previously socially disadvantaged classes (Boon, 1980:81). By and large they appear to come from less educated families and lower socio-economic groups than young students. However many of them are socially upwardly mobile and have been able by this stage in life to make up for the disadvantage of their childhood (Moses, 1978:73).

The other concern about research involving SES measures and academic achievement is the strength of the relationship reported by different studies. Correlations between SES measures and academic achievement varying from 0.1 to 0.8 have been reported by various studies (White, 1982:463). From the meta-analysis of 101 studies, White (1982) found median correlation of 0.251 between SES measures and academic achievement (p.467).

In summary performance in arithmetic does not appear to correlate with students' social and economic conditions (Curry, 1962:48). When students are used as units of study the

relationship between SES measures and achievement tends to drop with age. This happens due to the equalising experiences provided by socialising agencies, such as school, radio and TV as students grow older. Secondly, a disproportionate number of lower achieving students drop out of school in the higher grades, thus reducing the variance in achievement and correspondingly the magnitude of the correlation (White, 1982:469).

2. METHODOLOGY

There are a number of variables which could be used as measures of SES. However, the review of literature given above, especially from Papua New Guinea shows that the main SES variables for a developing country students are: father's education and occupation, mother's education and language mostly spoken at home. To obtain information on these variables two instruments were used in this study. They were information questionnaires for internal and external students. They were pre-tested on the 1983 intakes of PY and MS students and were modified in the light of their responses. They contained questions on students personal, educational, socio-economic and occupational background.

The questionnaires were administered to internal students during regular class time and to external students during one of their weekly tutorials. This personal approach had several advantages over postal administration. The response rate was high. Thus out of 150 DLs 90.4 per cent out of 117 NSLs 82.4 per cent, and out of 29 SLs 90.6 per cent responded to them. This increased the validity and reliability of the survey, giving weaker students a chance to reply, thus off setting the bias of brighter students who tend to dominate replies to questionnaires administered by post. As the mathematics performance does not depend only on students home environment, therefore, some information

Table II

Means and S.Ds of three populations in age, Grade 10 grade, arithmetic ability and number of years away from school.

	DLs		NSLs		SLs	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Age in years	26.4	4.7	21.9	2.8	18.6	1.6
Grade 10 grade *	2.4	0.9	2.9	0.6	3.6	0.5
Airthmetic ability	23.1	9.8	24.9	9.3	30.3	8.5
Years away from school	8.5	4.0	4.6	2.9	0	0

* Grade 10 grade in mathematics was converted to ordinal data on the following basis.
D = 4, C = 3, UP = 2, P = 1, F = 0.

other than the SES background of different samples of students is also provided. This is supplied in the form of the means and S.Ds of marker variables age.

Grade 10 grade in mathematics, arithmetic ability pre-test scores and number of years away from school in Table II. The effect of these variables on students mathematics performance is discussed in another paper (Kaeley, 1990).

3. THE RESULTS

In this section first the indicators of students' SES are discussed in detail. From these indicators the relative position of the students of the three samples is compared with respect to the four variables: father's schooling (FSCH), mother's schooling (MSCH), father's job (FJOB) and language mostly spoken at home (LANG). Second, the relationship between the dependent variables achievement 1 to 2 and these four variables is studied by computing the coefficients of correlations. Third, two variables father's education and father's job, known to be important measures of SES in the literature are taken and studied further by applying One Way Analysis of Variance (ANOVA). Language mostly spoken at home was also con-

sidered for ANOVA, but dropped later as it gave very small sub samples. Finally the dependence of students' mathematics performance on these four main SES variables was investigated by applying multiple linear regression analysis.

The results are reported in the following five sub sections:

- Indicators of SES.
- Effect of parents education, father's job and language spoken at home on students mathematics learning.
- Father's education and student's performance in mathematics.
- Father's occupation and student's achievement in mathematics.
- Dependence of students' mathematics achievement on SES variables.

3.1 Indicators of Socio-economic Status :

The results shown in Table III are indicators of students' SES. It shows that fathers of 60 per cent of DLs, 52 per cent of NSLs and 41 per cent of SLs were subsistence farmers. This result is analogous to Tuppen's (1981) findings for Grade 10 students and Wilson's 1985 survey

results on national high school Grade II students as quoted by Bacchus et al (1985). The former reported that 58 per cent and the latter 50 per cent of fathers of the students of their samples were subsistence farmers. This proportion for mothers was approximately four out of every five for DLs and NSLs and three out of every five for SLs. Some 13 per cent of fathers of DLs and one quarter of each of NSLs and SLs worked in paid jobs in the modern sector of the economy. A negligible number of mothers of students of all samples held such jobs. This result was different from Tuppen's (1981) survey. Some 42 per cent of fathers of students of his sample were in higher occupational categories. This is due to the reason that he was dealing with regular students, while the majority of the subjects of the present research were mature age entrants.

Table III
Indicators of SES.

Item	Percentage		
	DLs	NSLs	SLs
Fathers subsistence farmers/ no job.	60	52	41
Fathers in paid jobs.	13	26	26
Fathers did not go to school	58	56	63
Fathers with more than Grade 6 education.	4	10	15
Fathers with some training	7	10	11
Mothers subsistence farmers/house wives.	79	78	63
Mothers in paid jobs.	1	2	4
Mothers did not go to school	69	69	74
Mothers with more than Grade VI education	3	3	4
Mothers with some training	3	3	4
Speak English at home	2	3	4

Speak pidgin at home	18	22	18
Have 20 or less books at home	62	53	85
Have no dictionary at home	20	46	50
Read newspapers everyday	76	55	22
Read magazines at least once a week	46	30	22
Read books other than course books at least once a week.	63	63	70
Face difficulties in speaking english.	78	77	88

In the present study the SLs are younger and hence their parents are younger compared to the parents of their mature age counterparts, especially the DLs. Consequently they appear to be proportionally more represented in paid jobs than the parents of DLs. This indicates the change taking place in the society with the educational development of the country. This also supports West and Boon's (1980:81) statement from Australia that mature age students tend to come from the previously socially disadvantaged class.

Over half of the fathers and two thirds of mothers of the students in all the samples had no schooling. The comparable proportion of total male and female population over 35 years having no education was 88 and 93 per cent respectively (National Census, 1980). This result is much higher than Thomas' (1976) findings of national high school students fathers' education. Thirty four percent of the fathers of his sample had no schooling. This is higher than Tuppen's (1981) findings on Grade 10 students as well. In his case 43 per cent of the fathers had no schooling. Wilson 1985 as quoted by Bacchus et al (1985) has also shown that 35 per cent of the fathers of national high school Grade II students had no schooling. The majority of the students of this study were mature entrants, therefore, their

fathers were educationally different from the fathers of regular students. Most of the SLs are from the Highlands region, which has a low literacy rate, which made the SLs of the present study different from the students of earlier studies with respect to parents education. Two per cent of DLs, 3 per cent of NSLs and 4 per cent of SLs belonged to English speaking home. This is similar to 5 per cent of national high school Grade II students of Wilson's 1985 survey as quoted by Bacchus et al (1985) who came from English speaking families. However, this result is much below 13 per cent of Tuppen's (1981) survey of Grade 10 students who generally spoke English at home. About one fifth of students of each sample mostly communicated in pidgin at their homes.

3.2 Effect of Parents' Education, Father's Occupation and Language Spoken at Home on Students Mathematics Learning:

Table IV shows the association between four main SES variables i.e. student's father's schooling, father's job, mother's schooling, language mostly spoken at home and their mathematics achievement 1 and 2 scores. Correlations significant at the 0.05 level are printed in bold. The correlations between father's school-

ing, father's job, mother's schooling language mostly spoken at home and both achievement 1 and 2 for all individual samples except NSLs for mother's schooling with achievement 2 and SLs for language mostly spoken at home with achievement 2 were non-significant. This was so because the samples were homogeneous in other variables. Both these correlations were negative. For the NSLs this means the children of uneducated mothers had better performance in mathematics over the whole year than their counterparts who had educated mothers. This result is similar to Tuppen's (1981) Grade 8 students' where the children of educated mothers obtained lower scores in mathematics compared to the siblings of uneducated mothers. It is difficult to give explanation to this result. In the case of language mostly spoken at home the negative sign of the correlation shows that the SLs who spoke english or pidgin at home had lower scores in mathematics than tok ples and motu speakers

The possible reason is that the majority of the members of this sample were from Highlands region. The english and pidgin speakers were from the minority of the students who were from other parts of the country. Among highlanders

TABLE IV
Correlations between mathematics achievement and FSCH, FJOB, MSCH and LANG

	Achievement 1			Achievement 2		
	DLs	NSLs	SLs	DLs	NSLs	SLs
FSCH **	.02	.10	.31	.17	.13	.17
FJOB *	.00	.10	.08	.10	.05	-.10
MSCH **	.02	-.02	.28	.03	-.20	.29
LANG ***	.13	.16	-.13	.18	.15	-.44

These variables were converted to ordinal data in the following way:

- * Paid job = 4, earned money in the village = 3, subsistence farmer = 2, no job = 1
- ** More than primary = 4, primary = 3, incomplete primary = 2, no schooling = 1
- *** English = 4, Pidgin = 3, Motu = 2, Tok Ples = 1

by chance there were a number of bright students who spoke to parents at home, as their parents were comparatively less educated than the parents of other students, but obtained high scores in mathematics.

The association between achievement 1 and 2 scores and SES measures discussed above for mature students (DLs and NSLs) were especially low. This is possibly because of a decline in the relationship between SES measures and achievement due to age as shown in the review of literature in the beginning of this paper.

3.3 Father's Education and Student's Performance in Mathematics :

To study the association between father's

education and student's mathematics performance in detail the ANOVA was applied except where the size of the sub sample was very small. The results are reported in Table V. Throughout this paper the ANOVA tables will include results for the combined sample for the sake of providing complete information. Since the aim of this paper is to compare DLs, NSLs and SLs, therefore the combined sample results will not be discussed.

For achievement 1 the F-values are not significant for all samples. However, it is evident from the table and the figure that for NSLs the mean scores of the sub sample of students whose fathers had the highest education were substantially higher than the students of all the other sub

TABLE V
Student's mean scores by level of father's education.

	No Schooling		Incomplete Primary		Complete Primary		More than Primary		F
	Mean	n	Mean	n	Mean	n	Mean	n	
ACHIEVEMENT 1									
DLs	59.7 (16.3)	87	61.8 (17.3)	41	58.5 (11.0)	15	59.5 (19.6)	6	0.21
NSLs	62.2 (15.8)	65	60.9 (14.3)	25	58.5 (18.5)	11	70.0 (14.9)	12	1.42
SLs	69.4 (10.8)	17	72.6 (15.9)	5	62.0 (0.0)	1	82.5 (13.9)	4	
ALL	61.6 (15.8)	169	62.2 (16.3)	71	58.7 (14.0)	27	69.8 (17.5)	22	2.18
ACHIEVEMENT 2									
DLs	51.3 (14.7)	53	53.2 (14.3)	26	59.2 (12.4)	6	64.5 (10.6)	2	1.3
NSLs	57.2 (11.8)	56	52.0 (16.0)	20	54.0 (14.3)	10	66.5 (13.8)	10	2.83*
SLs	62.4 (4.5)	17	64.8 (19.8)	5	50.0 (0.0)	1	72.8 (23.8)	4	
ALL	55.4 (13.9)	126	53.9 (15.7)	51	55.6 (13.1)	17	67.8 (15.6)	16	4.02**

Figures in the brackets are S.Ds. (* means F-value significant at the 0.05 level. ** means F-value significant at the 0.01 level.

samples. There is a marked difference in the score representing the SLs from the other samples as the only student in the sub sample whose father had full primary education was getting substantially lower marks than the students of the other sub samples. The size of the sub sample involved makes the result statistically insignificant.

For achievement 2 the F-values are significant for NSLS at the 0.05 level. The trend for students of the sub samples whose father had highest education getting substantially higher mean scores than the students of all the other sub samples continued for all samples and became significant at the 0.05 level between sub sample of students whose fathers have more than

primary and incomplete primary education in the case of NSLS.

3.4. Father's Occupation and Student's Achievement in Mathematics:

Table VI depicts the results of ANOVA for mathematics achievement 1 and 2 scores for the individual samples as well as the combined sample as related to father's occupation.

The F-values are not significant for all samples both for achievement 1 and 2. However, from the figure and the table it can be seen that the students in sub samples of all samples except the SLs, whose fathers were in paid jobs got higher mean scores than the students of all

TABLE VI
Student's mean scores by level of father's education.

	No Job		Subsistence farming		Earned Money in the Vill.		Paid Job		
	Mean	n	Mean	n	Mean	n	Mean	n	F
ACHIEVEMENT 1									
DLs	62.4 (18.0) ^S	20	60.0 (14.9)	70	57.6 (17.2)	40	64.1 (16.2)	20	0.42
NSLs	61.3 (16.9)	13	60.7 (15.2)	47	63.8 (17.4)	24	64.6 (15.8)	29	0.61
SLs	-	-	70.7 (12.3)	11	71.7 (11.1)	9	73.1 (17.3)	7	0.07
ALL	61.9 (17.3)	33	61.2 (15.0)	128	61.4 (17.2)	73	65.5 (15.8)	56	1.02
ACHIEVEMENT 2									
DLs	53.9 (16.9)	14	51.5 (15.0)	46	52.3 (10.8)	19	60.0 (13.8)	9	0.30
NSLs	55.9 (10.8)	10	56.4 (14.1)	39	56.4 (13.9)	21	58.0 (15.2)	26	0.30
SLs	-	-	65.9 (15.3)	11	62.9 (14.6)	9	62.1 (22.5)	7	0.25
ALL	54.7 (14.5)	24	55.1 (15.1)	96	56.0 (13.2)	49	59.1 (16.5)	42	0.79

S Figure in the brackets are S.Ds.

Note: None of the F-values are significant

the other sub samples. It is analogous to the results of some of the other studies reviewed in this paper earlier, where modest to negligible association of father's occupation and student achievement has been reported.

The reason for getting negligible relationship between achievement and SES measures for mature students discussed in this paper earlier, apply here as well.

3.5 Dependence of Mathematics Achievement on Socio-economic status variables :-

The contribution of individual SES variables and all of them taken together to variation in achievement 1 (ACH1) and achievement 2 (ACH2) is shown in Table VII.

Table VII indicates that SES variables make the largest contribution to variation both in achievement 1 and achievement 2 among SLs and a much smaller in the case of mature students (DLs and NSLs). The reason is that there were proportionally more students in the

sample of SLs than their mature age counterparts who belonged to higher SES families, thus making the sample heterogeneous. The parents of SLs were educated and were working in paid jobs in the formal sector of the economy. The large majority of the parents of the mature students did not have any formal education and were subsistence farmers. The well off position of SLs, parents might have helped them to provide educational facilities at home to their children which could have contributed to their better performance in mathematics.

The positive change in variation accounted for DLs from achievement 1 to achievement 2 is more due to high drop out rate among lower SES students, thus improving the overall SES of the whole sample.

Further examination of Table VII indicates that the maximum contribution of achievement 1 comes from language mostly spoken at home both for DLs and NSLs. The same pattern continues for achievement 2 in the case of DLs. In

TABLE VII

Percentage of variance accounted for by SESV group

Dependent	Variables Independent	$100 XR^2$		
		DLs	NSLs	SLs
ACH 1	FJOB	0.05	1.2	0.57
	FSCH	0.01	1.4	9.8
	MSCH	0.01	0.01	7.7
	LANG	1.6	2.2	9.5
	All Together	2.0	4.6	44.3
ACH2	FJOB	1.01	0.16	0.94
	FSCH	3.0	2.3	3.0
	MSCH	0.11	3.9	8.5
	LANG	3.3	1.9	18.9
	All Together	6.1	4.5	51.5

NSLs mother's schooling takes over the place of language spoken at home as a maximum contributor to variance in achievement 2/.

4. CONCLUSION

From this study the following conclusions could be drawn.

First, the parents of the majority of the mature students (DLs + NSLs) have not gone to school and are subsistence farmers. For SLs the proportion of such parents is comparatively less, but is still higher compared to other PNG studies mentioned in the review of literature. This is due to the fact that the majority of them are from Highlands region, where the literacy rate is lower compared to the rest of the country. Moreover, it could be due to the small size ($n=29$) of the sample as well. If Papua New Guinean students' background is compared to the students of the Western countries, it shows the difference between the SES background of the students from a developing country and the developed countries. The majority of the parents of the students from the developed countries have gone to school and have paid jobs.

Second, this study also shows that as in

developed countries (Boon, 1980:81), the majority of the mature age students in Papua New Guinea also tend to come from previously socially disadvantaged classes.

Third, as shown in the review of literature, the mature students SES background does not relate to their mathematics performance. However, there is one difference between developing country and developed countries students, i.e. in the former it was father's education and in the latter father's occupation which has shown closer association with their mathematics performance. The mathematics performance of SLs showed significant dependence on their SES background. This result may not be statistically valid due to the small size of the sample.

Finally, despite of the difference in the mode of learning of DLs and NSLs, the performance of the latter is similar to the former, but not to the SLs, with whom they were learning mathematics in the face-to-face classes, as discussed in another paper (Kaeley, 1988). This means it is not the mode of instruction but the SES background of the students which showed bearing on their mathematics performance.

REFERENCE NOTES

1. Mid Year Rating Examination (MYRE): According to this method of examining, Grade 10 internal assessment of students was scaled according to the school's result on a national MYRE. At the end of the year School Certificate assessments (Tuppen, 1981:11). This examining method was replaced with a norm based examination system at the end of 1983.

REFERENCES

- Bacchus, M.K. et al (1985) *Report on Upper Secondary Education in Papua New Guinea* (Waigani, Department of Education).
- Boon, P.K. (1980) Attitudes of staff towards mature age students, in: T. Hore and L.H.T. West (eds.), *Mature Age Students in Australian Higher Education* (Higher Education Advisory and Research Unit, Monash University).
- Chopra, S.L. (1967) Parental Occupation and Academic Achievement of High School Students in India, *The Journal of Education Research*, 60, 8, pp. 359-362.

- Curry, R.L.(1962) The Effect of Socio-economic Status on the Scholastic Achievement of Sixth Grade Children, *The British Journal of Educational Psychology*, XXXII, pp. 46-49.
- Department of Education (1989) *1988 Education Staffing and Enrolment Statistics. National Education System*. (Waigani, National Department of Education).
- Department of Education (1985) *Growth of Education since Independence: 1975-1985*. (Waigani, Department of Education).
- Fredrick, D.et.al (1984) College Freshmen Mathematics Abilities: Adults Versus Younger Students, *School Science and Mathematics*, 84, 4, pp.327-336.
- Holmberg, B.(1990) a Paradigm Shift in Distance Education? Mythology in the making in International Council for Distance Education, 22, pp.51-55.
- James, A.N. and W.N. Pafford (1973). The Relationship between Academic Achievement in Science and Father's Occupation, *Science Education*, 57, 1, pp. 37-41.
- Jones, J.and A .Pope (1974) Home background as a determinant of success in a Papua New Guinea High School (Waigani, UPNG, ERU Research Report No.11).
- Kaeley, G.S.(1989) Entry style versus mathematics performance in two instructional modes and three age groups. (in press).
- Kaeley, G.S.(1988) Distance versus Face-to-Face Learning: A Mathematics Test Case, *International Council for Distance Education Bulletin*, 16, pp. 54-64.
- Moses, I. (1978) Mature age students -- are they really different ? in : S. Knights (ed.) *Returning to Study : The Mature Age Students* (Sydney University Extension Programme).
- National Planning Office (1984) *The National Public Expenditure Plan 1985-88* (Waigani, National Planning Office).
- Nelson, H. (1966/1967) The University's First Year, *New Guinea*, December and January, pp. 19-24.
- Ros, L. (1983) Monitoring Standards in Mathematics of the Grade 10 Output -- Research Report 1983, (mimeographed), (Goroka, Mathematics Department, Goroka Teachers College).
- Silvey, J.(1978) *Academic Success in PNG High Schools* (Waigani, UPNG, ERU Research Report No.26).
- Skemp, R.R. (1971) *The Psychology of Learning Mathematics*, (Penguin Books, Harmondsworth, Middlesex, England).
- Thomas, E.B. (1976) A Comparative Study of Senior High School Students in Papua New Guinea and Western District of Victoria (Waigani, Unpublished Ph.D. Thesis , UPNG).
- Tuppen, C.J.S (1981) *School and Student Differences : Grade Ten Examination and Assessment Results* (Waigani, UPNG , ERU Research Report No. 39).
- Weeks, S.G. (1977) *The Social Background of Tertiary Students in PNG* (Waigani, UPNG, ERU Research Report No. 22)
- Weeks, S.G. (1978) *Youth in their Villages* (Waigani, UPNG, ERU Research Report No. 24).
- Weeks, S. G. (1985) *Students and Background : A Literature Review*, in : M. Bray, and P. Smith (Eds) *Education and Social Stratification in Papua New Guinea* (Melbourne, Longman Cheshire Pty Ltd).
- White, K.R. (1982) The Relation Between Socio-Economic Status and Academic Achievement, *Psychological Bulletin*, 91, 3, pp. 461 -481.
- Wilson, A. (1986) Science Students at Risk : A Papua New Guinea Analysis, *PNG Journal of Education*, 22, 2, pp. 141-152.

DISTANCE EDUCATION - Problems and Challenges

Bakhshish Singh

Every system, every organisation or institution is bound to face challenges to some extent, and I feel challenges help in improving things as otherwise we would become complacent and over confident which attitude would hinder improvement, innovations, quality improvement and success. When a new system is introduced or a new institution established these are bound to be greater challenges and problems and the organisers must be prepared to face them boldly and do their best to meet the challenges and resolve the problems in order to establish credibility and reputation of the system and institution. Although Distance Education in a way is not a very new system as it has been in vogue in some form or the other for over a century. But the system assumed a proper shape only during the last two decades or so. In that sense it is a new system and therefore it is still faced with quite a few challenges which must be met with an open mind. However, that should not make us pessimistic, particularly when quite a lot has been achieved to resolve problems during the last three decades. The system has grown tremendously all over the world and it now compares favourably with the age-old class room teaching system which is elitist, conservative and rigid. The Open University teaching-learning system established in a number of countries over the world has been a bold and successful venture symbolising the openness, innovative and flexible characters of the distance education system. The distance educators can now hold their heads high and need not suffer from any inferiority complex. However, we must continue for further improvements in order to achieve excellence. And that can be done by

understanding and resolving the challenges and problems that we may still be facing.

In my view based on my personal experience over the last twenty-one years, my interaction with distance education experts in different countries and my readings of various publications on distance education the challenges that distance education is faced with are:

1. Quality of content, comprehensibility and printing of course materials. This particularly applies to correspondence courses institutes or distance education departments established by the conventional universities. And the main reason for that is that the conventional universities do not allow the requisite flexibility and innovations which are a must for the distance education system. Unfortunately this problem is faced by most of the distance education institutes and even open universities because most of their teachers are also drawn from the conventional system. The academics in the conventional universities are generally averse to changes and innovations in the curriculum. Most of them are obsessed with the idea that there can be no teaching without face-to-face contact. They probably deliberately shut their eyes to the deterioration of standards, irrelevance of their system to the needs of society and the new developments in the field of communication technology. They also don't seem to realise that the quality of quite a few of their teachers is much below the mark and face-to-

is much below the mark and face-to-face contact between such teachers and the students hardly serves any purpose. The general attitudes of most of the teachers and students in the conventional system is hardly conducive to proper learning. Most of the conventional universities in many countries, these days, are plagued by agitations and indiscipline resulting in drastic lowering of teaching hours and standards. Moreover, the ever-increasing demand for education at all levels in most of the countries can no longer be met by the conventional universities, colleges and schools. They have reached the saturation point and most of the nations can not afford to open new universities, colleges and schools because of the high cost factor. In fact that is the main reason why distance education system is being adopted by most of the countries, particularly the developing countries because you can teach for larger numbers at less than even half the cost of the Conventional System thereby democratising educational facilities. However, we should not draw any satisfaction from the limitations or drawbacks of the Conventional System. We know that course material is the main stay of teaching through the distance education system and it must therefore receive our greatest attention. Some of the important steps to ensure quality if course material are:

- * innovations in curriculum which should not be stereotyped.
- * relevance of curriculum to the needs of learners.
- * selection of really good teachers/teams for writing the course material.

- * impartial and thorough editing of the content of course material to ensure that it is self-learning material in the real sense of the word.
- * is factually correct and up-to-date, is within the comprehension level of the learners, is written in simple language, it carries a list of suggested reading by the students.
- * format editing of the course material in accordance with the distance concepts to ensure that:
 - * it is put across in a personal style
 - * it is set in a standard format
 - * it has built-in exercises such as self-check exercises to help self learning.

The printed course material should be despatched to the students strictly according to the schedule which ought to be intimated to the students in the beginning. The distribution could be organised through mail, through Study Centres or at the institute according to the students' convenience and option.

The course material must be printed strictly according to schedule. There ought to be periodic review, revision and updating of the course material on the basis of feedback from learners, teachers/tutors and advice of subject experts.

2. Students' Assignments: Another aspect connected with the course material is student assignments (SRS). The institutions must ensure proper and careful evaluation of SRS by teachers/tutors with helpful and detailed comments/suggestion and prompt return of the evaluated assignments to students within the shortest possible turn-around-time lest they should lose interest in submitting them. The turn-around time can be considerably reduced by using computers for the evaluation of objective type assign-

ments. We may therefore have two types of assignments - computer marked (objective type) and tutor-marked (essay types). This aspect presents a very formidable challenge which calls for serious attention of the distance teaching institutions in order to ensure the success of this important non-contiguous two-way communication between the learner and the teacher/tutor. It would greatly help the learner to overcome the feeling of isolation in the system of teaching at a distance. The learner will have the feeling that there is some one to look after him/her. Another important point in this regard is that the assignments must be such as may require some thinking and originality on the part of the learner so that he/she doesn't copy out answers from the course-material supplied to him/her. These assignments should be treated as internal assessment of the learner's performance and given adequate weightage, say 20-30 %. The weightage for the end-of-term examination would thus be 70-80 %. The assignments could form a part of each block of 4-5 (units) and supplied to the students as a part of the last unit of each block or separately printed and sent along with the last unit of the block. It should either be compulsory for the students to submit assignments or else they should lose the weightage given to the assignments.

3. New Communication Technology

Since distance education is a multimedia teaching-learning system, integration of the new communication technology presents another challenge which must be met if we are to make the system successful. It is not so difficult for the developed countries to

achieve this objective but the developing countries have certain limitations. Highly sophisticated communication technology may not be feasible for them for want of funds as also for non-availability of necessary gadgets/equipment with the learners. However most of the developing countries can make uses of the Radio, Television, Audio and Video Cassettes to supplement instruction imparted through the printed course material. As Lord Perry puts it, 'two-way communication', both audio and video, is the key to the acceptance of distance education methodology. Most of the open universities, even in developing countries have adopted reasonably good communication devices, but the distance education/correspondence courses institutions have not paid adequate attention to this aspect. There is now a wide range of communication technology devices available and open universities in the developed countries have adopted quite a few of them/e.g. an extremely versatile audio-visual teaching medium based on the conventional TV Set, standard audio cassettes and micro-computer technology developed by the O.U. in U.K.; Cyclops, (as in U.K.), Telidon-a Canadian Video System, Radio tutorials/Radio conferences as in New Zealand and Australia, telephone for tutor-learner, learner-learner, tutor-learners in a group, tutor learners in several groups by which a teacher can lecture upto 200 classes, simultaneously and cover 40,000 students as tried by Wisconsin university, USA, conferencing/seminars with tutors by linking several telephone numbers of students or seven study centres, self-help conference cells by which students can interact with one-another on the telephone. Lot more

developments are expected in the field of communication technology. But as mentioned earlier a distance education institutes in the developing countries which can not afford to in for higher sophisticated communication technology will have to adopts a rational and practical approach in selecting a judicious mix of the communications media relevant to their needs and in keeping with their resources. Most of these countries can probably afford to adopt a mix of Radio, television, audio and video cassettes. Television has great potential and its visual aspect makes it more effective than the radio. This has been amply proved by some universities of the Air, Tele Universities and Open Universities-Distances Education Programmes through this medium can benefit the general public too in addition to the students.

In fact distance education institutions can be the pace-setters for the conventional universities for adopting new communication technology to reinforce their class-room teaching method which probably would soon become a necessity for these universities.

4. Collaboration among distance education institutions/open Universities at the provincial, regional, national and international level is another challenge which calls for very careful consideration. This would help in

- * Pooling of resources
- * Wider choice of course offerings
- * Reduction in costs
- * Mobility of students
- * Sharing and exchange of expertise etc.

Some very significant initiatives have been taken in this direction by forming

national bodies of distance education, international bodies like the International Council for Distance Education (ICDE), European Home Study Council, Association of South Pacific & Asia (ASPESA), Canadian and British Associations of Correspondence/Distance Education Institutions. The latest and most effective initiative has been taken by the Commonwealth Countries by establishing the Commonwealth of Learning (COL) in Vancouver, Canada. I am sure these initiatives will go a long way in bringing about collaboration and net-working of distance education institutions, including the open universities. However, bolder steps need to be taken at the national level, specially in the developing countries. That would avoid duplication of distance education programmes and courses at least in subjects where the content is more or less similar. It would also help in further reduction of costs.

5. Staff Development: Lack of adequate initiatives and efforts for staff development is yet another very important aspect which has received scant attention of distance education organisations. Most of the teachers for distance education institutes are drawn from the conventional universities and they put them on the job without giving them any training. The result is that many of such teachers resist innovations aimed at making curriculum more meaningful and relevant to the needs of the learners and society. As such it becomes a problem to break-away from the traditional pattern in the conventional universities. Moreover such teachers who are used to the closed classroom teaching find it difficult to adapt themselves to the multi-

media distance teaching methodologies. Even the external experts generally try to impose the conventional university pattern while helping the distance education institutions in designing curricula for their programmes and courses. Although some parity has to be maintained so that the conventional universities and equivalence bodies give recognition/accreditation to the programmes of distance education institutions, we must not totally succumb to the pressures of the conventionalists. Of course, from my personal experience at Indira Gandhi Open University I can say that some of the experts had open minds and were in favour of changes from the traditional pattern. Therefore with a little bit of discussion and persuasion we generally succeeded in bringing them round to our view point to ensure that our curricula are innovative, meaningful and relevant to the needs of learners. Unfortunately the distance/correspondence education institutes tagged to the conventional universities have no such scope and they are more or less mere extension centres of their conventional universities.

However, with coming in of COL and the active interest that some of the other international and national bodies of distance education are taking things, seem to be looking up, and I am sure the much needed collaboration and networking at the national and international level will take some shape. That would be very useful stride towards achievement of excellence, innovations and relevance of distance education programmes and courses. And I am sure this would ultimately makes the conventionalists also to follow our pattern in their universities.

This could then lead to the very much needed mobility of students from the conventional universities to distance education institutions/open universities for doing some courses which they consider more relevant to their needs, and vice versa. This kind of mobility of students between the two systems would provides choice of course offerings to the learners.

As for as staff development is concerned, recently some courses for training distance educators have already been launched e.g.

- * A course on Essentials of Distance Education by Borje Holmberg- Fern University, Hagen, Germany.
- * Diploma in Distance Education Courses of the International Extension College and the University of London Dept. of Education.
- * Post-graduate Diploma in Distance Education of Indira Gandhi National Open University.
- * Surrey University Course on Distance Education U.K.

Distance education institution, should make it obligatory for their teachers to do one of these courses, or at least encourage them to take up some such course. In due course of time it could be laid down as an essential qualification for the recruitment of teachers. However, the institutes and the national bodies of distance education should at their own level organise short training courses/seminars/workshops/refresher courses for their teachers.

6. Student Support Services: Student Support Services which have come to

be recognised as an important and essential feature of distance education/open university system poses a formidable challenge to the distance education institutions. Except for open universities and some well organised institutions, others hardly provide any worthwhile student services. Although printed course material is designed to be self-instructional we can not deny the facts that it is mass produced and that distance education learners vary greatly in their motivation, learning styles, level of comprehension etc. That is why now even the course writers have come to recognise the need of providing some kind of support to the distance learners who hardly get a chance of interaction with their teachers and fellow students. This gives some of them the feeling of isolation and results in large drop-out rates.

The Open Universities have given the lead in organising a network of student support services to help their learners who are scattered over large areas. But most of the correspondence/distance education institutions do not provide any support services and the study centres set up by some of the institutes are just an apology for Support Services.

In fact if we study the impact of Support Services provided by some of the Open Universities/ distance education institutions, one would realise that a well organised Support Services serve as the nerve centre of the system. These services which can be of many types help the learners in :

- * better, comprehension of the course material

- * overcoming the feeling of isolation and individual frustrations,
- * reducing drop-out rates
- * supplementing the printed course material through counselling tutoring and face-to-face contact programmes.
- * providing real multimedia teaching to the learners through audio and video cassettes. Counselling, interaction between the teacher and the learner and among the students as well.
- * feeling that he/she is better served and looked after in the pursuit of his studies.

Considering all these advantages, distance education institutions should give special attention to the provision of student Support Services and regard it as an essential and fruitful investment. It would, as Michael G Moore puts it (ICDE Bulletin, Vol.14, May 1987) "ensure proper exploitation of the much more expensive distance teaching materials, and bring about improvement in the distance education system.

Apart from providing academic counselling, face-to-face contact programmes and evaluation of students assignment by counselors/tutors, the study centres can serve as

- * information cells to provide necessary information and guidance to the potential clients and new entrants to the system.
- * centres for assessing local needs which would help the institution to design relevant programmes/courses.
- * meeting place for interaction between the learner and the teachers through socialising & interaction, counselling and face-to-face contact programmes
- * reading rooms for learners
- * good library centres with multiple copies of texts, suggested books for

supplemental reading and course materials.

- * centres for listening to audio cassettes and watching Video Cassettes and T.V. Programmes.
- * centres for social and cultural activities to reduce the boredom of the learners
- * centres for delivery of course materials and receipt and return of students assignments.
- * centres for distribution of Admission brochures, registrations, admission forms, and fees etc. etc.

As regards the form of Support Services there can be many forms which have been tried and adopted by OUS and some distance education institutes. But much will depend upon the availability of finance and resources. If the resources are limited as in the case of developing countries maximum utilization should be made of the local resources available in schools, colleges and universities for counselling, evaluation of student assignments, contact programmes etc. But it would be absolutely necessary to appoint a coordinator at each study centre with adequate office and library staff. Efforts could also be made to organise students help groups at different places. A well-stocked library and reading room facilities are a must. It would also be necessary to arrange effective monitoring of activities at the Study Centres. Funds permitting this could be achieved by setting up Regional Study Centres for a cluster of study centres in different region. We should also remember that one of the important objectives of distance education is to democratise education and to take it to the very door-steps of the backward sections of society in

remote rural areas. It would therefore be helpful to organise a few mobile study centres to achieve this objective. These mobile centres could get encouraging publicity for the institutions among the people in these areas to take up courses offered by the institution. It would particularly benefit the females who fight shy of going to the cities for acquiring education.

Since the number of distance education institutions is considerable and is bound to increase further we should strive for collaboration among these institutions in order to cut down costs. Another factor, already discussed under Staff Development is very much applicable here for training the coordinators and counsellors of Study Centres so that there may be some kind of uniformity and reasonable standard in the activities of these centres. But we must give due priority to the building up of a proper Student Support Services to make distance teaching-learning a really sound and effective system which has a great role to play in the spread of education and dissemination of knowledge all over the world.

7. Research: Research in any educational system is a must, more so in a new system. Unfortunately very little has been done in this direction by most of the distance education institutions. Of course some universities and international organisations have done some useful research, and here I would specially mention Fern-Universitat, International Council for Distance Education, Open University of U.K. which have been doing considerable work in the area of research on distance education. Some other open universities like Athabasca university

in Canada have also entered the field of research which is bound to encourage some other universities also to undertake some research projects. We must concede that Research should be an essential feature in the future development of distance education which is now definitely a distinct discipline and its own strength which will have to be accorded due recognition by Academics in the conventional universities and all the authorities connected with education of the people all over the world.

8. Miscellaneous Challenges: There are a few other challenges that confront the distance education institutions such as:-

- * inadequate funding and wrong attitude of the authorities concerned that distance education should be self-supporting. They do not realise that this system is very much less costly as compared to the formal system, it covers for larger number of learners and therefore deserves adequate funding, specially in the initial stage.
- * prejudice and discrimination against distance education students in admission to conventional colleges and universities, recruitment for jobs, fee concessions and other facilities that are available to students in the formal system.
- * inadequate physical facilities
- * misappropriation/diversion of financial surplus of the correspon-

dence/distance education institutions for the benefit of other departments / projects of the universities running correspondence / distance education courses.

However I feel, in due course of time the authorities would, through gradual awareness of the potential of distance education system to cope with the ever-increasing demand for education which cannot be met by the formal system, give up whatever prejudices they have realised, the societal impact and relevance of this innovative system in democratising and opening up educational opportunities for the masses and give it the necessary financial help, support and accept its credibility.

I would now end up my paper on a cheering note to my colleagues in the field of distance education that we need not smart under any inferiority complex. We have no rivalry with the formal system. Rather we are there to help them also in bringing about improvements in their system. The two systems can work together in close collaboration for the good of our countries and society. Lastly, I would say with confidence that distance education has a very bright future and it would soon develop into a sort of international education system which would be a unique achievement. But we will have to work hard, tirelessly and with utmost dedication to realise this commendable goal. We must gird up our loins to meet the challenges mentioned by me. I am sure we can do it if we have the necessary will-power and determination to overcome the challenges. Nothing is impossible if we strive hard.

GROWTH OF DISTANCE EDUCATION IN INDIA

Ruddar Datt

Three decades ago, distance education in India was conceived as a pilot project in the university of Delhi. The success of this experiment encouraged other universities to take up instruction through distance education technique. In 1989, we have, in the country, 5 universities and 35 Institutes/Directorates imparting instruction through distance education technique. Among the 5 universities, the Andhra Pradesh Open University (1982), Indira Gandhi National Open University (1985), Kota Open University (1987) and Yashwant Rao Chavan Maharashtra Open University (1989) have been able to make a good progress during the short span of 6-7 years. However, Nalanda Open University (Bihar) though formally established, is yet to make a serious beginning in taking up distance education courses. Besides, the open universities which are solely devoted to the development of distance education, 35 institute

/directorates are working within the conventional universities.

As against, the open university system which is yet in its infant stage of development, distance education is imparted largely by correspondence directorates/institutes teaching with the formal university system. In 1988-89, as against 17 per cent of the students being serviced by the open universities, the distance education directorates accounted for 83 per cent of the total enrolment. However, these proportions are likely to change over time as the Open University Network matures. The two systems are to co-exist with advantages and limitations of both of them. The Open University System has much greater freedom to innovate courses, experiment with flexible designs and evolve its own system of evaluation. The biggest advantage of the system is its exclusive devotion to the development of distance education. As against it, the Distance Education directorates attached

Table 1

Distribution of enrolment of Distance Education students between Open Universities and Directorate attached with conventional Universities in India.

	1988 - 89	1989 - 90
1. Andhra Pradesh Open University	37,435	18,524*
2. Indira Gandhi National Open University	21,986	31,663
3. Kota Open University	18,327	14,131
4. Yashwant rao Chavan Open University	---	3,972
i) Total Enrolment in Open Uni.	77,748 (17.1)	68,290 (14.0)
ii) Total enrolment in DE in conventional Uni.	3,76,495 (82.9)	4,19,059 (86.0)
iii) Total enrolment in distance education in India	4,54,243 (100.0)	4,87,349 (100.0)

* The figure of Andhra Pradesh Open University for 1989-90 appears to be an under-estimate, since the UGC was not supplied figures of enrolment for B.A. and B.Sc. We have, therefore, relied on 1988-89 figures to determine the share of Open Universities in Distance Education.

with conventional universities use the same syllabi and carry with them the stamp of the well-established conventional universities and thus are more acceptable to the public. A student from these directorates can switch over without much difficulty to conventional system and vice-versa. The pattern of the syllabi of the Open University System does not provide the student this advantage of transferability. As a consequence, the Distance Education Directorates with conventional system will continue to attract students.

Since as a part of the National Education Policy, the state intends to keep enrolment in formal education restricted, it has stopped encouraging the starting of more and more colleges and universities. As a consequence the rate of growth of enrolment in the conventional universities has been less than the rate of growth of enrolment in the distance education system. Table 2 reveals that as against an enrolment of 1.98 lakhs in distance education system in 1982-83, the total enrolment jumped to the figure of 4.87 lakhs in 1989-90 showing the growth rate of 16.2 per cent per annum during the period 1982-83 --- 1988-89. As against it, the growth of enrolment in the conventional universities was 3.9 per cent per annum during 1982-83 -- 1988-89. This only highlights the fact that the distance education system has been growing faster than the conventional system and this is evidenced by the figures given in Table 2. The total enrolment in the higher education including distance education has increased from 24.9 lakhs in 1975-76 to 44.0 lakhs in 1988-89. As against it, the enrolment in distance education has increased from 0.64 lakhs in 1975-76 to 4.54 lakhs in 1988-89. In relative terms, the share of distance education which was only 2.6 per cent in 1975-76 improved to 5.9 per cent in 1982-83 and was of the order of 10.3 per cent in 1988-89. Obviously, distance education is slowly and gradually increasing its share and if this trend continues, then by the turn of the century the number of students in distance education may reach an order of 20 per cent of

the total enrolment in higher education. In this way, the distance education is likely to fulfill the national target of achieving 20 per cent enrolment through this technique of education by the turn of the century.

The history of growth of distance education reveals the following:

1. During the decades 1962-72, the process of establishing undergraduate courses was witnessed.

2. During the second decade, 1972-82, there has been rapid expansion of distance education courses both at the undergraduate and postgraduate level, though the growth rate at the postgraduate level, was much higher than the growth rate at the undergraduate level. But most of these courses were a mere replica of the traditional B.A./B.Com., M.A./M.Com., B.Sc. courses of the Universities. In this sense, this phase may be described as "expansion phase" of the traditional university structure. It marked the process of expansion.

3. The third phase started with 1982 when the first Open University viz. Andhra Pradesh Open University was established - an institute totally devoted to the development of distance education in India. This was followed by certain other open universities being established, namely, Indira Gandhi National Open University, Kota Open University and Yashwantrao Chavan Maharashtra Open University. The most significant development of distance education was the setting up of open universities in India during the eighties.

TABLE 2

TOTAL ENROLMENT IN HIGHER EDUCATION IN INDIA

	University Departments & Colleges	Distance Education (Universities & Institutions)	Total Enrolment
1975-76	24,26,109 (97.4)	64,210 (2.6)	24,90,319 (100.0)
1976-77	24,31,563 (96.8)	79,718 (3.2)	25,11,281 (100.0)
1977-78	25,64,972 (95.6)	1,19,163 (5.5)	26,84,135 (100.0)
1978-79	26,18,228 (95.1)	1,33,459 (4.9)	27,51,687 (100.0)
1979-80	26,48,579 (95.1)	1,36,699 (4.9)	27,85,278 (100.0)
1980-81	27,52,437 (94.3)	1,66,428 (5.7)	29,18,865 (100.0)
1981-82	29,52,006 (93.8)	1,93,691 (6.2)	31,45,757 (100.0)
1982-83	31,33,093 (94.1)	1,97,555 (5.9)	33,30,648 (100.0)
1983-84	33,07,649	n.a.	n.a.
1984-85	34,04,096	n.a.	n.a.
1985-86	35,70,897 (91.0)	3,55,090 (9.0)	39,25,987 (100.0)
1986-87	36,81,870 (91.1)	3,57,791 (8.9)	40,39,661 (100.0)
1987-88	38,14,417 (89.4)	4,02,720 (10.6)	42,17,137 (100.0)
1988-89	39,47,922 (89.7)	4,54,243 (10.3)	44,02,165 (100.0)
1989-90	n.a.	4,87,349	n.a.

ANNUAL GROWTH RATE OF ENROLMENT

1975-76 TO 1982-83	3.7	17.4	4.2
1982-83 TO 1988-89	3.9	16.2	4.7

4. During 1980, the trend towards diversification of distance education was also observed. The diploma/certificate courses of non-traditional nature were started in both traditional universities and in the open universities, although their impact on total enrolment has been very modest. There is however, a growing realization that this trend towards non-traditional courses needs to be strengthened.

SPATIAL DISTRIBUTION OF DISTANCE EDUCATION

Review of spatial distribution of distance education has been indicated in Tables 3, 4 and 5. For the purpose of analysis the country has been classified into four regions i.e. southern Region, Northern Region, Central and Western Region and Eastern Region. Table 4 reveals that whereas the Southern region accounted for only 37 per cent of enrolment in 1975-76, its share has been gradually moving up and it rose to the level of 70 percent in 1982-83 and then it further rose of 71.5 percent in 1987-88 and was about 59 percent in 1989-90. Northern Region came second in order of importance and its share initially was 58 percent in 1975-76, but it declined to around 21.4 percent in 1982-83. However, it has started picking up again and its share stands as 30.5 percent in 1989-90. The Central and Western Region which was a late starter has a share of about 8 percent in 1989-90. But for the state of Maharashtra the other states viz. Madhya Pradesh and Gujarat are having a very insignificant position so far as enrolment in distance education is concerned. Out of the total enrolment of 38,324, Maharashtra alone accounts for 36,089 students viz., 94 percent of the total enrolment in distance education in the state. The Eastern Region had a total enrolment of 13,300 in 1989-90 i.e., 2.7 percent of the total enrolment in distance education in the country. Only two states which have established distance education programmes are Bihar and Orissa. Considering

the population of the Eastern Region as also the enrolment in higher education in the Eastern Region, it may be stated that the share of Eastern Region is totally insignificant. West Bengal, Manipur, Meghalaya, Assam, Nagaland, Tripura, Sikkim have all yet to establish any institute in distance education. Obviously these states can be considered as the arid areas so far as distance education programmes are concerned.

In Table 4 data about the total enrolment in colleges/university departments and distance education in each state and region has been worked out for 1988-89. The data reveal that as against the total enrolment of 18.4 lakhs in the Southern Region, distance education accounts for 3.02 lakhs i.e. 23 percent of the total. Similarly, the share of distance education in total enrolment in the Northern Region worked out to be 8.8 percent (1.24 lakhs out of a total enrolment of 12.59 lakhs).

In the Central Region the share works out to be 2 percent of the total enrolment i.e. 20.9 thousands out of a total enrolment of 10.56 lakhs. In the Eastern Region the share works out to be 1.0 percent i.e. a total enrolment of 7.6 thousands in total enrolment of 7.74 lakhs. From this analysis it is obvious that Southern Region had already reached the goal of the distance education fixed for 2000 AD. Taking individual states, Himachal Pradesh accounts for 46 percent of the total enrolment, followed by Tamil Nadu 41 percent, Delhi 33.5 percent and Andhra Pradesh 20.2 percent. All these states have achieved the goal of 20 percent fixed for enrolment in distance education in the higher education programmes by 2000 AD. However, the Central and Western Region and the Eastern Regions are still laggards, even though Maharashtra has made some headway. Among the laggards are Karnataka (6.1%), Kerala (6.2%), Haryana (3.5%), Jammu & Kashmir (5.8%) and Uttar Pradesh (0.9%). It is really

TABLE 3

ENROLMENT IN DISTANCE EDUCATION IN INDIA-REGION WISE

YEAR	SOUTHERN REGION	NORTHERN REGION	CENTRAL & WESTERN REGION	EASTERN REGION	TOTAL
1975-76	23,824 (37.1)	37,358 (58.2)	1,432 (2.2)	1,596 (2.50)	64,210 (100.0)
1976-77	25,818 (32.4)	42,695 (53.6)	9,536 (12.0)	1,669 (2.0)	79,718 (100.0)
1977-78	59,457 (49.9)	48,368 (40.6)	8,456 (7.1)	2,882 (2.4)	1,19,163 (100.0)
1978-79	71,323 (53.5)	46,187 (34.6)	13,941 (10.4)	2,008 (1.5)	1,33,459 (100.0)
1979-80	83,307 (60.9)	42,844 (31.4)	9,072 (6.6)	1,476 (1.1)	1,36,699 (100.0)
1980-81	1,10,038 (66.1)	41,724 (25.1)	12,809 (7.7)	1,857 (1.1)	1,66,428 (100.)
1981-82	1,35,922 (70.2)	42,250 (21.8)	12,765 (6.6)	2,754 (1.4)	1,93,691 (100.0)
1982-83	1,38,294 (70.0)	42,283 (21.4)	14,615 (7.4)	2,363 (1.2)	1,97,555 (100.0)
1983-84	--	--	--	--	--
1984-85	--	--	--	--	--
1985-86	2,65,317 (74.7)	66,146 (18.6)	21,035 (5.9)	2,592 (0.7)	3,55,690 (100.0)
1986-87	2,65,505 (74.2)	66,378 (18.6)	22,093 (6.2)	3,814 (1.1)	3,57,791 (100.0)
1987-88	2,88,044 (71.5)	82,411 (20.5)	23,947 (5.9)	8,318 (2.1)	4,02,720 (100.0)
1988-89	3,02,168 (66.5)	1,23,612 (27.2)	20,878 (4.6)	7,585 (1.7)	4,54,243 (100.0)
1989-90	2,87,189 (58.9)	1,48,530 (30.5)	38,324 (7.9)	13,306 (2.7)	4,87,349 (100.0)

TABLE 4

SPATIAL DISTRIBUTION OF ENROLMENT IN HIGHER EDUCATION IN INDIA
(1988-89)

	College/ University Dep'tts.	Distance Education	Total	Share of Distance Education in Total
<u>SOUTHERN REGION</u>				
1. ANDHRA PRADESH	2,99,913	76,075	3,75,988	20.2
2. KARNATAKA	2,74,103	17,615	2,91,718	6.0
3. KERALA	1,53,753	10,194	1,63,947	6.2
4. TAMIL NADU	2,83,854	1,98,284	4,82,138	41.1
SUB-TOTAL	10,11,623	3,02,168	13,13,791	23.0
<u>NORTHERN REGION</u>				
5. DELHI	1,10,921	55,839	1,66,760	33.5
6. HARYANA	82,588	2,959	85,547	3.5
7. HIMACHAL PRADESH	22,437	19,257	41,694	46.2
8. JAMMU & KASHMIR	31,256	1,939	33,195	5.8
9. PUNJAB	1,46,574	16,303	1,62,877	10.0
10. RAJASTHAN	1,92,990	22,546	2,15,536	10.5
11. UTTAR PRADESH	5,48,791	4,769	5,53,560	0.9
SUB-TOTAL	11,35,557	1,23,612	12,59,169	9.8
<u>CENTRAL & WESTERN REGION</u>				
12. MADHYA PRADESH	2,87,240	303	2,87,543	0.1
13. MAHARASHTRA	5,14,809	20,423	5,35,232	3.8
14. GUJARAT	2,32,602	152	2,32,754	0.1
SUB-TOTAL	10,34,651	20,878	10,55,529	2.0
<u>EASTERN REGION</u>				
15. ASSAM	87,235	-----	87,235	---
16. BIHAR	2,73,303	3,262	2,76,565	1.2
17. MANIPUR	11,941	-----	11,941	---
18. MEGHALAYA/NAGALAND	10,103	-----	10,103	---
19. ORISSA	78,771	4,323	83,094	5.2
20. WEST BENGAL/TRIPURA/ SIKKIM	3,04,738	---	3,04,738	---
SUB-TOTAL	7,66,091	7,585	7,73,676	10.3
ALL INDIA TOTAL	39,47,922	4,54,243	44,02,165	1.0

TABLE 5

REGIONWISE ENROLMENT OF DISTANCE EDUCATION STUDENTS IN INDIA (1989-90)

REGION	ENROLMENT	PERCENTAGE OF TOTAL
<u>SOUTHERN REGION</u>		
1. ANDHRA PRADESH	65,782	13.5
2. KARNATAKA	22,532	4.6
3. KERALA	7,848	1.6
4. TAMIL NADU	1,91,027	39.2
SUB-TOTAL	2,87,189	58.9
<u>NORTHERN REGION</u>		
5. DELHI	72,829	14.9
6. HARYANA	18,960	3.9
7. HIMACHAL PRADESH	16,260	3.3
8. JAMMU & KASHMIR	1,885	0.4
9. PUNJAB	14,106	2.9
10. RAJASTHAN	14,131	2.9
11. UTTAR PRADESH	10,359	2.1
SUB-TOTAL	1,48,530	30.5
<u>CENTRAL & WESTERN REGION</u>		
12. MADHYA PRADESH	2,106	0.4
13. MAHARASHTRA	36,089	7.4
14. GUJARAT	129	0.03
SUB-TOTAL	38,324	7.9
<u>EASTERN REGION</u>		
15. BIHAR	5,632	1.1
16. ORISSA	7,674	1.6
SUB-TOTAL	13,306	2.7
GRAND TOTAL	4,87,349	100.0

SOURCE: COMPILED FROM THE DATA PROVIDED BY THE UGC

TABLE 6
SEXWISE BREAKDOWN OF DISTANCE EDUCATION STUDENTS IN INDIA (1989-90)

REGIONS	MALES	FEMALES	TOTAL	PERCENTAGE DISTRIBUTION	
				MALE	FEMALE
<u>SOUTHERN REGION</u>					
1. ANDHRA PRADESH	44,754	21,028	65,782	68.0	22.0
2. KARNATAKA	15,682	6,850	22,532	69.6	30.4
3. KERALA	5,944	1,904	7,848	75.7	24.3
4. TAMIL NADU	1,05,897	85,130	1,91,027	55.4	44.6
SUB-TOTAL	1,72,277	1,14,912	2,87,189	60.0	4.0
<u>NORTHERN REGION</u>					
5. DELHI	22,675	18,481	41,166	55.1	44.9
6. HARYANA	7,427	11,533	18,960	39.2	60.8
7. H.P.	11,661	4,599	16,260	71.7	28.3
8. J & K	1,201	684	1,885	63.7	36.3
9. PUNJAB	8,789	5,317	14,106	62.3	37.7
10. RAJASTHAN	5,935	1,985	7,929	74.9	25.1
11. U.P.	7,871	2,488	10,359	76.0	24.0
SUB-TOTAL	65,559	45,097	1,10,65	59.2	40.8
<u>CENTRAL & WESTERN REGION</u>					
12. MADHYA PRADESH	1,431	675	2,106	67.9	32.1
13. MAHARASHTRA	14,917	21,172	36,089	41.3	58.7
14. GUJARAT	112	17	129	86.8	13.2
SUB-TOTAL	16,460	21,864	38,324	42.9	57.1
<u>EASTERN REGION</u>					
15. BIHAR	4,596	1,036	5,632	81.6	18.4
16. ORISSA	5,073	2,601	7,674	66.1	33.9
SUB-TOTAL	9,669	3,637	13,306	72.7	27.3
GRAND TOTAL	2,63,965	1,85,510	4,49,475	58.8	41.2

Note: The break of 31,663 students admitted to Indira Gandhi National Open University and 6,211 students admitted to Kota Open university was not available. This explains variation of 37,874 students from the total of 4,87,349.

Source: Compiled from data provided by the UGC.

TABLE 7

**TOTAL ENROLMENT IN 10 MAJOR INSTITUTES OF DISTANCE EDUCATION WITH AN
ENROLMENT OF MORE THAN 10,000 IN 1987-88**

	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90
ICC, MADRAS	9,615	67,968	78,123	92,737	104,370	95,074
ICC, MADURAI KAMRAJ	69,036	75,866	67,143	52,894	44,658	46,863
DDE, ANNAMALAI	25,397	39,311	41,554	43,398	48,434	48,638
SCC, DELHI	9,822	21,466	22,743	27,478	33,853	41,166
DCC, HIMACHAL PRA.	11,701	7,181	7,181	12,928	19,257	16,260
DCC, JAIPUR/KOTA O.U.	6,136	13,000	12,068	13,910*	18,327	14,131
DE, BOMBAY	6,603	12,283	11,807	11,234	7,592	15,935
DCC, MYSORE	14,736	13,576	7,572	14,239	17,203	21,543
AP OPEN UNIV.	--	27,629	28,745	36,448	37,435	18,524
DCC, ANDHRA WALT AIR	14,469	29,829	29,258	28,528	30,683	35,886
IGNOU, DELHI	--	--	--	--	21,986	31,663
M.D. UNL ROHTAK	--	--	--	--	--	14,039
SNDT WOMENS UNI.	--	--	--	--	--	11,605
TOTAL FOR ABOVE INSTITUTIONS	167,515 (84.8)	308,109 (86.8)	306,194 (82.6)	333,794 (82.9)	384,298 (84.0)	411,327 (84.4)
TOTAL FOR ALL DE INSTITUTIONS	197,555 (100.0)	355,090 (100.0)	370,496 (100.0)	402,720 (100.0)	454,243 (100.0)	487,349 (100.0)

*After 1987-88, DCC Jaipur has been merged with Kota Open University.

strange that the state like Uttar Pradesh where the formal enrolment in colleges/university departments is 5.5 lakhs, distance education accounts for a little less than 5,000 students. It appears that no serious effort has been made in Uttar Pradesh in this regard.

All these trends in spatial distribution only highlight the fact that distance education programme have not been developed as envisaged in National Education Policy in an even manner throughout the country. There has been very unbalanced growth in distance education. This also underlines the scope for enlarging the distance education programme in the hitherto neglected areas of the country. In case a serious effort is made in those states which have not paid attention to the distance education programme, it will certainly help to absorb a large number of students seeking higher education.

SEX-WISE ENROLMENT OF STUDENTS

Distance education programmes were intended to help housewives or such females who may take up careers and would like to continue their education. The 1989-90 sex-wise break up of distance education has been given in Table 6. The data reveal that in the country as a whole males accounted for 59 percent and females accounted for 41 percent of total enrolment in Distance Education. However, the proportion of females in the Central and Western Region was much higher i.e. 57 percent but in the Eastern Region was much lower i.e. 27.3 percent. However, in the Southern Region and the Northern

Region, the proportion of females has been 40 percent and 40.7 percent respectively.

Sex-wise break-up thus reveals that distance education programmes have benefited a very large section of the women and as such their further expansion will also attract more women who have been deprived of distance education in the country. The states which have lagged behind in persuading women to take up distance education programmes are Uttar Pradesh, Rajasthan, Kerala, Bihar and Orissa.

HIGH DEGREE OF CONCENTRATION IN DISTANCE EDUCATION

Table 7 gives enrolment figures of directorates with more than 10,000 enrolment. The data reveals that 10 Directorates/Open Universities accounted for 83 to 85 percent of the total enrolment during 1982-83 to 1987-88. The situation has not changed even in 1989-90 wherein 13 Directorates/Open Universities accounted for 4.11 lakhs i.e. 84.4 percent of the total enrolment. This highlights the fact that on the one hand we have the Institute of Correspondence Courses, Madras with an enrolment of over 95,000 students and on the other hand, there are 12 Directorates/Institutes which have an enrolment of less than 2,000 and 10 Directorates with an enrolment ranging between 2,000 to 5,000 students. Thus out of 40 institutes imparting distance education in 1989-90, 22 can be considered as non/viable with an enrolment below 5,000 (Refer Table 8). Efforts should be made to devise ways and means to make these non/viable directorates viable so that the tremendous

Table 8

Frequency Distribution of Distance Education Institutions on the Basis of Enrolment Sizes in India

Enrolment Size	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90
0-2000	12	16	16	12	11	12
2000-5000	1	6	5	8	8	10
5000-10,000	6	3	5	4	2	6
10,000-20,000	3	3	2	4	2	6
20,000-ABOVE	2	6	6	6	8	7
TOTAL	24	34	34	34	34	40

TABLE 9
DISTRIBUTION OF CORRESPONDENCE COURSES STUDENTS STUDYING IN
VARIOUS UNIVERSITIES OF INDIA (1989-90)

	ENROLMENT	PERCENTAGE
<u>I. UNDER-GRADUATE COURSES</u>		
1. PRE-UNIVERSITY/FOUNDATION/		
LA./I.COM.	12,960	
2. B.A.(PASS)	1,81,934	
3. B.A.(HONS)	342	
4. B.COM (PASS)	55,456	
5. B.COM (HONS)	1,623	
6. B.SC.	8,424	
SUB-TOTAL (I)	2,60,739	53.5
<u>II. POST-GRADUATE COURSES</u>		
1. M.A.	84,722	
2. M.COM.	24,270	
3. M.SC.	6,694	
SUB-TOTAL (II)	1,15,686	23.7
<u>III. PROFESSIONAL DEGREE COURSES</u>		
1. B.ED.	49,343	
2. M.ED.	8,393	
3. LL.B./B.G.L.	2,343	
4. B.LITT.	8,884	
5. BACHELOR OF LIB.SCIENCE	2,125	
6. B.TECH.	1,251	
7. M.B.A.	182	
8. M.PHIL.	150	
SUB-TOTAL (III)	72,742	14.9
<u>IV. PROFESSIONAL DIPLOMA COURSES</u>		
BANKING, DIPLOMA IN	67	
COOPERATION & RURAL STUDIES :		
PG DIPLOMA IN :	444	
DISTANCE EDUCATION, DIPLOMA IN :	1,207	
FINANCIAL MANAGEMENT, DIP. IN :	785	
GEOGRAPHY, DIPLOMA IN :	62	
INDUSTRIAL RELATIONS AND PERSONAL		
MANAGEMENT.PG DIP. IN :	1,572	
INTERNATIONAL MARKETING, DIP.IN :	20	

	ENROLMENT	PERCENTAGE
JOURNALISM, DIPLOMA IN :	1,308	
KANNADA, PG.DIPLOMA IN :	70	
LABOUR LAW & LABOUR WELFARE & PERSONNEL MANAGEMENT :	870	
COMPANY LAWS, DIPLOMS IN :	404	
LIBRARY SCIENCE, DIPLOMA IN :	3,776	
LINGUISTICS, JUNIOR DIPLOMA IN :	14	
LINGUISTICS, SENIOR DIPLOMA IN :	17	
MANAGEMENT OF PUB. ENTERPRISES DIPLOMA IN :	165	
BUSINESS MANAGEMENT, DIPLOMA IN :	7,336	
MARKETING MANAGEMENT, DIP. IN :	1,263	
MATERIAL MANAGEMENT, DIPLOMA IN :	913	
MATHEMATICS DIPLOMA IN :	121	
OFFICE ORGANISATIONS & PROCEDURES, DIPLOMA IN :	136	
OPERATIONAL RESEARCH FOR MANAGEMENT, DIPLOMA IN :	118	
PRODUCTION MANAGEMENT, DIP. IN :	524	
PROJECT MANAGEMENT, DIPLOMA IN :	42	
PUBLIC ACCOUNTING, PG DIPLOMA IN :	542	
PUBLIC ADMINISTRATION, DIPLOMA IN :	59	
PUBLIC RELATIONS, DIPLOMA IN :	1,290	
POPULATION EDUCATION, DIPLOMA IN :	26	
TEACHING OF ENGLISH, PG DIP. IN :	227	
TOURISM AND HOTEL MANAGEMENT :	661	
ENVIRONMENT, PG DIPLOMA IN :	224	
FUNCTIONAL ENGLISH, PG DIPLOMA IN :	291	
TRANSLATION, PG DIPLOMA IN :	96	
INTRODUCTORY COURSES, DIPLOMA IN :	683	
COMPUTER APPLICATION, DIP. IN :	420	
ADVANCE DIPLOMA IN MANAGEMENT :	2,142	
SPECIAL DIPLOMA IN MANAGEMENT :	463	
CREATIVE WRITING, DIPLOMA IN :	426	
CHEMICAL PROCESS, INSTRUMENTATION AND CONTROL, PG DIPLOMA IN :	469	
CONCRETE TECH & DESIGN OF CONCRETE STRUCTURE, PG DIP. IN :	449	
MAINTENANCE MANAGEMENT :	146	
CONSTRUCTION MANAGEMENT :	226	
MERCANTILE LAW :	26	
CRIMINAL LAW :	840	
INDIAN CONSTITUTIONS :	13	
INSURANCE LAW :	74	
BUSINESS ADMINISTRATION :	1,372	

	ENROLMENT	PERCENTAGE
DIVINITY, DIPLOMA IN :	181	
DIPLOMA IN STATISTICS :	79	
FINANCE AND BANK MANAGEMENT :	43	
SANSKRIT, DIPLOMA IN :	29	
BUSINESS TAXATION, DIPLOMA IN :	542	
SUB-TOTAL (IV)	32,559	6.7

V. CERTIFICATE COURSES

LIBRARY AND INFORMATION SCIENCE :	1,180	
TEACHING OF ENGLISH :	881	
AUTOMOBILE TECHNOLOGY :	243	
INFORMATION SYSTEM THROUGH COBOL :	52	
SCIENTIFIC APPLICATION THROUGH FORTRAN :	48	
WORD PROCESSING AND DATA MANAGEMENT :	52	
URDU, CERTIFICATE COURSE :	33	
HINDI, CERTIFICATE COURSE :	2	
KANNADA, CERTIFICATE COURSE :	62	
ENGLISH IMPROVEMENT :	47	
FAMILY SAVING & INVESTMENT :	23	
AGRICULTURE, CERTIFICATE COURSE :	81	
HEALTH, & FAMILY WELFARE :	69	
COMPUTERS IN OFFICE MANAGEMENT :	93	
LABOUR LAW, CERTIFICATE COURSE :	270	
RURAL DEVELOPMENT, CER. COURSE :	287	
FOOD AND NUTRITION, CERTIFICATE COURSE :	2,085	
PUNJABI, PRAVESHKA :	9	
GYANI :	166	
SUB-TOTAL (V)	5,623	1.2
GRAND TOTAL (I TO V)	4,87,349	100.0

TABLE 10
COURSEWISE DISTRIBUTION OF DE STUDENTS IN INDIA

	1988-89	% OF TOTAL
<u>UNDERGRADUATE</u>		
i. Pre-degree/ foundation/ Inter	9,423	2.1
ii. B.A.	1,84,964	40.7
iii. B.A. (Hons.)	571	0.1
iv. B.Com. & B.Com. (Hons)	65,000	14.3
v. B.Sc.	11,489	2.5
Sub Total :	2,71,447	59.8
<u>POST-GRADUATE COURSES</u>		
i. M.A.	67,604	14.9
ii. M.Com.	21,767	4.8
iii. M.Sc.	4,880	1.0
Sub- Total :	94,251	20.7
<u>PROFESSIONAL DEGREE COURSES</u>		
i. B.Ed.	32,100	7.1
ii. M.Ed.	13,934	3.1
iii. LL.B/BGL	2,815	0.6
iv. B.Tech.	460	0.1
v. Bachelor of Library & Information science	767	0.2
vi. Bachelor of Journalism and Mass communication	997	0.2
vii. MBA	134	0.0
viii. M.Phil	73	0.0
ix. M.Lib & Information Science	353	0.1
SUB-TOTAL	51,633	11.4
<u>DIPLOMA AND CERTIFICATE COURSES</u>		
P.G.Diploma courses	9,913	2.2
Diploma Courses	19,762	4.3
Certificate Courses	7,237	1.6
TOTAL	4,54,243	100.0

demand for higher education can be met by them. A few attempts made by Utkal University, Bhubneshwar, and Himachal Pradesh University, Shimla, have helped them to become viable in 1988-89. Such attempts are welcome and need to be encouraged further.

DIVERSIFICATION IN DISTANCE EDUCATION:

Although during the 1970s only post-graduate courses were taken up along with the conventional under-graduate courses, the situation has begun to change and in the year 1989-90. The data reveal that 14.9 percent of the total enrolment was in professional degree courses like B.Ed, M.Ed., LL.B/BGL, B.Litt., B.Lib.Sc., B.Tech., MBA, M.Phil. There has also been sharp increase in the professional diploma/certificate courses provided in distance education. Among the diploma courses Banking, co-operation and Rural Studies, Distance Education, Financial Management, Geography, Industrial Relations and Personnel Management, International Marketing, Journalism, Labour Laws and Labour Welfare, Company Law, Library Science, Management of Public

Enterprises, Business Management, Materials Management, Office Organisation and Procedures, Operational Research and Management, Production Management, Public Accounting, Public Relations and Advertising, Hotel and Tourism Management, Environment, Computer Application, Creative Writing, Chemical Process, Instrumentation and Control, Maintenance Management, Construction Management, Business Administration, Statistics, Business Taxation. Besides there are diplomas in Linguistics, Kannada, Teaching of English. Alongwith these, a number of certificate courses have also been instituted. The total number of students covered by diploma/certificate courses is 38,200 during 1989-90 i.e. nearly 8 percent of the total enrolment. This is a healthy trend because these courses are functional in nature and prepare students directly for the job market. This trend needs to be strengthened further. But it may be worthwhile to point out that diploma/certificate courses accounted for only 1.5 percent of the total enrolment in universities and colleges in India in 1988-89, i.e. total of 55,3000 students compared with this, the distance education programmes are certainly doing

Table 11
Enrolment in Higher Education in India (1988-89)

	Under-graduate	Post graduate including Research	Diploma\ Certificate courses	Total
A. Regular University Deptt. & Colleges	34, 74, 171 (92.7)	4,18, 480 (81.6)	55, 271 (38.4)	39,47, 922 (89.7)
B. Diploma\ Correspondence Education	2,71, 447 (7.3)	94, 251 (18.4)	88, 545 (61.6)	4,54, 243 (10.3)
TOTAL :	37,45, 618 (100.0)	5,12, 731 (100.0)	1,43, 816 (100.0)	44,02, 165 (100.0)

Note: figures in brackets are percentage of total. Source : UGC, Annual Report for the year 1988-89.

much better than the programmes taken in the conventional system. (Refer Table 9, p. 65)

SCIENCE EDUCATION

One of the weaknesses of the distance education programmes has been lack of attention to science education. There is no doubt that some science courses have been started and there are 8,400 students admitted to B.Sc. and about 6,700 admitted to M.Sc. and 1,251 students admitted to B.tech programmes. If these are also added about 900 students who are admitted to two diploma courses in Chemical Process, Instrumentation Control and Concrete Technology, taken the total number of students admitted to science courses works out to be 17,287 which is nearly 3.55 per cent of the total enrolment in distance education. Obviously, distance education programmes have not been able to pay adequate attention to science education programme.

PROFESSIONAL DEGREE COURSES

Among the professional degree courses which accounted for total enrolment of 72,742, an enrolment of 57,736 i.e. 79 per cent is being provided by B.Ed. and M.Ed courses. This only highlights the fact that the institutes of distance

education have been enrolling students only to train teachers for which there is a high demand. But to enrol such a large number of students without developing adequate infrastructure and management has been a subject of criticism in the country. It is in this sense that heavy concentration in the professional degree courses towards obtaining B.Ed. and M.Ed. degrees needs to be corrected from the point of view imparting quality education.

The data provided by Table 11, indicate that in 1988-89, the share of distance education in total enrolment at the under-graduate stage was of the order of 7.3 per cent, at post-graduate stage of the order of 19.4 per cent and among diploma and certificate courses was of the order of about 62 per cent.

A review of the distance education in India, however, reveals that distance education programmes have made a big headway during the last 30 years. Many of them have been able to establish their credibility. They have also succeeded in bringing education to the door-steps of the students and are now serving over 10 per cent of the total enrolment in higher education. This trend should be strengthened further.

Role of A Study Centre In Distance Education : A Case Study Of The Expanding Dimensions Of The Ignou Study Centre, Chandigarh.

*S. Bhatnagar
A. K. Sahgal*

I

In the organisational set-up of an institute of distance education, study centre occupies a place of fundamental importance. Located in the midst of a rural community an urban centre, it furnishes to the mofussil students an ideal environment to pursue their studies in a somewhat more formal manner. Whenever they feel like doing so, they may meet their teachers and seek guidance from them or even attend regular counselling sessions, specially organised for them. Besides, they may consult books in its library, borrow/view audio and video cassettes, and, above all, get many of their administrative problems ironed out with the help of the office personnel of the Centre. In this way, the centre provides a convenient contact point for the students with the institute. But for it, many a distance learner would have been deprived of an opportunity of either keeping into the library or getting even a glimpse of their teachers and would have done their studies in their respective isolated homes, exclusively through the medium of the cold print.

The sweep of functions that a Study Centre is called upon to perform is so vast and varied that it gives to it the look of a medium-sized modern college. Like the latter, it is staffed with a large number of academics (through recruited on part-time contractual basis) each specialising in one discipline or another. In addition, there are a number of administrative and technical personnel who provide various types of supporting services. As regards the infra-structural

facilities, they comprise class-rooms, laboratory, library, TV /Video Cassette relay rooms and the like. Thus, a Study Centre is a compact, but all comprehensive unit. Though it functions all round the week, it is mostly on Saturdays and Sundays that it hums with a lot of activity. These days, being holidays, provides leisurely hours to distance learners most of whom are the office goers. It is generally in these days that regular counselling sessions and other academic activities are specially organised for them.

The Indira Gandhi National Open University (IGNOU) was set-up in September 1985. After having built up its basic infra-structure, it decided to launch a few study programmes. Simultaneously, the necessary steps were also taken to organise in phases 300 study centres. To begin with, it established 78 centres. The Chandigarh Centre which is the focus of this paper was one of the pioneer centres.

To begin with, the Study Centre was entrusted with only a few study programmes. Obviously, its responsibilities were quite limited. But with the multiplication of the study programmes of the IGNOU, its responsibilities marked a corresponding expansion. This paper which is a case study of the Chandigarh Study Centres, seeks to highlight the vast and the varied nature of the responsibilities of the Study Centre and the rate with which these responsibilities have expanded over the years. It also delineates the future projections of the Centre's activities, which in certain cases might not have at all been originally intended. Certain vital policy decisions might be called for sooner than later.

A word about the functional mode of the Study Centre: As a matter of policy, these centres have been located in various educational institutions (colleges or and university departments). The latter furnish to the IGNOU their infra-structural facilities and also the administrative and technical personnel. The head of the host institution or his nominee acts as the Centre Co-ordinator. As regards counsellors, they are drawn from the host institution as well as from the others, depending upon the requirement of the various study programmes as also the availability of the academic specialists. On its part, the IGNOU provides audio-visual and computing equipment, library books and periodicals, basic office equipment, class room equipment, furniture and fixture, printed lessons and the audio and video cassettes which are produced by it for study purposes of their own students. Above all, it meets all expenses that are incurred on the maintenance of the Study Centre, ranging from the honoraria to the Co-ordinator and counsellors to the purchase of stationery articles.

This paper is divided into four sections. The first section highlights the organizational set-up of an IGNOU Study Centre. In the second section, its functions have been delineated in detail while in the third, an effort has been made to show the rate at which its activities have expanded since its inception in the year 1987. Finally, the future projections have been worked out.

II ORGANISATIONAL SET-UP

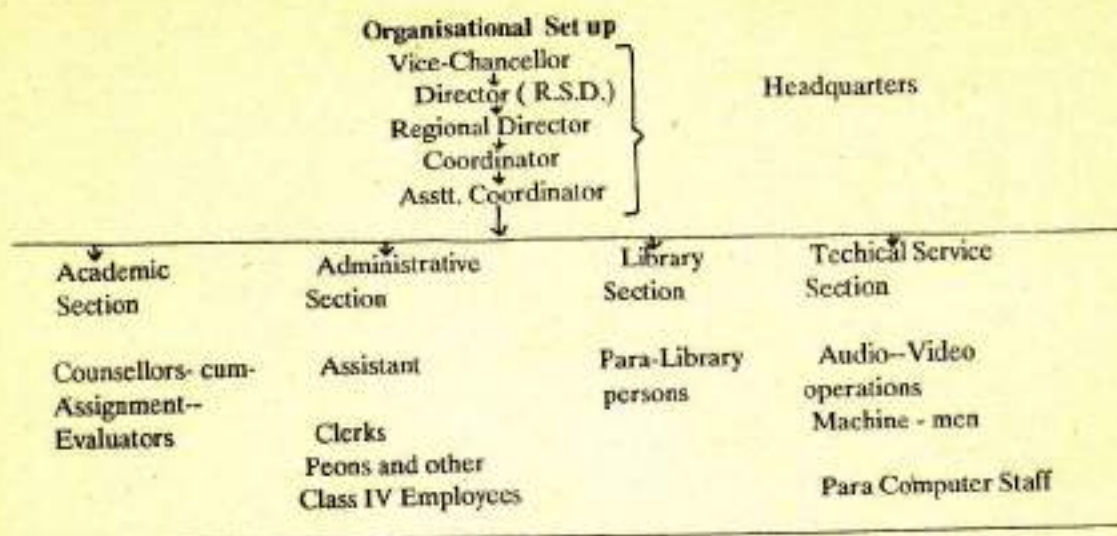
To achieve the objectives of an organisation, we need to develop its infra-structure or organisational set-up. This set-up involves division of work among people who are involved in the performance of its various functions and the execution of its strategies. In the building of this set-up, care need be taken to clearly specify the functional domain of each functionary lest

there is overlapping of jurisdiction which, in turn, may lead to confusion and dilution of authority as well as of responsibility. At the same time, it must also be ensured that various activities are properly coordinated so that the various wings of the organisation do not function at cross-roads with one another.

As for the Study Centre, its organisational set-up comprises three levels- top policy-formulation, coordination and management. Top policy-formulation is done at the Head Quarters and the king-pin of this task is the Director of the Regional Services Division. As the designation shows, this officer is charged with the task of formulating and executing all plans regarding the development of the regional services, as also supervising their day-to-day functioning. Being a member of the top hierarchy of the University, he is directly responsible to the Vice-Chancellor.

The co-ordination level consists of the Regional Director, Centre Coordinator and the Assistant Coordinator. The Regional Coordinator functions as a vital link between the Head Quarters and the study centre. Besides communicating the policy-directives from the top to the field and keeping the headquarter regularly abreast with the progress and activities of the various centres, under his charge, he holds from time to time refresher courses for the counsellors, meetings of the coordinators/assistant coordinators and also pays periodic inspections to the centres.

The main brunt of coordination at the level of the study Centre falls on the Co-ordinator. He infact is the pivot around whom the whole study centre revolves. He is the one who, in the final analysis, is responsible for achieving the basic objectives and growth of the activities of the open university programmes. He represents the university at the local level, projecting its image and dealing with students, general public and staff of the Study Centre. He is an important link



between the Headquarter/ Regional office and the students. To run the centre efficiently, he has to play several roles such as planner, organiser, developer, communicator and controller. As such, he has three faces: (a) proper face, upward to the headquarters; (b) downward face to his subordinates; and (c) lateral face to his peer level coordinators of other study centres. The varied nature of his responsibilities makes it imperative that he is well-conversant with the technicalities of the system of distance education, rules and regulations of the University and is also adept in the professional skills so that he performs his roles effectively.

At the management level, the organisational set-up of the Centre consists of the following four sections:

(a) **Academic Section** : It comprises mainly counsellors and assignment evaluators.

(b) **Administrative Section** : It consists of office assistants and clerks (all working on part-time basis). This section handles the day-to-day secretarial operations.

(c) **Library Section** : This section is managed by a clerk-cum-library attendant.

(d) **Technical Section** : It handles, audio-video, duplicator, photocopier, overhead projector and other machines provided by the university to the centre.

III FUNCTIONS

As hinted earlier, the functions that an IGNOU Study Centre is called upon to perform are varied and complex. Broadly, they fall into two categories; administrative and academic.

Administrative Functions : The former category of functions are performed into two phases. The first phase functions are : the sale of application forms for the various entrance examinations, distribution of information brochures, publicity campaign, conduct of entrance examination and attending of hundreds of personal and telephonic enquiry that drop in every day. Once the entrance examination results are out and the students are allotted to the study centre, the

second phase of administrative functions begin. These include inward and outward correspondence from three different sources, namely, the headquarters/regional office, students and counsellors; the handling of remittances; the maintenance of the accounts and records (which by itself is quite an elaborate task, for it requires the handling of such things as the stock register of movable and immovable articles, accounts books, attendance registers of counsellors and students, records of tutor-marked assignments and regular reporting of various activities to its regional office/ the headquarters.)

Academic Functions. The academic functions too are performed in two phases. The first phase functions are related to problem-solving activities, whereas the second phase functions are totally related to testing the students ability regarding his understanding of the subject. The first phase functions relate to the identification of suitable counsellors, arranging counselling sessions, conduct of audio/video sessions and the management of library facilities. All these functions help the students to improve their skill in their respective study programmes. The second phase functions are receiving/collection of tutor-marked assignments, getting these evaluated from the tutors concerned and the conduct of term-end examination.

These functions, though appear to be of a beaten track routine nature, are highly time-consuming and some of them are even quite ticklish. By way of illustration, we may refer to three of them. First, the handling of correspondence. As mentioned earlier, a large number of letters, enquiries and circulars pour in every day. Besides, numerous types of periodic statements and returns are required to be submitted to the Regional Director and the Head Quarters. To cope with the whole of this work by one clerk single-handedly and that too by the one who is engaged in part-time basis is quite a difficult task. The second difficult area is to contact and engage counsellors. So many types of study

programmes have been launched that the number of counsellors required to handle them is pretty large and their number is continuously on the increase. The kernal of the problem is that suitable qualified counsellors with requisite specialisation are seldom available. If the Coordinator succeeds in spotting one, he does not easily accept the offer, partly for the reason that these specialists are too busy a bee and partly for the reason that the honorarium is too inadequate, particularly in comparison to the long span of the counselling session (two and a half hours). The third problematic area relates to the evaluation of the tutor marked assignments of the students. The enormity of the numbers of the assignments apart, the unwillingness of the counsellors to handle this job (despite the reasonably lucrative remuneration) coupled with long delays and incessant number of reminders (made telephonically, in writing and above all through personal visits) makes this task quite difficult. We wonder how will it be possible to cope with all these varied types of functions when in due course of time more study programmes are added. We feel that this experiment of part-time functionaries, hired from other institutions will not work. The IGNOU may have to appoint permanent staff of their own.

IV EXPANDING CONTOURS

The main focus of this study is the growth in the activities of the Study Centre. The period covered in the study stretches from March, 1987 to August 1990. We make March, 1987 as the base in view of the reason that it was at that point of time that Chandigarh Study Centre became operational. The growth has been measured in terms of the increase in both manpower and the various sectoral activities-- administrative, academic and technical.

Manpower Growth: As Table No. I shows, manpower strength at the top hierarchy of the

Centre (Coordinator and Assistant Coordinator) remained stationary at one each, whereas that of the staff at the lower levels who manage various administrative, para-academic and technical operations, was doubled. As for the Counsellors, their number marked an increase by 8 times.

This development appears to be somewhat lop-sided. As highlighted earlier, the job of iden-

letters that were disposed off during April, 1990 was 1,590. Earlier, letters were received only from the Headquarters, but now they pour in from the office of the Regional Director (besides of course the Headquarters) and from hundreds of present and past students, attached with the Study Centre, who seek the redressal of varied types of problems. Another significant area of high density activity is that of the verbal and

Table No. 1
Showing the Growth in the Number of Various Functionaries

Functionary	Strength		Increase	
	March, 1987	August, 1990	Absolute	Times
1. Coordinator	1	1	Nil	Nil
2. Asstt. Coordinator	1	1*	Nil	Nil
3. Office Assistants	2	4	2	2
4. Peons	2	3	1	1½
5. Cleaners	—	1	1	—
6. Library Attendant	1	1	Nil	Nil
7. Counsellors	10	80	70	8

* One more post of an Assistant Coordinator has been sanctioned, but it is lying vacant.

tification, contacting and persuasion of such a large number of specialists (as 80) and of such a varied range of disciplines to accept the offer and then to constantly remind them about their timely attendance at the counselling sessions as well as of the evaluation of home assignments of the students is quite a time-consuming job. To do it almost single-handedly is too heavy a burden on the tender shoulders of the coordinator and Assistant Coordinator.

Administrative Activities: The increase in administrative activities has been tremendous. To illustrate, we may refer to a few activities only. A look at Table No. II shows that the volume of correspondence has increased 113.6 times. As compared to only 14 letters that were handled during the month of March, 1987, the number of

telephonic enquiries, which the enrolled as well as the prospectus students make day in and day out. The number of such inquiries, on an average, was 52 inquiries per day in the month of August, 1990, as compared to only 6 in March, 1987 thereby marking an increase of 9 times.

Yet another activity which has undergone an enormous expansion is the Tutor marked assignments of the students. From 400 assignments per annum, their number has gone upto 6,000, thus multiplying itself by 15 times.

In this way, we find that there is hardly an area of activity where the work might not have expanded. Although it was but natural that a growing institution must expand its sphere of activity all around, yet this much expansion was

Table II

Showing the Increase in Administrative Activities

	March, 87	August, 90	Absolute	Times
1. Number of enquiries	6 per day	52 per day	46	8.7
2. Study material handling	16 sets	102 sets	86	6.4
3. Assignment handling	400 p.a.	6000 p.a.	5600	15
4. Correspondence inward and outward	14 p.m.	1590 p.m.	1576	113.6
5. Maintenance of records	4 registers	24 registers	20	6
<u>6. Conduct of exams:</u>				
i) Entrance Test	—	3	3	3
ii) Terms End Exams	Twice a year	Thrice a year	1	1.5
iii) Duration of TEE	5 days	15 days	10	3
<u>7. Financial Management</u>				
i) Imprest	500	1500	1000	3
ii) Examination exps.	1200	11000	9800	9.2
iii) Sale of Material	—	1000 articles	1000	—

perhaps not anticipated. This fact notwithstanding, the manpower provided to cope with this unduly expanded quantum of work is not adequate. The part-time nature of the staff further aggravates the situation

Academic Activities :

The number of study programmes entrusted to the care of the Centre concerned* has multiplied itself by 3 times (from 3 to 9) during the

period under study. Correspondingly, the number of the students has increased 2.4 times and that of the counselling sessions 4 times. Compared to this evenly corresponding increase in these allied sectors of academic activity, the increase in the number of tutor-marked assignments is rather too abnormal. Their number multiplied by as many as 15 times, i.e. from 400 to 6000 per annum (Table No.III). Two reasons mainly account for this increase. First, the num-

Table No. III

Showing the Increase in Academic Activities

Activity	Number		Increase	
	March, 87	August, 90	Absolute	Times
1. Study Programmes	3	9	6	3
2. Counselling Sessions	114	458	344	4
3. Students	300	706	406	2.4
4. Tutor Marked Assignments	400	6000	5600	15

* The number of Study Programmes entrusted to various Centres varies from centre to centre, depending upon its resources.

ber of courses in certain study programmes is very large and a student is also required to opt for a larger number of courses. Secondly, there are

has to handle a stock of books, etc. and also to cope with demands of 20 to 25 visitors who come and study in the Library every day. Over and

Table No. III
Showing the Increase in Academic Activities

Activity	Number		Increase	
	March, 87	August, 90	Absolute	Times
1. Study Programmes	3	9	6	3
2. Counselling Sessions	114	458	344	4
3. Students	300	706	406	2.4
4. Tutor Marked Assignments	400	6000	5600	15

* The number of Study Programmes entrusted to various Centres varies from centre to centre, depending upon its resources.

certain study programmes (BDP Courses) wherein the students are required to submit a comparatively larger number of tutor-marked assignments.

Library Services: Besides reviewing, processing and maintaining the stock of books, sets of study material, old question papers and the like, the Study Centre Library provides the reading room services to the students. The limited stock prohibits the loaning facility. It is open only on Saturdays and Sundays when it is comparatively convenient for the local and mofussil students to find time both for counselling and studying in the Library. The job of the Library Clerk-cum-attendant is quite strenuous, for the reason that he

above this comes the continuing expansion of the various activities of the Library. The rate of expansion during the period under study ranges between 3.25 times to 16.6 times. The addition of every new study programme means the corresponding addition of new books, new study materials and new library readers which, in turn, would involve more work for the Library Clerk-cum-attendant.

As for the technical services they comprise mainly audio and video facilities. Prepared specially for their own students, these cassettes are supplementary study aids. The Centre arranges special listening and viewing sessions (of course during counselling programmes) when these cassettes are played/telecast. It speaks highly of

Table No. IV
Showing increase in Library Services

Activity	Number		Increase	
	March, 87	August, 90	Absolute	Times
1. Books	800	800		
2. Study materials sets	16	52	36	3.25
3. Question papers	8	120	112	15
4. Visitors (per day)	1-2	20-25	19-23	12.5
5. Audio cassettes	24	176	152	7
6. Video Cassettes	10	166	156	16.6

the University that it has produced in so short a time such a large number of audio and video programmes.

Problems and future projections

The IGNOU has so far been able to institute 13 study programmes. For a university of this size and importance, this much number of study programmes is too little. Obviously, many more programmes are bound to be started sooner than later. The Study Centre which is already too much hard pressed with work, will find it increasingly difficult to cope with the additional workload. Every aspect of it will feel the strain. For, each study programme will bring with it the additional demand on its resources—office establishment, class rooms, library, counsellors and above all, the Co-ordinator and the Assistant Co-ordinators, we may dilate upon some of these aspects.

The Centre under study remains open and organises counselling sessions on all Saturdays and Sundays of the month when the academic session is at its peak. On each such working day, it strains the resources of the host institution to the maximum. Besides occupying all the 6 class rooms that the host institution possesses, it spreads its counselling sessions to even the rooms of the teachers. In addition, it uses the whole of the Library Reading Hall, the Seminar Room (for video viewing purposes), the ante-room of the Director's Office (for the sitting of the teachers), the Reception Hall (for seating the students) and so on and so forth. The position thus obtaining leaves absolutely no space where additional study programmes may be accommodated. That is perhaps one of the dominant factors which impelled the Director of Correspondence Courses (the head of the host institute and the Co-ordinator of the Study Centre) to suggest the Head Quarters that for the science courses (Which at one time were on the agenda of this centre) a new Study Centre may be set up. Unless therefore the optimum size of a study centre both in terms of the num-

ber and nature of study programmes and the number of students thereof is determined and additional programmes are added one after the other, the study centres of the big cities would cease to be centres *per se* and assume the size of colleges. We wonder which college or university would place its resources at the disposal of the IGNOU for the purpose. It is hightime that some perspective planning is done in this respect.

Another area of concern is that of the counsellors. As pointed out earlier, it is quite difficult to find out qualified and competent persons, particularly for the higher level courses. If a few persons are available, then it becomes difficult to persuade them for the job. One reason why senior faculty members of the universities or management do not accept the offer is the too little remuneration that is offered to them (Rs. 100 for a period of 2-1/2 hours with no additional provision for transport). If the Centre under study has been able to rope in competent persons, it is more due to the personal equation between the Coordinator/Assistant Coordinator and the persons concerned, and less due to the terms that the IGNOU offers to them. How anomalous is it that a junior level school/college lecturer who gives counselling to the students of the Undergraduate Foundation Courses is also given the same remuneration as is offered to senior level university professor or a business executive. Realising this problem, the IGNOU has recently decided to double the remuneration to the Counsellors for the higher level Management Courses. This revision may be extended to other courses parts of the specialised nature. By doing so the remuneration would come to be linked with academic requirements of the various courses and as a result, the quality of counselling would improve considerable.

Yet another area of concern is the management of information service. Whereas the final dates for the compliance of various requirements by the students and of the Study Centre

are fixed in advance and are even strictly adhered to, the Headquarters on their part have not prescribed any schedule for the completion of job for themselves. Delay in the redressal of students' complaints, in the despatch of the study material, in answering the letters of the Coordinator, etc. has become an established feature of the Headquarters.

The functioning of the latter smacks of the typical Indian administration. It may be un-

derlined that in the system of distance education wherein the only means of communication between the spatially scattered students and their institute is the postal service, this type of sluggish functioning is bound to estrange the students. The IGNOU which has come up only a couple of years ago and which is the premier institution of distance education in the country, cannot afford to project such a growingly poor image. It must gear up the management of its information service soon lest it is too late.

IN SERVICE TRAINING OF PRIMARY SCHOOL TEACHERS AT A DISTANCE IN TURKEY

Bekir ÖZER

INTRODUCTION

The most recent comprehensive effort for teacher training in Turkey is the Two-Year Diploma Program for Primary School Teachers (TDPPST) carried out by distance education. The aim of the TDPPST is to provide two years of higher education to the 145,000 primary school teachers who had completed only secondary education. The goal was to help them become more effective in teaching and provide them with a better standard of life. As it was impossible for them to leave their teaching positions, the Ministry of Education asked Anadolu University, which already had a distance education program, to train those teachers.

The existing resources of Anadolu University, such as the radio and television studios and the printing house were used for this program and the Ministry of Education paid for the printed materials and for the examination and additional expenses for all of the teachers attending the program. As a result, the TDPPST was prepared and realized by the Faculty of Open Education of Anadolu University between 1985 and 1990.

Student Characteristics

A total of 141,713 teachers were enrolled in the TDPPST. Almost 45% of the teachers enrolled are female and 55% of them are male. The ages of the teachers range from 27 to 67 and they each have between 6 and 40 years of teaching experience. By the end of the 1989-1990 academic year, 117,618 of them finished the program successfully and attained their higher education diplomas.

The Courses and the Media

The TDPPST is a multi/media program consisting of three main components: general culture, teaching methods, and field of specialization. The courses for these components are as follows:

First Year

Behavioral Sciences
Social Sciences
Science
Mathematics
Principles of Atatürk &
History of the Turkish
Revolution I

Turkish Language I
Foreign Language
(English) I

Second Year

Educational Sciences
Special Methods of Teaching
History of Thought and
Civilization

Principles of Atatürk &
History of the Turkish
Revolution II
Contemporary Developments
in Technology

Turkish Language II
Foreign Language
(English) II

Three instructional media were used for the TDPPST: Printed material, television and radio programs and academic counselling.

The printed material was the main instructional medium of the program. The printed material for each course generally was prepared in three volumes. In all, 55 volumes of the printed material were sent to the teachers by post at three different times during the academic year.

The television and radio programs were prepared to support the printed material. A total of 179 television programs each lasting 20-25 minutes and 147 radio programs each lasting 15-

20 minutes were prepared and broadcast daily by the Turkish Radio and Television for all courses.

All the instructional media were authorised by selected academic staff of various universities in Turkey and edited by experts of Anadolu University.

The academic counselling for the teachers was planned to be done during the summer holidays as face-to-face teaching (Özgü, Hakan and Acikalin, 1985). But unfortunately it could not be realised because the economic aspect of it was quite heavy for the individual teachers and also for the government because of the big number of the teachers attending the program. Instead, special printed material and television programs were prepared and introduced for the teachers' benefit.

A part from the ones above, a number of special television programs called *The Journal of Teachers* were produced and broadcast on television periodically, about seven times a year. They were non-academic programs providing communication between the university and the students.

Examinations

Examinations were given to the teachers, one in the middle and one at the end of each academic year from each course to measure their level of learning. A make-up examination was also made for each course. The examinations made were all summative type. All the examinations were carried out at 22 different centers of Turkey, and the teachers took them at the nearest centers to the town where they live.

Conclusion

It can be stated that the TDPPST was realized successfully. More than 140,000 primary school teachers were trained in a five year period by distance education, providing important advantages to the teachers. As the teachers themselves stated, they had an opportunity for higher

education," they renewed their "professional knowledge and skills by studying the latest developments," they "gained more self-confidence in teaching and respect in society" and they "received increases in salary and retirement benefits" (Özer, 1987).

An additional benefit was the development of a positive attitude toward distance education among the teachers and the decision-makers in the government. Recently an agreement has been signed by the Ministry of Education and Anadolu University for a new distance education program for secondary school teachers. The university has learned that more than 90,000 teachers from different branches are willing to attend it. This is the victory of the teachers, of Anadolu University and of distance education.

REFERENCES

- ÖZER, B. (Chairman). "Öğretmenlerin Eğitim Önlisans Programı Üzerine Görüşleri, Öğretmen Dergisi TV Programı (Teachers Views on the TWO-Year Diploma Program for Primary School Teachers", The TV Program of the Journal of Teachers). Established May 12, 1987.
- ÖZGÜ, T.A. Hakan and A.Acikalin., *Ortaöğrenimli Lise Öğretmenlerine Uzaktan Öğretim Yoluyla Önlisans Öğretimi Sağlama Projesi Ön Raporu* (The Preliminary Report of the Project Providing Higher Education by Distance Education to Primary School Teachers with Secondary Education). Eskisehir, Turkey: Anadolu Üniversitesi Açıköğretim Fakültesi, 1985.

Identification Of The Distance Education Students In Turkey : A Case Study Open Faculty

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Prescript

Just at the moment there are twenty nine universities spread throughout the country. The total capacity-keeping Open Education Faculty out of this category - is 393. 508. But the demand in an increasing manner- is approx. 700.000. That means, traditional higher education system keeps nearly 300.000 students out of the system because of capacity insufficiencies. In a general understanding this problem can be mentioned as the main reason and the source of many social problems which has appeared in Turkey, in the last twenty years.

Anadolu University Open Education Faculty was established in 1982 after a thirteen-year hard work. The first graduation was realised at the end of the 1985-86 term. Indeed, the history of the Open Education Faculty goes back to 1970's. In those years state planning institution permitted 'Institute of Education through TV' to be founded in Eskisehir Academy, as a pilot project. Three years later Cinema and TV Institute was established in order to trained technical and academical personnel for the distance education systems (Askun, 1980).

After the 1982 higher education reorganizations, the Open Education Faculty was founded and began to offer two distinct types of higher education programs: One of them was, face-to-face "class-room" education programs in (1) Cinema and Television, (2) Printing and Publishing, (3) Communication Arts, and (4) Educational Communication and Planning departments; and the other distance education

programs in (1) Undergraduate level; Economics and Business Administration (2) Adult Education; Junior college for Teachers Training, (3) Adult Education, Vocational In-Service Tele-Training for Private Sector, (4) Secondary Education; Televised Summer Courses for Lycee Students, (5) Overseas Education; Open education for Turkish Citizens Living Abroad (6) Video Education; Support for Foreign Language (English) Programs.

In 1982-83 academic year, distance education programs started with 29.479 students. The Economics and Business Administration programs offered by the Open Education faculty are four-year undergraduate programs leading to the degree of Bachelor of Arts in the respective fields. The students of the Open Education Faculty are enrolled in these programs on the basis of their scores in the university entrance examination and their individual preferences.

The instructional materials used by the Open Education Faculty consist of printed materials sent out to the students, television and radio programs broadcast by the Turkish Radio and Television Association (TRT), and video cassettes through the Video Education Centers (VEC). These materials are supplemented by the services provided at the local face-to-face teaching centers, local students' information bureaus, and the newspaper "Anadolu".

Introduction

This study deals with the information on the social and socio-economic conditions of the

Open Education Faculty senior students in 1985-86 Education year.

There were 9949 senior students in the Open Education Faculty "Economic" and "Business Administration" programs in 1985-86 term. All the senior students were given the questionnaires. 8771 students mailed the questionnaires back, 389 out of 8771 questionnaires were not included in the research since they were not answered accordingly. This 8382 questionnaires were used in the research (The returning rate of the questionnaire is 84%). In this respect, the group which the study is based on has been accepted as the control group. The term "control group" includes all the Open Education Faculty 1985-86 senior students.

Information Related to the Students

The questions were directed to the student themselves concerning their departments, the regions where their student information bureaus exist, their sex, age and marital status, the quality of the places they live in, whether they work and what their financial resources are.

60% (5064 students) attend the "Economics" program and 40% (3314 students) attend the "Business Administration" program. As stated previously 1178 students did not mail their questionnaires back and 389 students' questionnaires were not included in the study since they were not answered.

The students attending the Open Education Faculty programs are registered to the nearest Open Education Faculty local student information bureaus where they live. The distribution of the senior students in terms of the student offices they are registered is as follows : 45% (3776 students) is registered to the offices in the Marmara and the Egean, 30% (2528 students) in Central Anatolia, 10% (848 students) in the Medigerranean, 9% (754 students) the Black Sea and 6% (464 students) in the Eastern and South Eastern Anatolia. Such a distribu-

tion is expected in that most of the students in group are not working, the population density is low in the eastern parts where as it is high in the western parts and that big cities take place in the western parts.

Out of all students 29% (2432 students) are female and 71% (5941 students) male.

Another topic which has been analysed is whether the age groups of the Open Education Faculty students would be different from those of the regular university students since the Open Education Faculty has been using distance education method. It is seen in the answers to the questions related with age that 85% (7086 students) are 25 or under 25 years old. This is an expected result because students of 18, generally start higher education and at the age of 21 or 22.15% are from the other age groups. The distribution of this 15% group is as follows : 13% of the control group is between 26-30 and 0.27% is over 40. In 1982-83 term the Open Education Faculty administration applied these students a questionnaire and the question "How many times did you take the university entrance examination" was asked. 27% (6202 students) of the answers indicated that it was the first, 37% (8507 students) the second, 24% (5613 students) the third and 10% (2474 students) the fourth or more. It is seen that four years ago the 73% of the students who registered to the Open Education Faculty is over 18 whereas the university candidates are generally 18 years old in Turkey. This result related with the number of the university entrance exam shows that some of the Open Education Faculty students did not pass the university exam and quitted their education for a few years. This shows us another fact that the Open Education Faculty students are older than the regular university students. Yet this can not be the only reason for this difference.

In our questionnaire for 1985-86 senior student the question of marital status has been answered as follows : 87% of the students are

single, 13% married. The group of single students; 78% (6544 students) never married or engaged, 19% (722 students) engaged and less than 1% divorced or widow/widower 5% (431 students) married without children and 8% (641 students) married and have children.

The questionnaire includes the question "Do you work?" in order to determine the students' economic conditions. From the answers to this question, it is seen that 40% (3360 students) of the Open Education Faculty Senior Students do not work. 59% (4968 students) does his own work without payment or with payment. 46 students did not answer this question.

The questionnaire also includes the question "What is your financial resource?". Those who answer this question as "from my family" were 35% (29861 students.) The rate of those who cover all their own expenses of their own is 30% (2498 students). The rate of the students who state that they have money from some other financial resources are 1.5% (121 students), 16 students did not answer this question.

One of the different aspects of the Open Education Faculty is that it employs the distance education system and in this way it carries out the educational services into the places where they live or work. A regular university student has to live where his faculty is. The answers to the question "What kind of a place do you live?" 33% of the students live in metropolis, 28% in city centres, 24% in towns and 10% in villages. Under the light of the above data it can be said that 1/3 of the Open Education Faculty students live in towns and villages where there are not many cultural activities and where the traditional structure is more dominant and industry is less dense.

Information related to Socio-Economical Conditions:

The questions 9-23 in the questionnaire have been planned to obtain necessary informa-

tion on the students' socio-economical conditions.

The students were asked "Do you live with your father and mother ? The rate of the students who answered positively is 84% (7052 students) and that of those who answered negatively is 15% (130 students). 30 students did not answer this question. It is natural that the mass of the students lives with their parents because they do not have to go to another city to attend the university with the help of distance education system. 15% of the students do not live with their parents because parents are not alive or the students are married or they work somewhere away from their families. By the way, it must be stated that the Open Education Faculty students do not have the opportunity of staying at the State Dormitories.

One of the most important factors in education is the students' family circle. The number of family members can be important in terms of family relationships. Therefore the question of "How many students do you live with at home ?" has been added to the questionnaire. A great majority of the Open Education Faculty students stated that the number of family members is 4-5. The distribution of the answers to this question is as follows : 3% (227) of the students live alone, 6% (516 students) state that they share the house with another relative, 31% (2601 students) with 2-3 relatives, 39% (3247 students) with 4-5 relatives, 21% (1762 students) with 6 or more relatives. 29 students didn't answer this question.

The same group of students were asked in 1982-1983 term when getting registered to the Open Education Faculty - the question was "How many students do you have in your family?". The distribution of the 22821 answers to this question is as follows: 2% (445 students) of these students state that there are two, 4% (1819 students) three, 19.5% (54450 students) four, 25% (5683 students) five and 46% (10424 stu-

dents) six or more. This data shows that the mass of students registered to the Open Education Faculty four years ago has the same family structure with the group of senior students today. The families of 60% of the Open Education Faculty students have five or more members. This finding shows that this rate is almost the same as the Turkey's average (DIE:1980,p.13). In this respect it is not possible to compare the university students in Turkey with the Open Education Faculty students. However, it can be expected that the latter group has some differences in terms of their families.

The educational background of the students whom the students are in close contact with is also a very crucial factor in the students' adaptation to the society and during their education. In the researches carried out on the social status of the students, the parents' educational background, the members of the family the number of sisters or brothers, the place where the students live have been important variations together with the students' economical conditions (Gunduz:1980,p.59). Therefore, two questions on the educational backgrounds of the mothers and fathers have been added to the questionnaire. The distribution of the answers to both questions is as follows; 28% (23589 of these students) have illiterate mothers, 58% (4842 students) have literate or primary school graduate - mothers, 7% (549 students) have secondary - school graduate mothers, 6% (505 students) have high-school graduate mothers, 1% (86 students) have university graduate mothers. 42 students did not answer this question.

As for the fathers' educational background, 5% (452 students) have illiterate, 60% (5037 students) have literate or primary school graduate, 10% (873 students) have secondary school graduate, 15% (860 students) have high school graduates, 8% (671 students) have university graduate. 89 students did not answer this question.

The answers obtained from the questionnaire given to the senior students four years ago are as follows: 28% have illiterate mothers and 5% illiterate fathers. 60% have primary school graduate mother, 63% primary school graduate fathers and 6% have secondary school graduate mothers and 10% fathers, 1% have university graduate mothers, and 8% fathers. This indicates that the students who are registered to the Open Education Faculty four years ago and the senior students today are almost the same in terms of their parents' educational backgrounds. Another research compares the students registered in 1982-83 term to the Open Education Faculty programs with the students who were registered is seen that the Open Education Faculty students have parents whose educational levels rather low whereas other university students have parents whose educational level is high. The number of the Open Education Faculty students whose parents are not literate is very high. (Gunduz: 1985, p.60)

The data mentioned above can briefly be summarized as it has been observed that there is a difference in terms of parents' educational backgrounds for both the Open Education Faculty students and the regular university students. The number of students who have high school graduates among the university students is higher than those of the Open Education Faculty students. The educational background of the Open Education Faculty students is rather low.

An important point here is that the Open Education Faculty Students' fathers have a higher degree of education than their mothers.

The occupation of parents can also be mentioned as an important factor for higher education students. Therefore, the question of the parents' occupation has been added to the questionnaire. From the answers it has been observed that 93% (7763 students) of the Open Education Faculty students have 'not-working'

mothers. 6.5% of the mothers have such occupations as follows: 1% (III students) are seasonal workers or unemployed, 5% (378 students) are workers, officials or retired, 0.6% (57 students) are doing their own job, shareholder employer or business women. On the other hand fathers of 12% (1018 persons) of the students are unemployed or seasonal workers, 54% (4494 students) are workers, officials and retired, 17% (1426 students) are tradesman, 3% (279 students) are doing their own work (such as doctors, lawyer, engineers, etc.) 10% (812 students) are employers or farmers. 353 students did answer this question.

The monthly income level of the Open Education Faculty students' families has also been asked in the questionnaire. The distribution of the answers to this question is as follows: Those whose monthly income is less than 30,000 TL. consist of 8% (700 students), those whose income is between 30,000 - 60,000 TL. consist of 35% (3239 students), those whose income is be-

tween 60,000 - 120,000 TL. make up 38% (3205 students), those whose income is between 120,000 - 230,000 TL. make up 14% (1145 students) and those whose income is more than 230,000 TL. consist of 4% (355 students). 61 students did not answer this question.

It is rather difficult to make comparisons in terms of the distributions of students' income shown in the other studies because Turkey has had financial fluctuations in the recent years. However, the study carried out by Gunduz in 1982 has indicated that the question of monthly income asked to the students who were registered to EITIA-EACS in 1982 and those who registered to the Open Education Faculty programs is in the same income categories. Table 1 shows the findings of the research mentioned above.

The questionnaire includes another question on the family's monthly income in terms of

TABLE: 1

MONTHLY INCOME LEVEL	OPEN EDUCATION FACULTY (1982)		ESKİŞEHİR ACADEMY (1982) (Eskişehir Academy of Commercial and Sciences)	
	Number	Percentage	Number	Percentage
Under 10,000 TL.	3441	0,14	77	0,10
10,000 - 24,999 TL.	14340	0,59	472	0,59
25,000 - 49,999 TL.	5533	0,23	203	0,25
50,000 - 74,999 TL.	929	0,03	39	0,05
Above 75,000 TL.	322	0,01	14	0,01
TOTAL	24565	100	805	100

Reference: (Gündüz: 1985, p: 62), $\chi^2_{(4)}=16,99$; $p<0,01$

the number of the members earning a living? The distribution of the answers to this question is as follows:

46% (3825 students) state that there is one students earning a living, 39% (3239 students) two, 12% (1017 students) 3.2% (191 students) 4 and 1% (66 students) 5 or more. 44 students did not answers this question. As it is seen in almost half of the families, one family member earns their living.

In this respect, there is a parallelism between almost half of the students having an income level less than 60.000.

The question of 'How many rooms - except kitchen and bathroom - do you have at home?' was asked in the questionnaire. The distribution of the answers to this question is as follows: 3% (219 students) have stated that they have one room, 19% (1616 students) two rooms, 54% (4990 students) three rooms, 19% (1600 students) four rooms, 6% (462 students) five or more. 21 students did not answer this question.

The Open Education Faculty students have been asked the question of whether they have a study room of their own or not'. The distribution of the answers to this question is as follows: 51% (4312 students) have stated that they have a study room of their own, 48% (4038 students) have stated that they do not 32 students did not answers this question. The students were asked the same question four years ago and from the 22708 answers it was observed that 50% (11283 students) of the students did not have a room of their own. Therefore, there is not an important difference in terms of the students' having a study room of their own-four years ago and today.

The questionnaire includes questions concerning the control group has the mass-media at home and the other facilities determining their social status. One of these question is: 'Do you have a tape recorder or a radio at home?'. The distribution of the answers to this question are as follows: 6% (543 students) have no radio or

tape-recorder 23% (1893 students) have radio only and 3% (228 students) have only tape recorders. The rate of those who have both radio and tape recorders is 67% (5618 students). 64 students did not answer this question.

As for TV and video: 10% (795 students) have none of them, 44% (9733 students) have only B/W TV, 36% (3048 students) have colour TV. Thus approximately 80% (6781 students) have TV at home (when both B/W and colour TV are considered together). 9% of the students have both TV and VCR. 19 students did not answer this question.

The other facilities asked were about videos, cars, telephones and owning a flat/house. These facilities can be thought as the determiners of social status. The distribution of the answers shows that 30% of the students have none of such facilities, 30% have only one of them and 40% have two or three of those facilities. When this group has been analysed in detail, it is seen that 23% (1959 students) have two of these facilities, 11% (936 students) three, 4% (373 students) four of them. 29 students did not answer this question.

The rate of the Open Education Faculty students who live with their families is about 85%. Although the Open Education Faculty students have a higher range of average age than the other university students, a greater part of them live with their families. Because they carry on their education through the distance education method. Therefore, they do not have to go to the cities where the higher education institutions are. In this respect the family's attitude towards the students gains importance. Therefore, the students have been asked such questions as 'who is dominant in making the important decisions are made' and 'how much tolerance the family elders and parents show the students'.

The distribution of the answers to the question of "Who usually makes important decisions in your family?" Is as follows: 51% (4247 students) have stated that they take impor-

tant decisions "together with all family members". In other words it can be said that half of the Open Education Faculty students takes part in the important decisions. 1238 students who state that the important decisions are made by their father only 15%. In other words 1/5 of the Open Education faculty students' parents usually make decisions together. 12% (1007 students) of the students state that the elders in their family together with their parents take part in decision making. 19 students did not answer this question.

The answers to the question of tolerance is as follows: 1% (104) student state that they show "no tolerance", 7% (547) students "too little", 26% (2182) student "too much", 49% state that sometimes "positive", sometimes "negative", 17% (1338) students state that there is "no interference". 87 students did not answer this question.

When the answers "too much tolerance" and "no interference" are considered together, it is seen that 43% (3570) students of the group have democratic families. When the 48% answers "sometimes positive, sometimes negative in terms of tolerance" are added, it is seen that 99% of the Open Education Faculty students have democratic families.

In the light of the above data it can be said that the students who state the idea that their families are democratic have appropriate family circles. In this respect there seems to be no difference between male and female students. However, when the answers in terms of the "degree of tolerance" their families show the number of male students who are more tolerated is higher than that of female students.

Use of Time

In order to determine the students time usage, the questions on the weekly hours of work, the daily hours of study and the hours for leisure time a day have been asked.

The questions "if you are working how many hours a week do you spend for working?"

has been answered by 41% (3416) students as "I do not work", 4% (315) students "under 20 hours" and 15% (1335) "20-40 hours", 24% (1991) students "41-50 hours" and 13% (1130) "more than 50 hours", 195 students did not answer this question.

As observed in the answers 41% of the students do not work and 53% work for more than 20 hours a week. This shows that 37% of the students in the control group work full-time.

The question "Can you study regularly, if so how many hours a day do you study?" have been answered in the following way: 48% (4013) students state "I cannot study regularly", 6% (500) "less than an hours", 30% (2505) students "1-2 hours", 13% (1112) "3-4 hours", 3% (210) "hours or more", 42 students did not answer this question. From the answers it is observed that approximately half of the students do not study regularly, 43 % study for 1-4 hours, 16% for 3 hours or more.

The last question on the students' use of time is: "How many hours a day do you spend for leisure time activities?". The distribution of the answers to this question is as follows: 22% (1872) of the students state that they have no leisure hours, 34% (2862) for "1-2 hours", 28% (2382) for "3-4 hours", 11% (931) for "5-6 hours" and 4% (314) for "7 hours or more", 21 students did not answer this question. This distribution shows that nearly half of the students' leisure hours are 1-4 hours and for 15% of them it is more than five hours.

In this respect, it can be said that as the amount of working hours increase, the number of study hours decrease. This is because the hours for sleeping and the other daily needs will not change. In order to determine whether such a situation exists the answers to both questions have been analysed together. The answers to the question, "If you work how many hours do you have to be at work?" (i.e. the answers those students who do not work, who work for 20-40 hours a week (part time) and those who work for

41 hours (full-time) give have been considered together with the answers given to the question "Can you study regularly, if so how many hours do you spend for studying?" (i.e. not regularly and less than 1 hour, 1-2 hours a day, 3 hours and more) and the situation is presented in Table 2.

As seen in Table 2 there is a relevant relation between the period of study hours and that of working hours. As it is expected the more the amount of working hours are, the less the amount of study hours become and the study hours become irregular.

The above mentioned data can briefly be summarized as follows: It is seen that about half of the Open Education Faculty students study for less than an hour and not regularly and that

the rate of those who study for 1-2 hours a day is 30% and that of those who study for 3 or more hours is about 15%. This study has stated that there is a relevant relation between the period of study hours and that of working hours. In other words, the more the amount of working hours are the less the amount of study hours become.

A final point in the Open Faculty Students use of time is that 22% of the students state that they have no leisure hours and 34% 1-2 hours for leisure. This indicates that about 60% of the control group do not have leisure hours apart from daily activities like sleeping, feeding, work and study hours.

In this way it has been understood that the public's idea that the Open Faculty students can

TABLE: 2
The Period Of Working Hours and Time For Study

Question 25			TIME FOR STUDY			
Question 24			Not Regular and Less Than 1 Hour	1-2 HOURS A DAY	MORE THAN 3 HOURS	TOTAL
TIME FOR WORK	NOT WORKING	No	1502	1245	969	3716
		Line%	40.4	33.5	26.1	45.5
		Column%	33.9	50.8	75.8	
		Total%	18.4	15.3	11.9	
	20-40 HOURS (PART-TIME)	No	777	429	124	1330
		Line%	58.4	32.3	9.3	16.3
		Column%	17.5	17.5	9.7	
		Total%	9.5	5.3	1.5	
	MORE THAN 41 HOURS (FULL-TIME)	No	2150	777	186	3113
		Line%	69.1	25.0	6.0	38.2
		Column%	48.5	31.7	14.5	
		Total%	26.4	9.5	2.3	
TOTAL		Number	4429	2451	1279	8159*
		%	54.3	30.0	15.7	100.0

223 Student are out of this analysis.

$$\chi^2(4) = 782.37, p < 0.01$$

have more time for leisure just because they do not have compulsory attendance is not correct. This mistaken idea can be based on the realized that the public has not yet realized that most of the Open education Faculty students are working and earning their own lives.

Conclusion

In most of the countries where "distance education" models and methods are used there is a strong belief that these models are not fully appropriate to cover the educational needs and demands. Consequently the distance between the teacher/tutor and the learner has always been accepted as a disadvantage supporting the above mentioned belief. However, it can briefly be stated that the ones who put those counter arguments are not well informed about the details of the fantastic developments in D.E. models, communication industry enabling better education, and the changing typology or identification of the learners.

This study is proposing to prove that even if, considering the specific conditions of Turkish society, distance education is the most appropriate model for bringing solutions to the existing problems of Turkish Higher Education system and higher education students. The standpoint is accepted the features of distance education students. And they are as follows:

Under the light of the information that has been mentioned so far the results obtained can be summarised as follows: 15% the Open Education Faculty students are above 25 years old, 59% work at any job, 13% are married, 35% are financially supported by their families, approximately 30% live in places like towns and villages, 29% are females, 71% are males and 60% attend 'Economics' program, 40% 'Business Administration' program and 45% of these students live in Marmara and Aegean Regions, 30% in Central Anatolia, 10% in the Mediter-

anean, 9% in the Black Sea and 6% in the South eastern and Eastern Anatolia.

The characteristics of the students in this research can be summarized as follows: Most of these students work, they are older than the other university students and are married at a higher degree than the university students. Their financial status is not very high and almost half of them live with five or more members of their families. The rate of their parents' educational background is a little lower (especially the rate of the university graduates is very little). The Open Education Faculty students' mother have lower educational level than that of the father. In terms of parents' occupational status, most of the mothers are housewives, most of the fathers are workers, officials or retired. When this is compared with those of the other university students it is seen that there is not a great difference. In the families of most students one person supports the family, in half of them two or more students support the family financially. 72% of the students' families have a monthly income of between 30.000 TL. and 120.000 TL. For most of the students their houses are sufficient in terms of the number of rooms. Half of the students have a study room of their own. In terms of the facilities and the mass-media used it can be said that the students have enough of them. These students regard their families a bit more democratic than those of the other university students. The same is valid for them in terms of their communication and interactions with their families.

All of these findings to indicate that distance education model, with its already existing structure in OEF, can be considered a successful application keeping the identification of the target learners.

REFERENCES

- ABADAN, Nermin. 1981. *Üniversite Öğrencilerinin Serbest Zaman Faaliyetleri, (Leisure Activities of the University Students)* Ankara University Publications, Ankara.
- AÇIKÖĞRETİM FAKÜLTESİ DEKANLIĞI (THE OPEN EDUCATION FACULTY ADMINISTRATION). 1982. The results of the questionnaire carried out by the Open Education Faculty Administration in 1982-1983 term, Eskişehir.
- DEMİRAY, Uğur. 1987. *Açıköğretim Fakültesi Öğrencilerinin Boş Zamanlarını Değerlendirme Eğilimleri, (Evaluation of Leisure Time Activities And Expectations Of Students From Faculty Of Open Education At The Anadolu University)*, Anadolu University, The Open Education Faculty Publications No:252, Eskişehir.
- EKSİ, Aysel. 1982. *Gençlerimiz ve Sorunları, (Our Youth and Their Problems)* İstanbul University Medi-co-Social Publication No:1 İstanbul.
- GÖKÇE, Birsen; TÖZÜN, Sezgin; ETKİN, Güven; SÖNMEZER, Yaşar; AKPINAR, Aylin; ATALAY, Dilek; GÜRTAN, Kadir. 1984. *Ortaöğretim Gençliğinin Beklentisi ve Sorunları, (Problems and Expectations Of the Secondary School Students)* Ministry of Education Publications, No: 270/19, Ankara.
- GÖKMEN, Hülya; AÇIKALIN, Aytac; KOYUNCU, Nur; SAYDAR, Zühal. 1985. *Yükseköğrenim Öğrencilerinin Serbest Zaman Etkinlikleri Kendilerini Gerçekleştirme Düzeyleri, (The Leisure Time Activities Of the University - Higher Education - Students And The Levels the Of Realizing Themselves)*, Ministry of Education Publications No: 456/34, Ankara.
- GÜNDÜZ, Özer Mukadder. 1985. *Anadolu Üniversitesi Açıköğretim Fakültesi (İktisat-İş İdaresi) Birinci Yıl Uygulamasının Değerlendirilmesi - (Evaluation of the First Year Application of Anadolu University Open Education Faculty)*, Social Science Institute of Hacettepe University, (Unpublished Doctoral Dissertation), Ankara.
- KARASAR, Niyazi. 1982. *Bilimsel Araştırma Yöntemi, (Scientific Research Methodology)*, Bahçelievler, P.K.33, Ankara.
- NESSMANN, Karl. 1985. "Media Education in Leisure Time", *Journal of Educational Television's*, Britain.
- ÖZBİLGİN, Lütfi; IŞIK, Şenay; YILDIRIM, Ali. 1985. *Açıköğretim Fakültesi Televizyon Programlarının Değerlendirilmesi, (A Research done on the Open Faculty Students Living in Malatya)* Malatya İnönü University Faculty of Educational Sciences (Unpublished research), Malatya.
- ÖZÇELİK, A. Durmuş. 1981. *Araştırma Teknikleri: Düzenleme Analiz, (Research Techniques: Regulation And Analysis)*, University Placement Center Educational Publications 49, Ankara.
- SERTER, Nuray. 1987. *Açıköğretim Fakültesi Danışmanlık ve Uygulama Hizmetlerinin Değerlendirilmesi (Evaluation of Academic Advising Organization Of Anadolu University Open Education Faculty)*, Anadolu University, The Open Faculty Publications No: 243/116, Eskişehir.
- ÜNVER, Özkan; TOLAN, Barlas; BULUT, Işıl; DAĞDAŞ, Cevat. 1986. *12-14 Yaş Gençlerinin Sosyo-Ekonomik Sorunları, (The Socio-Economic Problems Of Youngs Between 12-14 Years Old)*, The Ministry of Education Publications, Ankara.
- YURTKUR Kurum Yurtlarında Barınan Öğrencilerin Boş Zamanlarını Değerlendirme Anketi Sonuçları, YURTKUR Publications, No:3, *(Results Of The Questionnaire How The -Higher Education Students' Living In Dormitories Spend Their Leisure Time)*, Ministry of Education Publications, Ankara.

TRANSFER OF AGRO-HOME TECHNOLOGY

L. S. Gill

G. S. Saini

Recent advance in technology have brought many changes in the life style of the people. There is so much to know that one is tempted to keep oneself abreast with these changes. It is apparent that existing educational infrastructures related to agriculture and home are physically and financially inadequate to meet the growing needs of farmers, farm women and rural youth. There are large number of rural people who did not have enough resources and could not leave their homes/work places to join institutional training programmes. Thus, distance education has enough scope to improve the behaviour components related to gain in knowledge and skills, and creating favourable attitude towards improved technology. It will serve the following objectives :-

- i) To impart basic knowledge to rural youth, farmers and farm-women related to all areas of agriculture and home science.
- ii) To motivate and prepare rural youth for self-employment avenues in the field of agriculture.
- iii) To offer graduate/postgraduate level degree courses to rural youth.

Curriculum Development

Different courses have to be designed to meet the specific educational and training needs of rural people. Courses will also differ as per the objectives cited earlier. Keeping in view the available expertise and professional competencies in agricultural universities in India, it is feasible to start/strengthen the distance education under the discipline of extension education in these universities. The Punjab Agricultural University, Ludhiana, initiated first correspon-

dence courses entitled 'Integrated Course in Agriculture' for farmers during the year 1971. Subsequently four other courses on 'Home Management and Family Life for Farm women', 'Farm Power and Machinery Maintenance and Operations for Farmers', special integrated course in agriculture for Small and Marginal Farmers; and special Home Management and Family Life course for Small and Marginal Farm Ladies were also started. So far 6984 general farmers 2101 small farmers, 2894 farm women were trained through correspondence courses in Punjab. The courses meant for farmers were devoted to Soil Science, Agronomy, Horticulture, Vegetables, Plant Pathology, Entomology, Subsidiary occupations (*bee keeping, mushrooms, forestry, piggery*), Animal Husbandry Poultry, Farm Machinery and Farm Management. Similarly, farm women courses included contents on Foods and Nutrition, Family Life, Child Development, Clothing and Textiles, Health and Hygiene, Kitchen Gardening, Fruit and Vegetable Preservation, Home Management, Control of Household insects, Dairying, Poultry and Compost from Household.

The lessons on the contents referred earlier were prepared by a team of subject Matter Specialists on the basis of the training needs of the farmers and farm women. It is ensured that the contents are technically accurate, specific and precise. The sentences are simple and short. The sequence of lessons is based on the timely application of the contents in homes and farmers and level of understanding of the trainees. Based on the findings of researchers and experiences, additions and modifications are made in the contents of lessons from time to time.

Regional Research Centres/Agricultural and Home Science Colleges

The Agricultural universities have opened regional research centres/agricultural and home science colleges in the States. Some universities have appointed a team of experts at the District Headquarters to provide advisory service to the rural community. This facility could be utilised for conducting the personal contact programme and to strengthen the interactions between the distance educators and students.

Media Use

Print media is commonly used in distance education. Studies have shown that 'Multi-media Approach' depending upon the purposes of the media, suitability to the contents of study proper/combinations with other media is effective in bringing desirable changes in behaviour composed of an individual. Practical knowledge and skills are better communicated through the use of television, films, slides

These media are not the substitute of one another rather these supplement and enhance the effects of learning. The use of 'Visual effect' in Agriculture Education is indispensable. All this can be done by creating a close association between the distance educators and media organisations in the State. Radio can also be used as means for distance education to the rural masses.

Research Components

For providing feed-back to the distance education and the effective implementation of its programmes, it is desirable to conduct systematic and periodic research and evaluation. Four postgraduate students of Punjab Agricultural University, Ludhiana, completed their studies in the field of correspondence education being run by the department of Extension Education in the same university. Some of the salient findings are given as under

- i. The Distance Teaching was efficient in the fulfilment of Information Needs of the farmers in respect of Agricultural Technology³
- ii. The Farmers (81.25 per cent)³ and Farm-women (77%)² Comprehended reasonably well the contents of the Lessons.
- iii. The Farmers and Farm Women (75%)^{3,2} made use of information to a great extent at their farms and homes.
- iv. The Farmers increased the average yield under improved practices of cultivation of selected crops after the completion of the distance education programmes.³
- v. The Farmers and Farm-Women enrolled under the course were mostly young (20-30 years) and school drop-outs and had small farm size (upto 5 acres)^{3,2}

Requirement for Starting Distance Education Programme

Adequate staff and budgetary provisions are required for the :

- i.) Production of instructional materials.
- ii) Use of multi-media like radio, television, audio visual cassettes, audio-cassettes ect.
- iii) Creation /strengthening of infrastructure at district level for providing efficient and effective face to face instructions between the trainees and trainers.
- iv.) Expenses for the staff to organise personal contact programmes with the trainees.
- v.) Organization of refresher training course to up-date the knowledge of the distance education staff in designing, planning and monitoring of distance education programmes.

REFERENCES

1. David, J.S. et al (edi) 1983 *International Council for Distance Education 1982 Conference Report and Handbook* Athabasca University, Canada.
2. Gill, L.S. & G.S. Saini 1986 *Reading Behaviour of farmers of Punjab State*. Maharashtra Jour of Ext. Edu. Vol. V, pp 49-55.
3. Kaur, S. 1982 *Comprehensive and Use of Information*. A study of correspondence cours for farm ladies of Punjab. Unpublished, Ph.D. Thesis, PAU, Ludhiana.
4. Saini, G.S. 1982 *Distance-Teaching Prospects and Problems*. Sahita Kala Prakashan, Ludhiana
5. University News. 1986 Association of Indian Universities, New Delhi.

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Computer Education In UGC Countrywide Classroom Television Programmes

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INTRODUCTION

The Higher Education Countrywide TV programmes are produced at the UGC Media Centres, namely, EMRC's located at Ahmedabad, Hyderabad and Pune, MCRC located at JMI, New Delhi, AVRCs located at Calcutta, Hyderabad, Jodhpur, Madras, Madurai, Roorkee, Srinagar, Patiala and Imphal. It is under UGC-INSAT TV project undertaken by the UGC, New Delhi. A mass Communication Bureau is also established at the University Grants Commission, New Delhi. Some facilities for TV programme production have also been developed in the TTIs.

The programmes are recorded on 3/4" U-matic PAL/625 format. UGC has entered into an agreement with Electronics Trade and Technology Development Corporation Limited (ET & T) to video publish some of the programmes on 1/2" VHS format, so that interested viewers, institutions may be benefitted. These are telecast on the countrywide classroom on Doordarshan's National Network via INSAT system on all working days from 12.45 p.m. to 1.45 p.m. and from 4.00 p.m. to 5.00 p.m. With effect from 1 March, 1990 for about six months the telecast time is 6.00 a.m. to 7.00 a.m. and 12 noon to 1 p.m. The target audience primarily is the under graduate student particularly from the semiurban and rural areas.

The programmes aim to upgrade, update and enrich the quality of education, to arouse the interest of the viewers, to whet their appetite and to broaden their horizons -- to stimulate rather than to satiate (UGC, 1989). To what extent the above mentioned objectives are realised is yet to be examined. Is the quality of education really upgraded, updated and enriched? Do the viewers gain significantly through these programmes? All these programmes are beamed in English. Do the different media

viewers gain equally or differentially? What is the comparative effectiveness of Indian and imported programmes?

Research efforts and need for further research

The function of TV as a medium for classroom instruction is to supplement the classroom instruction. How far the Educational Telecasts function effectively is to be examined. A few studies (Shah 1972, Rahman 1977, Somboornam 1980, CET 1980, Kanade 1982, CET 1983, Seth 1983, CIET 1984, Goel 1984, Kiran 1988, Arti 1988) have been conducted in our country to study the functioning of the ETV programmes. There is a need to conduct a series of studies of different nature focussing on the various dimensions of the ETV programmes. The information obtained through such studies may lead to certain findings of practical utility for the effective conduct of the ETV programmes. The study under investigation is one such attempt.

Objective Of The Study

To findout the effectiveness of the UGC Countrywide classroom TV programmes on computer education in terms of the achievement of students.

Hypothesis

The following hypothesis were formulated:

1. There will be no significant difference in the pre-test and post-test scores of students on the UGC countrywide classroom programmes on computer education.
2. There will be no significant difference in the gain of the English medium students and Hindi medium students.

Research Design Used

The present study was experimental in nature. In this study pre-test-treatment-post-test

design was used. The duration of treatment was 10 hours and 8 minutes. The independent variable in the present study was countrywide classroom ETV programme and the dependent variable student achievement.

STUDY PROCEDURE

Sample Programmes

Nine computer programmes were recorded out of the UGC Countrywide classroom TV programmes beamed by the Doordarshan from 9-3-1989 to 10-8-1989. The names of the programmes, alongwith the production place and time duration are presented as follows :

1. Computer Memory-2, EMRC, Ahmedabad, 29 Minutes
2. Computer Memory-3, EMRC, Ahmedabad, 33 Minutes.
3. Introduction to computer-2, EMRC, Ahmedabad, 23 Minutes.
4. Introduction to computer- 3, EMRC, Ahmedabad, 23 Minutes.
5. COBOL -4, CIEFL, EMRC, Hyderabad, 19 Minutes.
6. COBOL -6, Divisions, EMRC, Hyderabad, 18 Minutes.

7. Graphics with microcomputers -2, AVRC, Madras, 18 Minutes
8. Computers in office automation, EMRC, Ahmedabad, 20 minutes.
9. Emerging trends in computers, AIAET, 25 Minutes.

Sample Student

All the diploma in computer education students (1989-90), School of education, Centre of Excellence, Devi Ahilya Vishwavidyalaya, Indore constitute the sample for the study.

Test Construction

After viewing each programme an objective type test was constructed by the investigator. So, in all nine tests were constructed keeping in mind the instructional objectives and teaching points covered in each programme.

Treatment and Testing

The programme were viewed by the students during 22-7-89 to 13-3-90. A test was administered before and after viewing each programme as a pre-test and post-test.

Table 1: Significance of difference of the means of pre-test scores and post-test scores of the students.

S.No	PROGRAMMES	M1	M2	R	SE1	SE2	t' VALUE	DF
1.	COMPUTER MEMORY-2	3.65	18.05	.508	.818	1.645	10.163 **	18
2.	COMPUTER MEMORY-3	5.866	24.2	.519	1.008	1.974	10.870 **	13
3.	INTRODUCTION TO COMPUTER-2	6.266	10.133	.208	.672	.321	5.667 **	13
4.	INTRODUCTION TO COMPUTER-3	18.733	31.466	.145	1.458	.623	8.485 **	13
5.	COBOL -4	8.5	20.111	.429	.837	.744	13.685 **	16
6.	COBOL -6	5.941	28.882	.633	1.148	1.374	20.861 **	15
7.	GRAPHICS WITH MICROCOMPUTERS-2	0	5.933	1.701	0	.963	6.158 **	13
8.	COMPUTER IN OFFICE AUTOMATION	2.6	10.866	.161	.702	1.099	6.860 **	13
9.	EMERGING TRENDS IN COMPUTERS	2.6	21.133	.612	.411	2.072	10.024 **	13

** : Significant at .01 level

* : Significant at .05 level

Data Analyses

't' test was used to find out the significance of difference between the means. Table 1 presents the significant difference in the pre-test and post-test scores of both, the English and Hindi medium students, whereas Table 2 presents the gain of the English medium students as compared to that of the Hindi medium students.

FINDINGS

1. In all the nine programmes the post-test scores of both the English and Hindi media students were significantly higher than their pre-test scores. So, the null hypothesis is rejected. The higher education countrywide science TV programmes are effective for both the Hindi and English media students.

2. The mean gain of the English medium students was not significantly different than the mean gain of Hindi medium students in 6 programmes out of the nine, whereas, there was significant difference in 3 programmes in favour of the English medium students.

So, the higher education countrywide science TV programmes are effective for both the Hindi and English medium students. In a large number of the programmes there is no significant difference in the achievement of the English and Hindi medium students. It may be because TV is an audio visual medium. The visual stimuli support the audio stimuli or the language of delivery and compensate for the language. Otherwise, also TV is more of a video medium and visuals have their own language which is universal. However, in some of the programmes there is significant difference in the achievement of the English and Hindi medium students in favour of the English medium students. It may be because the telecast is in English language. In some of the programmes the level of the language used is quite high, speed of delivery of the programme is very fast and the accent and articulation strange. However, new ideas and improvements in telecasting technique and in the field of instruction will raise Educational Television to its pinnacle of importance.

Table 2: Gain of the english medium students as compared to that of Hindi medium students

S.No.	Programme	M1	M2	SD1	SD2	SEDM	t-VALUE	DF
1.	COMPUTER MEMORY-2	15.785	11.166	6.231	5.231	2.740	1.685	18
2.	COMPUTER MEMORY-3	19.545	15.866	6.486	6.218	3.673	1.237	13
3.	INTRODUCTION TO COMPUTER - 2	3.818	4	2.821	2.449	1.491	.121	13
4.	INTRODUCTION TO COMPUTER -3	14.5	11.333	8.361	5.507	3.992	.793	13
5.	COMBOL - 4	10.928	14	3.689	2.160	1.462	2.100	16
6.	COMBOL - 6	24.142	20	4.671	4	2.625	1.578	15
7.	GRAPHICS WITH MICROCOMPUTER - 2	7.272	2.25	3.408	1.258	1.205	4.168 **	13
8.	COMPUTER IN OFFICE AUTOMATION	9.25	4.333	4.653	2.081	1.802	2.727 *	13
9.	EMERGING TRENDS IN COMPUTERS	18.923	9.5	6.563	3.535	3.092	3.370 **	13

** : Significant at .01 level

* : Significant at .05 level

REFERENCES

- MITRA, S.K. and KHANNA, P.N. , A comparative study of observing surgical operations through Closed Circuit Television with Direct observation, NCERT, New Delhi, 1963.
- DEWAN, S.S., Programmed learning through television, Dept.of psychological foundations, NCERT, New Delhi, 1966
- SHAH, MUKUND C., The Scope, Utility, and Limitations of Educational Television in India, (Ph.D. Thesis, MSU Baroda, India), 1972.
- ROY, B., "A study of the cognitive effects of the ETV programmes broadcast by the Delhi TV Centre, Dept. of Educational Psychology and Foundations of Education., NIE, New Delhi, 1974.
- RAHMAN, S., Satellite Instructional Television Experiment --- A study in Education Television (Udaya-bhanu), Misinstry of Education and Social welfare, Government of India, New Delhi, Oct., 1977 (Published).
- PAIGANKAR, A., The use of mass media for second language teaching in India with special reference to Radio and Television, Ph.D., Poona U., 1978.
- SAMBOORNAM, K.V., The Impact of Television viewing on Achievement in History and Tamil, M.Ed. dissertation, Madras University, 1980.
- PHUTELA, R.L., A study into utilisation and Comprehensibility of STV programmes in Delhi, CET, NCERT, New Delhi, 1980.
- KANADE, H.M., A Study of the Impact of Instructional Television on the Behaviour of the Rural Elementary School Children, Ph.D. thesis, MSU, 1982.
- CET, A Study of the Impact of the ETV programmes on the children of Class IV-V in Sambalpur District (Orissa), mimeographed, NCERT, New Delhi, 1983.
- SETH, INDU, A Study of the Effectiveness of Educational Television on the Educational Development of Primary School Children, a Ph.D. thesis, CASE, MSU, Baroda, Oct., 1983.
- CIET, Report on ETV Utilisation in Orissa (for the period ending Dec. 1983), mimeographed, NCERT, New Delhi, 1984.
- GOEL, D.R. "Educational Television in India : Organization and Utilization", Post-doctoral Thesis, CASE, MSU, Baroda, 1984.
- JAIWAL, KIRAN, "A study of science educational television programmes in terms of their contents, presentation, students' reactions and effectiveness", M.Ed. dissertation, D.A.V.V., 1987-88
- DONERIYA, ARTI, "A study of general educational television programme in terms of their contents, presentation, students' reactions and effectiveness", M.Ed. dissertation, D.A.V.V., 1987-88
- UGC, Countrywide Classroom Educational Video Programmes - CATALOGUE, UGC, INSAT. TV PROJECT, Teachers' Training College Building, Jamia Millia Islamia, New Delhi, Dec., 1989.

Distance Teaching Universities (DTUs) : A Study Of IGNOU

Venugopal Reddy
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The first distance teaching University, properly so called was the University of South Africa. It was originally established as a conventional University and it began teaching by correspondence in 1946. However, the real foundation of distance teaching Universities took place only in 1970s. The new trend stemmed in part from an increased concern for greater quality of opportunity of access to higher education. The novelty of UKOU, Britain, its success and the worldwide interest it attracted, made it certain that some countries would follow the example of UKOU and found distance teaching universities of their own. Now, it is being practiced in many countries irrespective of size, economy, population, etc.

Initially many of the DTUs faced 'profound scepticism garnished with ridicule and hostility'. They have collectively survived changes in Government which threatened their early existence. In fact they are particularly vulnerable in periods of economic recession. Indeed the harsh economic climate of the late 1970s and early 1980s have already swept away a number of the non-traditional educational structures that emerged in the 1960s and 1970s. Now in 1980s, there are signs of resilience, a developing sense of identity, and air of permanence about them. More DTUs have been recently established and many are under consideration. Thus, though DTUs are relatively new development, many of them have already achieved a name for excellence.

In DTUs, there is no campus-based instructions compared to the conventional universities. DTUs adopt a 'multi-media' approach using the word of mouth of a class-room teacher, the text books, audio-video aids, etc. and the modern communication technology such as

radio, television, telephone, computer, telex, video, etc. Which are being used to transmit information quickly and to far off places.

Many people think that Open Universities could afford to launch only Arts courses as they do not have infrastructural facilities that are required to launch Science Programmes. In fact, many DTUs have already launched Science and Technology programmes. The CCTU-China, the Air University Japan, the Open University of Germany, etc. have launched many science and technology programmes such as Engineering, Systems Engineering, Digital Computers, etc. The Srilankan University has many technical courses and a serious proposal under consideration by the CCTU, China, for initiating Medical Course as well. The UKOU, Britain introduced research programmes in which they are extensively using Computers.

In 1987, there were 756 Distance Teaching Institutions offering 1969 different courses in various countries. The enrolment of students in DTUs is in millions. The CCTU, China alone has more than one million enrolment in 1980s. The Thailand Open University has an enrolment approximately 3 lakhs. In Germany the enrolment of open university is around 12% and in the USSR it is around 40%. The UK Open University has an enrolment around less than a lakh at present.

Are the Degrees, Diplomas & Certificate of DTUs recognised by other employers, Universities, Institutes, etc.? Many of the DTUs are established by State/Central Governments in many countries. So the Degrees, Diplomas and Certificates of DTUs will have the status as those of any other University. So the

question of non-recognition of DTUs degrees doesn't arise.

The standards of DTUs is in no way inferior to any other University in the World. In fact it has been proved by conducting surveys in a number of countries. Many DTUs offer uniform standards throughout their countries which we do not find in the conventional system. The quality of the study material is also of high standard as DTUs utilize the expertise of the best brains from various fields in order to get the best input for the various requirements of the system.

The courses which these DTUs are offering are more cost effective than those of the conventional system. Many studies have already been conducted and they have proved that these are less expensive.

Against this background, IGNOU has been taken in order to study the following aspects:

- * The target group; its features and enrolment; the examination system; the programmes launched and to be launched; the staff position; the type of awards, its recognition and standards; how cost effective the system is and projections for IGNOU's Development.

Indira Gandhi National Open University (IGNOU)

The IGNOU was established in September, 1985, as one part of an overall plan for restructuring the system of Higher Education by an act of the Parliament. The Govt. had clearly made a commitment to a massive undertaking, given the size and diversity of the nation taking into consideration the following aspects.

The Indian subcontinent covers an area of almost 1.3 million square miles. With a population of just under 800 million, it is the second most populous country in the world; and on the basis of an annual growth rate of 2.24 per cent, it is projected that it will be the most populous by

early next century.

Forty per cent of its population are under 15 years of age; so it is anticipated that the demand for higher education will increase significantly in the decades ahead.

In 1984, the overall literacy rate was estimated to be 40 per cent, with a figure of 18 per cent for females and 41 per cent for males in the rural areas, where three-quarters of the population live.

There are 14 recognised official languages besides Hindi and English. People live in a variety of social, economic and geophysical conditions. India is predominantly a rural country with more than 70% of the population living in rural areas whose main occupation is agriculture where productivity is very low compared to many other countries.

India has a fair net work of telecommunications, roads and railways (47% connected), 37 thousand telegraph offices and 3.5 millions telephones in 1986. The broadcasting and transmission (under the control of central Govt.) coverage is around 97% and 72% respectively; however, its utilisation is very much less compared to its total capacity.

Factors which contribute for the agricultural and industrial development are technical expertise, technology, management skills, etc. which require more technical education and higher education. It is very difficult to exploit resources unless the country makes a breakthrough in technical and higher education. The alternative is 'distance mode of education' which is less normative, but 'more technology oriented'.

Target group for IGNOU

Who need open education? Who are the target groups for this IGNOU.

- * Those who could not go for higher education at an earlier stage for one reason or the other, but wish to do

something about their higher education now.

- Those who have had education for some years and have got their career but would like to continue their education for improvement of their knowledge and advancement in career.
- Dropouts who want to continue to have a second chance (Drop outs are not failures, but people who have discontinued their studies for various reasons)
- Those who want to make their education a life long affair.
- House wives, and such other groups of people who would like to pursue their studies without disturbing their normal routine.
- People who are in such situations, geographical, social, economic, etc. which do not allow them to attend regular schools/colleges/universities.

Features of IGNOU

1. National Character of Jurisdiction:

Unlike the formal universities (State and Central) which rely more on the local/regional students population IGNOU widens its jurisdiction to all parts of the country, even Indians living abroad can become students of this university. The university break the geographical barriers by extending its services to students in urban, rural, plain, hilly areas and the remote areas of the country through its network of Study Centers.

2. Relaxed entry rules:

Admission in this University though not fully open, is not as rigid as the Conventional system. Relaxation of entry depends upon the nature of the course. For instance, to join B.A./B.Com.Course, the university does not insist on a 10+2 certificate, but the student is about 20 years of age besides the candidate

should pass a qualifying test in order to get admission into Bachelor Degree Programme however, a person who is 10+2 qualification is eligible for direct admission into BDP. Similarly, IGNOU conducts qualifying examination of MBA. A graduate with 3 years or non graduate with 6 years supervisory/managerial experience are eligible for taking the admission test in order to get admission into MBA.

The student will have to take an admission test for programmes like computers in office management and specialization diplomas in management provided there are more students than required. A admission into BLS programme is restricted to only experienced people who are working in Libraries. The intention in conducting entrance examination/restricting the students by putting age bar is nothing but to prevent unnecessary competition between IGNOU and other Conventional Universities. The other programmes such as Diploma in Creative Writing, Certificate Course in Food and Nutrition do not require any formal qualification, however they have a bar on age.

3. Independent Study:

The university allows the students to study from their place of living. No conventional university allows the student to study from his/her house or own place. The attendance is not compulsory in IGNOU. They can choose their time to read their lessons and complete their learning within the minimum/maximum period.

4. Flexibility:

The students of this university enjoy the freedom to chose the subjects of their own interest. Suppose the student of Chemistry wants to do a course in literature, a formal university would not allow him to do so. But the Open University allows, but it is restricted to a minimum number of credits.

The student who has to change his place

of living, because of transfer, etc., need not worry about the completion of his studies. He can get his Study Center transferred to any where in the country.

Similarly if a student cannot complete a course within a minimum time prescribed, he does not get worried. For example, the minimum period to complete the Bachelor Degree programme of IGNOU is 3 years but the maximum period is 8 years. Again, the Diploma of 1 year can be completed within a period of 4 years.

5. Instructional System:

In Open University, there is no campus based instruction. The students are scattered over a wide area including the interior and remote rural villages. University disseminates knowledge through 'integrated media' i.e. in the form of print materials, Audio/Video programmes, etc. It is further supported by broadcasting and T.V. transmission.

Printed lessons are sent directly to the students. Audio/Video programmes can be attended at the Study Centers or he can buy those cassettes for his personal use at the nominal rates, which are available in the market.

6. Student Support Services:

The student support services can be provided through a network of 140 Study Centers scattered over the country. To Co-ordinate the functions of Study Centers, 13 Regional Centers are set up, which are located mostly in the State Capitals/Major Cities. The Study Centers are the actual focal point to enable the student to receive regular information and learning supports. Each Study Center is provided with library, television, audio and visual facilities and Senior Academics who are engaged as, part-time Academic Counsellors for face to face counselling in order to clarify student's academic & non-academic doubts in the learning process. The Study Centers are located in the existing educational institutions and normally function on holidays and Sundays. Each Study Center is headed by a Coordinator.

How Open the IGNOU is ?

Open Universities mean they are not completely open in all respects. However, they are not as rigid as conventional Universities. In the conventional system the admission is restricted in many ways such as age, entry qualification, attendance, face to face contacts etc. However, this is not true in Open University system. For example, the Open University in Costa Rica has no bar on age for admitting students. The UKOU (Britain) and IGNOU admits students who have completed 21 and 20 years respectively. The UKOU admits students on first-cum-first serve basis, whereas, the Athabaska University Canada admits them throughout the year.

Some DTU's they conduct entrance examination to admit students. The IGNOU conducts 'entrance examination' some programme and directly admits in some other programme. Many Open Universities in the world do not insist on attendance of a Distant Learner. The students of DTUs are at liberty to study anywhere in the country at his own place, pace and convenience. Further, the students of DTUs enjoy the freedom to choose the subjects of any combination of their own interest which is not allowed in the conventional system. The student of IGNOU need not attend any where except writing examinations and attending some practicals. He is free to choose or get transfer to any study center of IGNOU according to his convenience.

Enrolment of Students :

The popularity of IGNOU can be gauged from their enrolment. IGNOU has an existing enrolment around 85 thousand as against expected 1.1 lakh by the end of 1990. According to estimates it is likely to cross 2.5 lakhs by the end of 1995. Within four years from the date of its establishment (1987-1990), it has achieved remarkable growth compared to UKOU, Britain and AIOU, Pakistan.

Many of the students of conventional sys-

tem are less than 25 years as compared to Open Universities. The students of Open Universities are much older, many of them are employees, housewives and married people. Many of the distant learners take more time to finish their courses.

The profile of IGNOU students shows that the youngest is 20 years and the eldest is 72 years in 1988. In IGNOU's rolls, there are Ministers, Vice-Chancellor, Professors, etc. The ratio in Bachelor Degree Programme between Male and Female is 76:24 and Diploma in Creative Writing 51:49 in 1988. Age-wise analysis shows that above 25 years there is 68% enrolment for all programmes.

To bring science subjects in its fold, the University has already launched Bachelors Degree in Science (B.Sc.) and Computers Programme throughout the country. Many programmes are in the pipeline, such as Engineering and Technology, Health Education, etc. Some other employment oriented and interdisciplinary courses are also under preparation, some of these courses are; Translation, Feature writing of Office Management, Export Documentation, Small Management, Instrumentation, Horticulture, Nursery and K.G. Teaching, Computer Application, Water Analysis and Pollution Control, Radio and T.V. Servicing, etc.

Staff:

The university has been utilizing the expertise of senior personnel, professionals from various institutions in order to get the best input for various requirements of the system. It has around 1000 employees out whom around 200 are academicians. More than 5000 teachers from various universities and colleges have been extending their services to IGNOU as part-time counsellors, co-ordinators, and Asstt. Co-ordinators.

Examination and Evaluation :

The understanding of IGNOU's student is assessed in three ways: 1. Check your progress

(self assessment questions). 2. Assignments (Continuous assessment) 3. Term-end examination (External assessment). Check your progress as given in the print material do not carry any weightage for passing examination. However, they help the student to assimilate the subject matter. Assignments (continuous assessment) carry the weightage of 25% to 30% for passing the examination. These assignments after evaluation, are returned to the students along with teacher's comments (which is two way communication), which you do not find in the conventional system. The comments written on the assignments help the students to know his progress, weaknesses and limitations and how to overcome them. Term-end examination (external assessment) which carried 75% to 70% is the final examination.

The performance of the students in both continuous (Assignments) and External assessment (term-end examination) is counted towards their final grade in each course. The university has adopted a letter grade system to indicate the performance of students, using 5 point scale (A,B,C,D & E) for all types of assessment.

Academic Programmes:

IGNOU has 10 academic programmes with a number of courses in each. It has also produced 200 Video and 150 programmes which are of such exceptional quality that they are already in demand among other universities. The programmes are: Master of Business Administration (M.B.A.) 2. Diploma in Distance Education 3. Diploma in Creative Writing in English 4. Certificate Course in Food and Nutrition 5. Bachelor of Arts/Commerce 6. Bachelor's Degree in Library and Information Science. 7. Diploma in Computers of office management. 8. Diploma in Financial Management. 9. Diploma in Marketing Management. 10. Diploma in Human Resource Management. 11. Further the university is planning to introduce some more programmes which are under preparation. They

are Diploma in Higher Education 1. Bachelor Degree Programme in Science 2. Water Resources Management. 3. Diploma in Food and Nutrition 4. Diploma in Rural Development, etc.

Types of Awards:

The Academic activities will be broadly divided into 3 categories, viz., Certificate Programmes (Less than 6 months), Diploma Programmes (1 year) and Degree Programmes (3 years or more). Irrespective of the award i.e., Certificate/Diploma eventually they lead to degree programmes in the future. For example, the university has launched management Programme as a Diploma in 1987. In order to make it a Degree Programme, the university has already introduced 3 modules out of 4. When a student completes all the four modules successfully, he/she will be given M.B.A. degree. Otherwise, the student gets an award for each Module as and when he completes them.

Recognition Of Degrees And Standards:

Are the Degrees, Diplomas and Certificate of IGNOU recognised by other employers, universities, institutes, etc.? IGNOU is a National University established by an Act of Parliament and is supported by the Central Government. So the Degree, Diplomas and Certificates of IGNOU will have the status as those of any other Central University. So the question of non-recognition of IGNOU's degrees doesn't arise.

The standards of IGNOU is no way inferior to any other University in the country. IGNOU offers uniform standards throughout the country which you do not find in the conventional system. The quality of the material is of high standard. In 1989, the UKOU Vice-Chancellor applauded the quality of the Food & Nutrition material and he stated that it has international standards. Recently the State Bank of India & Mysore and M.R.F. Tyers has recognised the MBA programme of this University and it is allowing many concessions for its employees.

How Cost Effective The System Is?

The courses which these DTUs are offering are more cost effective than those of the conventional system. Many studies have already been conducted and they proved that they are the least expensive. In 1974, a study was conducted in UKOU (Britain), where the cost per unit was 33 paise as against 50 paise in the conventional system. A similar study was conducted in Delhi Correspondence School by Prof. Rudra Dutt, where the cost per unit in the Open System is around Rs.600/- as against Rs.3,600/- in the conventional system. Remember that the Open Universities are offering qualitative materials prepared by eminent academicians. The IGNOU is offering the entire print material for Food and Nutrition Programme which has international standards just for Rs.100/-. This includes Audio/Video lessons, valuable student support services offering at Study Centers.

IGNOU's role as an Apex Body:

While IGNOU has made its presence felt as a University in these last four years, its apex level functions are still to take concrete shape. Already four state Open Universities offer distance education programmes through correspondence courses. And for IGNOU to take its stance as the apex body, a Co-ordinators Council has been set up to ensure effective co-ordination and to work out a net work of Open University programmes for maximum utilisation of resources. And since IGNOU's leadership in this regard has favourably perceived, there are great expectations of IGNOU's dynamic involvement.

Projection For IGNOU's Development:

The IGNOU is four years old. Hence, it is too early to obtain any definite trend in the increase of enrolment. However, it has crossed 85 thousand as against expected 1.1 lakh by the end 1990. Now the University is planning to adopt a more flexible approach in order to establish 'sponsor' study centers wherein all the capital expenditure for equipments, furnitures, etc. as

well as part of the capital expenditure are expected to be borne by the host institution as against the study centers established by IGNOU where 100% expenditure is to be borne by IGNOU itself except the host institute provides necessary accommodation. The University is also in the process finalizing a proposal for starting sub-study centers along with mobile units in collaboration with non-governmental organisations. Every district is expected to have the services of at least one Study Center by the end of 1995 particularly industrial township and a few others in remote and backward areas of our vast country.

The coming years are going to be very significant for the University. Its perspective for the 8th Five Years Plan shows a very definite orientation towards job-oriented and socially relevant courses which may be offered separately or fitted into the Degree Programmes. It is visualised that while the state Open Universities may have more of traditional courses, mostly catering the age-group (19-24) population, IGNOU will strive to provide job-oriented and socially relevant courses mostly to the population of the age group of 25 plus.

The University has already taken some steps in development of some field and job oriented courses are being made. Profiles of

various remote areas (such as Mizoram, etc.) are being developed by the Planning Division, IGNOU. These profiles are expected to provide better understanding about the conditions in regions which can go a long way in the planning of variety academic, field and job-oriented courses and flexible strategies in the student support services.

IGNOU is also thinking of developing a symbiotic relationship with the industrial sector in launching job-oriented courses. Apart from launching new programmes, IGNOU is planning to decentralise many activities such as admission, evaluation, etc. in order to solve the problems of increasing in number of students, variety of course combinations and the vast distances in a country like ours. The processing of data related to students for admission, etc. at Hqs. is getting an impetus with the installation of the optical Mark Reader (OMR) with micro vax. The main frame computer VAX 8530 has installed focus in the management of various operations. Decentralisation of operation related to admission and evaluation to the Regional Centers has already been initiated. With the installation of all these equipment, the University is progressing in leaps and bounds, well prepared to face up to future challenges.

REFERENCES

1. Rumble G. and Harry, Keith (Ed.) *The Distance Teaching Universities*, Croom Helm, London, 1982
2. Greville Rumble : *The Planning and Management of Distance Education*, Croom Helm, London, 1986.
3. IGNOU : Project Report, Prepared by Educational Consultants India Ltd., New Delhi, 1985.
4. Distance education Division, *IGNOU Hand Books on Distance Education*, IGNOU, New Delhi, 1989.
5. Planning Division, IGNOU : Status Report, IGNOU, New Delhi, 1989.

Impact Of Correspondence Education On Farmers and Farm women

G. S. Saini

L. S. Gill

The Correspondence Education is a new and important area of study. Needless to say, not much empirical evidence is available in this field. The potential of this method of education are yet to be exploited. This is possible when the theoretical frame work is supported with the empirical data. In order to know the impact of the correspondence courses on the farmers and farm women four postgraduate level research projects were planned in the Department of Extension Education, Punjab Agricultural University, Ludhiana. The salient findings of these projects are presented as under.

1. Comprehension of Information : Bloom (1969) identified six classes of cognitive domain which consisted of knowledge comprehension, application, analysis, synthesis and evaluation. He has given three types of comprehension behaviour namely: translation, interpretation and extrapolation. He has also developed some model questions related to these behaviour. The comprehension level with respect to the contents of the Correspondence lessons sent to the General Farmers, Small & Marginal Farmers and farm women were studied based on model questions suggested by Bloom (1969). Dhillon (1978) found that 29.33, 48.00 and 22.67 percent of the farmers exhibited low, medium and high level of comprehension, respectively related to the contents of the selected lessons. The variation in the comprehension level is due to the type of contents of the lessons, age and participation level of farmers in agricultural fairs.

Saini (1979) reported that about 19, 49 and 32 percent of small and marginal farmers fall into low, medium and high category of comprehension level, respectively. Kaur (1982) found that about 23, 44 and 33 percent of the

farm women had low, medium and high level of comprehension, respectively. She, further, reported that education and occupation of the family was positively associated with level of comprehension.

These studies indicate that there is an urgent need on the part of the correspondence trainees to improve their level of comprehension. Factors (age, education, occupation and participation in agriculture fairs) which cause variation in the level of comprehension may be taken care while selecting the correspondence trainees.

2. Application of Information : The very purpose of the Correspondence Courses related to agriculture and home science is to apply the information contained in the lessons at the farm and home. How far this objectives has been achieved is evident from the studies reviewed as under ?

(Saini) 1979 measured the application of information in terms of actual area in acres put under the cultivation of each of the practices of selected crops before and after the completion of the correspondence courses by the farmers. The direction and magnitude of the area put under the cultivation of each of the practices at two different points of time i.e. before and after the completion of the course was tested with the help of Wilcoxon Matched Pairs Signed Ranks Test. He found that there was a significant increase in the average area put under the improved practices of wheat and paddy.

Dhillon (1979) reported that about 25, 51 and 24 percent of the farmers made high, medium and low level of use of information contained in the lessons. These figures showed that there is enough scope of improvement of the

contents of the lessons to enhance its application in field situation. Kaur (1982) found that about 42, 33 and 25 percent of the farm women made high, medium and low level of information contained in lessons. It showed that more than 50 percent of farm women made low to medium level of use of lesson's information. These studies implied that the lessons once written need constant revision, keeping in view, the changing educational/technical needs of the farmers and farm women.

3. Reading Process : It is generally felt that the successful reader has the purpose and comprehend but he reads. Grey (1950) identified the four dimensions of reading process as recognition, understanding, reaction and integration.

Saini (1979) studied the extent to which these dimensions were kept in mind while reading by the farmers who were enrolled under the correspondence course. He reported that 90 and 97 percent of the farmers were able to recognise and understand the meaning of the words for all the time, respectively. About 66 and 31 percent of them knew always and sometimes respectively the meaning which could be applied to their home requirements. There were about 39 and 57 percent of the farmers who always and sometimes respectively made use of the meanings.

He concluded that the lessons could evoke sensory and perceptual process (*identification and comprehension of the words*) among majority of the farmers. But their percentage decreased

in the next two categories (*reactions to the meaning and use of the meaning*) of the reading process. It indicated that the farmers while reading should make mental reaction to the meanings and perceive the actual use of these meanings according to their own requirements.

4. Personal Contact Programme : To create interest and liveliness among students, the spoken word and many types of teaching aids are used in the distance education. It provides two-way face-to-face flow of communication between the trainer and trainees. It also helps to clarify doubts, problems and ensure proper understanding of the instructional material. Saini (1979) reported that the participation of the correspondence trainees in the personal contact programme and in the discussion held during the personal contact programme needs to be encouraged. Saini (1979), Saini (1981) and Kaur (1982) reported that majority of the farmers and farm women were of the opinion that two personal contact programmes of two-three days duration in the middle of session and at the end of the course should be organised at Punjab Agricultural University, Ludhiana. They further noted that majority of the trainees were satisfied with the boarding and lodging arrangements and with the deliberations of the experts.

These findings showed that Personal Contact Programmes should be an important part of correspondence education. These should be organised effectively.

REFERENCES

- Bloom, B. S. (1969) , *Taxonomy of Educational Objectives*, New York, David McKay Company; p. 89
- Dhillon, Daljit Singh (1978) *An Appraisal of the Correspondence Course Programme for the farmers (General)* , Run by Punjab Agricultural University, in Punjab State. M.Sc. Thesis, PAU, Ludhiana.
- Grey, W.S. (1950) *Growth in Understanding of Reading and Its Development Among Youths. Keeping Reading Programmes Abreast of the Times. Supplementary Educational Monographs*. Chicago University Press, No. 72, pp. 8-13.
- Kaur, Shavinder (1982) *Comprehension and Use of Information - A study of Correspondence Course for Farm Ladies in Punjab*, Ph.D. Thesis, PAU, Ludhiana.
- Saini, G.S. (1979) *Potentials of Distance-Teaching A Study of Correspondence Courses for Small and Marginal Farmers of Punjab State*. Ph.D. Thesis, PAU, Ludhiana.
- Saini, Rajinder Kaur (1981) *An Evaluative study of the Correspondence Course, Run by the Punjab Agricultural University, Ludhiana for Farm Women*. M.Sc. Thesis, PAU, Ludhiana.

DIRECTORS' MEET

The President and Vice-President of the Commonwealth of Learning, while on their visit to India, invited the heads of a few leading directorates of correspondence courses to meet them for discussion on the state of distance education in India. The meeting was held on 21st May, 1990 at the India International Centre, New Delhi. Besides the President and the Vice-President of the Commonwealth of Learning, it was attended by the Directors of the Chandigarh, Rothak, Osmania (Hyderabad), Madurai, Madras, Mysore, Annamalai and Vishakhapatnam institutes of distance education.

In his opening remarks, the President disclosed that he had been invited by the Ministry of Education and the U.G.C. to advise them as to how can the system of distance education be goaded effectively to meet the challenges of development in general and educational spread in particular. Unless he acquainted himself with the functioning of the system, he would not be able to do justice to his mission. It was with that end in view that he had invited Directors of a few important institutions, he added.

Highlighting some of their problems, the Directors brought to the notice of the experts of the C.O.L. 'that the institutes were not being provided adequate financial assistance; that their functioning was handicapped because of the lack of autonomy; that the status of their institutes had not been defined suitably'. They impressed upon the dignitaries of the Commonwealth of Learning the desirability of bringing their institutes into the main stream of the education system of the country by providing to them more of governmental support.

The President thanked the participants for their candid assessment of their problems and assured them that he would include in his recommendations some of the points underlined by them.

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I, Satyapal Anand, hereby declare that the particulars given above are true to the best of my knowledge and belief.

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Sd/-
(Satyapal Anand)

Ever since distance education has come of age, a need was felt for some forum through which the problems and progress of this new system of education could be reflected suitably. To fill this gap, the Indian Council for Correspondence Education had decided in its Trivandram session that it would bring out a journal on its own and had even entrusted this responsibility to its newly-elected office bearers. But this dream could not somehow be realised. At long last, the Panjab University undertook this responsibility upon itself and instituted the Indian Journal of Distance Education in 1987.

The first and second issues that were brought out during last two years aroused a good deal of interest of all those who are associated with the promotion of the cause of distance education in India and abroad. It is as a result of this impact that we have been able to procure a comparatively large number of research papers and other articles. This response has assured us that sooner than later we would be able to make this Journal a bi-annual publication.

The Journal would welcome learned articles, review papers, research notes relating to distance education and reports of seminars/symposia and other academic activities of the institutes of distance education. Authors are requested to send two copies of the manuscript alongwith a certificate that the research papers are original and that these have not been published earlier.

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