

INDIAN JOURNAL OF DISTANCE EDUCATION



VOLUME VII & VIII

**DEPARTMENT OF CORRESPONDENCE STUDIES
PANJAB UNIVERSITY
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Indian Journal of Distance Education, Vol. VII and VIII

FROM THE EDITOR-IN-CHIEF'S DESK

I am happy to present this volume of the *Indian Journal of Distance Education* to my fellow-voyagers, as we all travel together on this adventure of the non-conventional system of education. My regrets for the delay but as you read along I hope you find that the volume was worth waiting for.

My personal endeavour and the efforts of the faculty are to mould correspondence education truly in the distance mode, so that the written word is adequately supported by a multi-media package. A well equipped computer centre was inaugurated by our worthy Vice-Chancellor Prof. K.N.Pathak. Gradually I visualize this as the heart of our department. But we are not resting on our oars. There is a renewed effort to invigorate the Educational Media Centre so that the students can get a multi-media package. We are planning a sound-proof studio. It is our endeavour to provide more audio talks to the students in this session. We also plan to collaborate with other distance education institutions in the field. Our aim is to reduce the distance in distance education. I am very grateful to our distinguished Vice-Chancellor for his enlightened guidance in this direction.

Prof. Devinder Singh
(Editor-in-Chief)
Chairperson, D.C.S.

PERSPECTIVE AND PLANNING IN DISTANCE EDUCATION

Slowly and steadily charting its way through a tricky terrain, Distance Education has reached a plateau to achieve both academic and social recognition. It is perhaps a good time to look back, take stock of the situation and plan ahead. Its time to co-ordinate the development of both the Distance Education institutions and their study programmes. The multiplication of effort in the preparation and maintenance of one and same type of courses results in overlapping and in the wastage of limited and precious resources. The institutions must pool their resources and hand out to the student a comprehensive multi-media package.

The functional patterns, problems and challenges of this system are different from the conventional system. Flexibility and openness are a pre-requisite for Distance Education. This must be recognized by the parent university and put in its calendar. In this direction the attention and signals that we received from our teacher-scholar Vice-Chancellor Prof. K.N.Pathak are encouraging. The department looks forward to his guidance and leadership to articulate specific policies for the specific problems of this department.

The papers in this issue look at Distance Education from almost all the angles — the present scenario, the problems, and the future planning. It looks at the SLM (Self Learning Mode), students response-sheets, tutor response to these, the various functions of the teacher, and the learner in the system. The technological advances and their contribution is recognized repeatedly. There is also the discussion of various types of courses and the different categories of students. For the first time, each paper in the *Indian Journal of Distance Education* is preceded by an abstract, glancing at these, it seems as though a shiny crystal has been placed in bright sunlight and has all the colours of rainbow emanating from it.

The preparation of this journal is a team-effort and I am grateful to my teammates for their valuable suggestions and willing assistance. The executive editors Dr.(Mrs.) Perminder Khanna and Dr.(Mrs.) Surinder K. Shukla were constantly with me. The production work was undertaken by Mr. Gandhi and his team at the computer centre, with diligence.

We all thank the Chairperson Prof. Devinder Singh for his help and encouragement.

(Prof. Meera Malik)
(Chief Editor)

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 Trivandrum 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 earlier issues that were brought out 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. We look forward to their continued and keen participation. There is a proposal to make the journal a refereed journal.

The Journal would welcome learned articles, reviews, research papers, research notes relating to distance education and reports of seminars/symposia and other academic activities of the institutes of Distance Education. The papers must be properly edited and complete in all respects, with references and footnotes. We would also welcome information relating to your audio and video collection. The department's Education Media Centre (EMC) would reciprocate the information. 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. Please also send a brief abstract and a floppy of the paper.

The views expressed in this Journal are those of the authors and do not necessarily reflect the opinion of the **Indian Journal of Distance Education** or the editors.

Papers may be sent to the Editor-in-Chief, Chairperson, Department of Correspondence Studies, Panjab University, Chandigarh.

DISTANCE EDUCATION : VISION 2000 (S)

Perminder Khanna

ABSTRACT

The paper attempts to enlighten the fact that investments alone cannot yield results without strengthening knowledge and skills base. Hence, we must create opportunities for education after high school, not just via the traditional path of an immediate college degree, but also through distance education for those who have jobs or are between jobs.

1.0 INTRODUCTION

1.1 We are living in a world of momentous change and turmoil. This raises fear and the question of adaptability to ever - changing situations. STABILITY is elusive and UNCERTAINTY the only certainty. How do we find our mooring amid ceaseless upheavals? How do we regain trust and faith in ourselves and institutions? What can the government do to ensure a semblance of stability? How can economic entities ride the waves of change and survive? These are questions that hold the clue to our survival in the future when, in fact, the rapidity of change will be far more intense.

Behind the success of humanity lies the genius to find solutions to problems. Managing "CHANGE" is the most challenging problem and we have to perforce look for a way out to survive. Prof. David Levine, an associate professor at the Hass School of Business at the University of California, Berkeley, begins by putting the PROBLEM in a historical perspective:

1.2 "Forty years ago, American schools, businesses, and governments all worked more or less the same way; they were rigidly controlled hierarchies. Most Americans attended boring and rigid schools that prepared them to work for boring and rigid jobs... Schools, businesses and government all operated in a machine like fashion to produce a standard output - whether the OUTPUT was a washing machine from a factory, a semiskilled employee from a school or a social security check from the government. This PRODUCTION method, essentially an extension of Henry Ford's assembly line, helped raise productivity and standards of living. Schools taught what businesses wanted: punctuality, reliability, and obedience, the virtues of a machine. And government followed suit."

Having put the past in perspective, Prof. Levine paints the present.

1.3 "Today's economy needs a different kind of a worker - and it is not getting it. Today's economy also needs a different kind of business and a different kind of government - and it is not getting enough of those either. The RESULT is an economy that has plateaued. Productivity and average living standards are growing much less rapidly than a generation ago."

1.4 After turning the spotlight on the MESS, Prof. Levine suggests the way out - INVEST and REINVEST is the panacea. We must invest for our future. Part of this investment involves better measurement. The government must measure investment correctly so that it no longer favours short-term spending over long-term investments.

The paper thus attempts to drive home the fact that INVESTMENTS alone cannot yield results without strengthening KNOWLEDGE & SKILLS base. Keeping the varied and exacting demands of future work places, LEARNING is both imperative and relevant in today's economic environment.

1.5 The KEY is creating a system of LIFETIME learning. Our CAPACITY for learning does not end at age 18, we must IMPROVE access to education after high school. Similarly our CAPACITY for learning does not end at age 22, so we must IMPROVE access to educational opportunities throughout peoples' careers. Hence, we must CREATE opportunities for education after high school not just via the TRADITIONAL path of an immediate college degree, but also through CONTINUING DISTANCE EDUCATION and TRAINING for those who have jobs or are between jobs.

2.0 VISION 2000

In more than 50 years of independence, there is much that has been achieved on many fronts. However, our performance on the ECONOMIC front is somewhat dwarfed by that of our East Asian neighbours and other countries. As we now go into the new millennium, one aspect of our economic evolution has become clear. There really are no major deviations in the economic thinking among the various political parties. Keeping aside the rhetoric, the political parties are by and large agreed that GLOBALISATION is a movement which cannot be arrested or changed and that INDIA has to become globally competitive for it to take its rightful place in the comity of nations.

2.1 The EIGHT major drivers of COMPETITIVE ADVANTAGE as identified by the WORLD ECONOMIC FORUM are:

- OPENNESS
- GOVERNMENT
- FINANCE
- INFRASTRUCTURE
- KNOWLEDGE
- MANAGEMENT
- LABOUR
- INSTITUTIONS

Of the aforementioned eight major drivers of competitive advantage, "KNOWLEDGE" is perhaps the driver which in the coming years is going to prove decisive in the race for ECONOMIC leadership. The KNOWLEDGE era has arrived and we as INDIANS are uniquely placed as knowledge happens to be the country's core competence. We are not quite there, but given the right INPUTS there can be no doubt that we can have a distinct competitive advantage in -

- * KNOWLEDGE DEVELOPMENT
- * ACQUISITION
- * DEPLOYMENT.

2.2 The CONCEPT OF KNOWLEDGE here relates to:

- * LEVEL OF COMPUTER USAGE
- * SPREAD OF NEW TECHNOLOGIES
- * ABILITY TO ABSORB NEW TECHNOLOGIES
- * LEVEL AND QUALITY OF R & D.

KNOWLEDGE then must be the STRATEGIC tool to achieve the objectives of economic growth and human development. This must be the common thread that we must weave through various elements of our economic and social initiatives. India may have failed in its merchandise exports but its INTELLECTUAL power is a PREMIUM product, sought after across the globe. What has been debated, discussed and criticised as BRAIN DRAIN in the 60 S has emerged as the single - most important investment by INDIA in the globalised era. The aggregate contribution of these non-resident INDIANS is put at Rs. 250 billion.

This drives home the truth that INDIA should take to the road of KNOWLEDGE - based development. It is here that CONTINUING DISTANCE EDUCATION can play a significant role in implementing universal literacy. Universal education and excellence in higher learning will provide the ground on which INDIA will become the global giant of the 21st. century.

The ISSUE in this new age is not distribution of WEALTH alone but more importantly that of equitable distribution of KNOWLEDGE - the WEALTH creator. Distribution of KNOWLEDGE means empowering people to CREATE wealth.

2.3 According to the WORLD DEVELOPMENT REPORT 1998-99, a dismal picture emerges from the KEY PERFORMANCE INDICATORS in the context of public expenditure on EDUCATION and WEALTH in particular and the economy as a whole in general when compared to U.S. (TABLE I).

2.4 To add to this, the FISCAL DEFICIT of the centre pegged over 5 per cent of GDP during 2001-02, is going to prove detrimental to the growth of the economy. SUSTAINED growth of our knowledge - based industries will ultimately depend on the

quality and extent of scientific and technological progress and training in our society. For taking up relevant TECHNOLOGY VISION PROJECTS and for increasing cooperation between our Universities and R & D institutions, an additional provision of a meager sum of Rs. 50 crore has been made in the budget of the Technology Information Forecasting and Assessment Council (2000-01). Moreover, the current ECONOMIC policy, offers no incentives to the corporate world for investing in educational institutions. The nascent trend of angel investors putting money in institutions like Indian Institutes of Technology (IITs) and of other companies to start B - school has been completely ignored by the FINANCE MINISTER.

- The CORPORATE world was expecting some real estate sops and tax incentives so that the process of industry investing in education picked up momentum. But it did not happen. Regional engineering colleges (RECs) were also expected to be granted IIT status. This would have automatically funnelled funds into creating fresh centres of excellence.

TABLE I

PERFORMANCE INDICATOR	KEY PERFORMANCE INDICATORS						
	US	BRAZIL	CHINA	INDONESIA	S.KOREA	INDIA VISION	INDIA 2000
POPULATION BELOW \$ 1 A DAY (%)	-	23.6 (1995)	22.2 (1995)	11.8 (1995)	-	52.5 (1992)	23.6
PER CAPITA GNP (\$) Measured At PPP (1997)	28740	6240	3570	3450	13500	1650	3100
ADULT LITERACY Rate (% of people 15 YEARS AND ABOVE 1995)	-	83(M) 83 (F)	90 (M) 73 (F)	90(M) 78(F)	99(M) 97 (F)	65 (M) 38 (F)	89 (M) 78 (F)
PUBLIC EXPENDITURE ON EDUCATION (% of GNP 1995)	6.7	-	2.3	-	3.7	3.5	5.0
PUBLIC EXPENDITURE ON HEALTH (% of GNP 1990-95)	6.6	2.7	2.1	0.7	1.8	0.7	1.8
PREVALENCE OF CHILD MALNUTRITION (% of CHILDREN UNDER FIVE 1990-96)	-	7	16	40	-	66	23

SOURCE: WORLD DEVELOPMENT REPORT 1998-99. PUBLISHED BY THE WORLD BANK.

- The central plan outlay for Department of Secondary and Higher Education was actually lower than targeted in 1999 - 2000. Against an estimate of Rs. 1555 crore, the actual expenditure was Rs. 1454 crore. With government spending on higher education falling, the sector needs whatever funds it can garner.
- The only bright spark in the BUDGET (2000-01) for the EDUCATION sector was the incentive to create intellectual property in research and education bodies. All UNIVERSITIES and RESEARCH INSTITUTIONS will be allowed to retain the revenue generated. This will offer a huge incentive for researchers to put their best in creating new products and processes.
- A CHANGE in intent and policies alone does not bring about a cultural change. The issues which are currently raging at the bureaucratic and regulatory levels are based on a deep-rooted paradigm of control. Investments have to be made in training and educating the vast administrative machinery at the central and state level to bring about a cultural change. Let economic policies be made immune to political activities in times to come to ensure a CONSISTENT economic system.

3.0 STRATEGIC IMPERATIVES FOR GROWTH IN DISTANCE EDUCATION

3.1 If the 80 S were about QUALITY and the 90 S were about RE - ENGINEERING, then the 2000 S will be about VELOCITY; about how quickly business, be it in the CORPORATE WORLD or in the field of higher EDUCATION, will be transacted. To function in the DIGITAL age, the successful institutions of the next decade will be the ones that use digital tools to re - invent the way they work.

The VELOCITY of business depends on the new digital infrastructure which reflects:

- * THE ABILITY TO RUN SMOOTHLY AND EFFICIENTLY.
- * THE ABILITY TO QUICKLY MAKE DECISIONS AND INTERACT WITH PEOPLE.
- * TO RESPOND QUICKLY TO EMERGENCIES AND OPPORTUNITIES.
- * TO QUICKLY REACH VALUABLE INFORMATION TO THE STUDENTS.

To augment growth in DISTANCE EDUCATION, a few specifics which need be taken up are

3.2 DIAL - A - TEACHER PLAN

DIAL - A - TEACHER programme has been designed to support SOUTH AFRICAN students with their studies. DIAL - A - TEACHER is facilitated through a notional call centre in Cape Town. The successful outcome of tests conducted in 1998, have been a driving force in the inception of this service. This CALL Centre is manned by qualified and experienced teachers in English, Maths, Biology, History, Geography, Business Economics and Accounting.

Students are able to dial into the centre daily five days a week. The main mode of INTERACTION between TUTOR LEARNER is telephonic so as to maximise accessibility for students from all walks of life. Each work - station is equipped with fax, E-mail and

Internet capability which is utilised for research and communication with those callers who are similarly enabled.

3.3 E-COMMERCE DEGREES

Job applicants with TECHNOLOGY skills and BUSINESS education are in such demand that US colleges are beginning to offer an e-commerce degree. Students earning these degrees study programming basics along with marketing and other business concepts. In a speech on higher education in the 21st century, Mr. Blunkett the Education Secretary, U.K., said:

"The arrival of the knowledge economy has intensified the competitive pressures on higher education institutions. Learning has become big business. So a new NATIONAL initiative is needed to maximise Britain's chances of success in this global environment."

The HIGHER EDUCATION FUNDING COUNCIL for England would bring forward proposals for the new "virtual" venture. "We want to create a new partnership between universities and the private sector which will develop a novel means of DISTANCE learning and exploit new technologies," Mr. Blunkett said. "It will concentrate resources from a number of partners on a scale which can compete with leading US providers."

Majestic Software Limited (MSL), incorporated in February 1994, is one of the companies in INDIA, which provides efficient and cost-effective solutions for complex information management requirements through innovative application of latest technologies. And the area of focus the company has selected for itself is the fast emerging e-business.

3.4 There are ten compelling reasons of E-COMMERCE potential for our students:

- * EASY INITIATION
- * FAST AND CHEAP
- * QUICK FEEDBACK
- * REFINED CLIENT SERVICE
- * GLOBAL AUDIENCE
- * MATCHING THE COMPETITION
- * INTERNET A STRATEGIC TOOL
- * INTERNET CHEAPER THAN A PHONE CALL
- * INSTITUTION - TO - STUDENT LINK
- * GLOBAL COMPETITION

3.5 NON - CONVENTIONAL COURSES

With GLOBALISATION becoming a reality, there is more and more emphasis on raising educational levels so as to bring them at par with international standards.

MICMED Institute, for instance, in association with American multinationals have

recently started expert guiding and coaching classes for students appearing in -

- * TOEFL
- * GRE
- * GMAT
- * SAT EXAMS, CONDUCTED INTERNATIONALLY.

Apart from conducting routine classes at graduate and post-graduate level, MICMED is also in the field of EDUCATIONAL consultancy. The expert and thoroughly professional faculty of MICMED has been offering guidance to well known institutions like the Delhi Public School and International Chartered Firm Arthur Anderson.

3.6 GLOBAL COURSES

In the existing economic environment, the main objective of EDUCATION for peace, human rights and democracy is to develop in every individual the abilities, values and types of behaviour on which a culture of peace is predicated.

This HUMANITARIAN focus acknowledges Hawaii Pacific University's role as an international model for the way that the world's people can live, work and learn in an environment rich in RACIAL and CULTURAL diversity.

The UNIVERSITY participates in various federally funded, need-based, financial aid programmes, including grants, low-interest loans and work opportunities. The UNIVERSITY also administers merit-based scholarship programmes for new and continuing students. Then there is the fully dedicated "CAREER SERVICES CENTRE" which helps the students to find suitable employment well before they graduate. Some of the FORTUNE 500 companies that visit the campus regularly are IBM, Microsoft, CISCO and a couple of renowned consultancy firms and merchant banks.

3.7 CREATING MT PROFESSIONALS

In hospitals across the United States of America, doctors find little time for ROUTINE filing of patients medical records. At the same time these records are mandatory because they form the basis of insurance claim processing upon which the entire HEALTH CARE industry is based. And herein lies the opportunity for those willing to provide such services.

Today, INFORMATION TECHNOLOGY enabled services like medical transcription offer a sedentary and well paying job.

Conventionally, doctors in the US record their findings through the traditional dictaphone or computers. These sound tracks are then sent through data-com lines to overseas transcription centres like INDIA where they are transcribed and converted into reports. The final report, after undergoing a quality check, is sent back electronically as work file for reference by the sender.

However, while the MT industry is growing in the US at an annual rate of 20 per cent, there has been an 8 per cent decline in the work force required for the job. Naturally

then, INDIA represents a vast potential for the US hospitals.

3.8 LEAD TIME' FOR BENEFITS

When introducing and bringing STRUCTURAL and SYSTEMIC changes in the context of DISTANCE EDUCATION, the unit of time to measure CHANGE is much longer. It is reasonable to expect that different sections of society will find the trickle down effect of economic changes at different points of time. This must be explained so as to ensure that there is no disillusionment.

Thus DISTANCE EDUCATION can go a long way in creating SPECIALISED JOB - ORIENTED programmes at a relatively low cost for all those who want to make a career at home or abroad. To create near perfect professionals, emphasis on "learning with EXPERIENCE & EXPRESSION", is an imperative input to achieve the desired output.

4.0 EDUCATION : THE LEARNING CURVE

4.1 The progress of an INSTITUTION/ENTERPRISE depends upon the proficiency of both the management and the working force. It is the job of the management to acquire the latest technology if it wants to be a market leader. It has also the responsibility to train its manpower so that the technological set up, be it in the field of education or the corporate world, yields the highest productivity. When both, the management and the working force, move in harmony and understand the intricacies of the process of learning, the results are bound to be encouraging.

4.2 The PROCESS of LEARNING can be portrayed in the form of a Curve called the "learning curve" or the "rate of improvement curve", and it exhibits the rate of improvement with the repetition of operations (Figure I).

4.3 DEVELOPMENT OF THE LEARNING CURVE

T.P. Wright, an aeronautical engineer with Curtiss - Wright Corporation Buffalo (USA) propounded the concept of the 'LEARNING CURVE'. The initial concept was evolved by him to establish a relationship between the quantity and cost of air-frames. Wright discovered that:

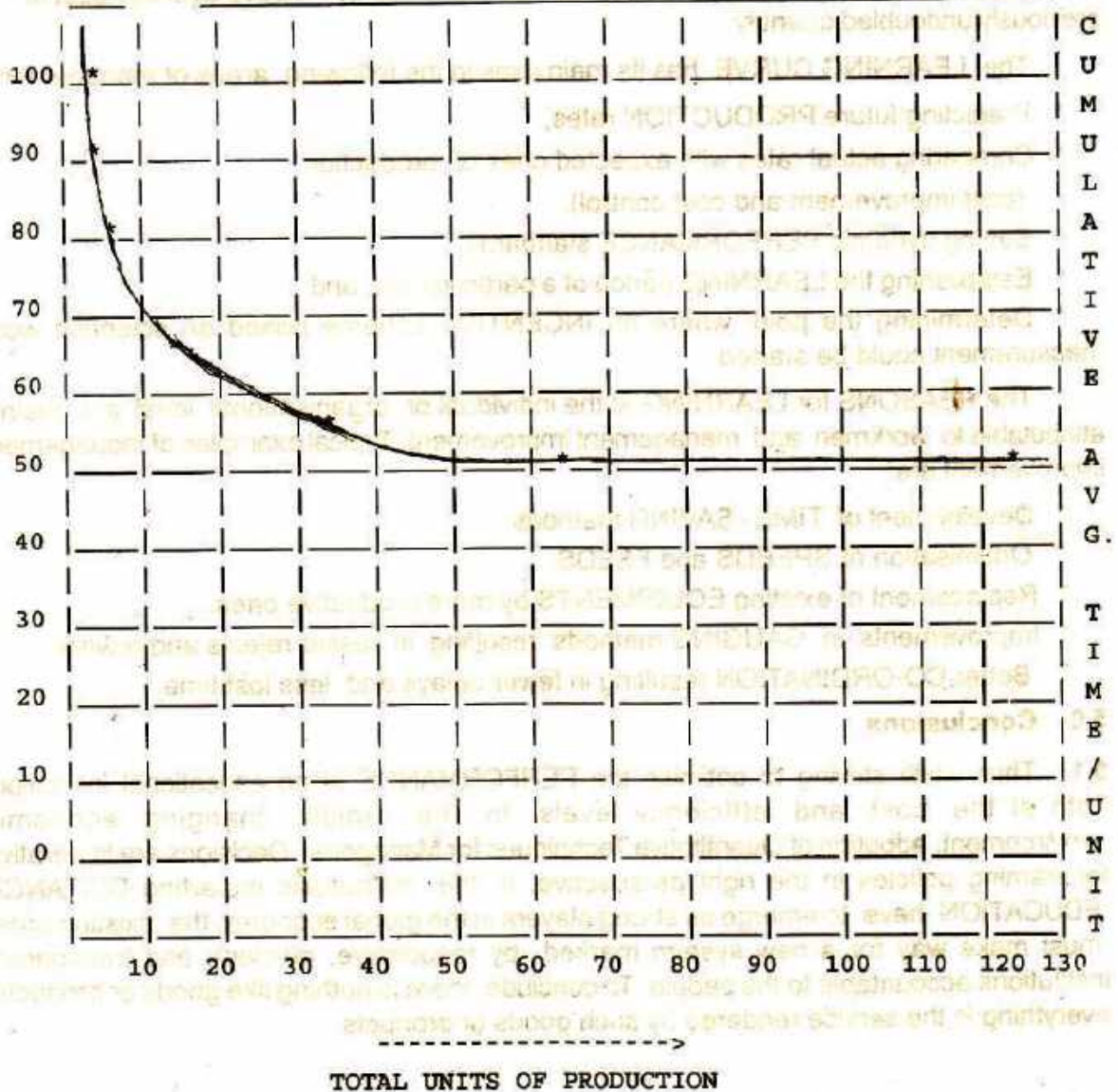
- * The LEARNING process continues indefinitely.
- * The rate of LEARNING is measurable.
- * The rate of LEARNING is fairly constant.

Wright adopted the pattern of learning for estimating the COST and DELIVERY of future quantities. In our case, the final product would be:

- * COURSE MATERIAL
- * AUDIO & VISUAL TEACHING AIDS
- * FREQUENCY OF THE AVAILABILITY OF THE COURSE LEADER
- * FREQUENCY OF COURSE LEADER - STUDENT INTERACTION

FIGURE I

GRAPHICAL REPRESENTATION OF A 90 PER CENT LEARNING CURVE



- * FREQUENCY OF SEMINARS IN THE RELATED FIELDS
- * FREQUENCY OF EXPERTS - STUDENTS DISCUSSIONS IN THE RELATED FIELDS.

The CONTENT and QUALITY of the final product together with COST and TIME CONSTRAINT are the important factors to be taken care of.

The rational used by Wright thus became the Wright's law which may be described as under:

Every time the quantity produced doubles, the cumulative average cost at the double quantity bears a fixed and lower relationship to the cumulative average cost at the previously undoubled quantity.

The LEARNING CURVE has its main uses in the following areas of management:

- * Predicting future PRODUCTION rates,
- * Comparing actual rates with expected ones of production (cost improvement and cost control),
- * Setting dynamic PERFORMANCE standards,
- * Establishing the LEARNING period of a particular job, and
- * Determining the point where an INCENTIVE scheme based on scientific work measurement could be started.

The REASONS for LEARNING at the individual or organisational level are mainly attributable to workmen and management improvement. Typical examples of management improvement are:

- * Development of TIME - SAVING methods.
- * Optimisation of SPEEDS and FEEDS.
- * Replacement of existing EQUIPMENTS by more productive ones.
- * Improvements in GAUGING methods resulting in lesser rejects and rework.
- * Better CO-ORDINATION resulting in fewer delays and less lost time.

5.0 Conclusions

5.1 Thus while striving to optimise the PERFORMANCE of an educational institution, both at the cost and efficiency levels, in the rapidly changing economic environment, adoption of Quantitative Techniques for Managerial Decisions are imperative for framing policies in the right perspective. If the institutions imparting DISTANCE EDUCATION have to emerge as strong players in the global economy, the existing order must make way for a new system marked by responsive, efficient, and transparent institutions accountable to the people. To conclude, there is nothing like goods or products; everything is the service rendered by such goods or products.

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DISTANCE EDUCATION IN THE NEW MILLENIUM

Deepti Gupta

ABSTRACT

In this paper, the author draws upon personal experience to explore the advantages and disadvantages of distance learning. As a student and as a teacher, this researcher had the opportunity to observe the whole paradigm of distance education at work. Both as a learner and as part of the materials production team, the two important sides of distance learning were open for analysis. In this era of globalization, distance education is playing a major role and this role is sure to develop further in terms of its demand. As a direct offshoot of this burgeoning demand, distance education will need to gear up to serve the needs of a community of global learners. This paper takes a look at what this will mean in terms of the demands upon the faculty.

The first taste of distance education came my way in 1998, when I joined IGNOU's diploma course in Creative Writing. Of course, those days all distance learning courses carried the humble title of Correspondence courses. And, the whole mindset was that only those students who are not proficient enough for regular, full-day courses join correspondence courses. Having embarked upon a teaching career in 1985, there had been ample opportunity to interact with students who had taken admission in regular, full-day courses and those who had opted for distance learning. IGNOU'S course included some PCP sessions and while attending those sessions, this researcher found that the system of distance education has its negative and positive side, like all other things.

The biggest positive factor that works for distance learning is that the learner may be located anywhere, the input from the teacher reaches in time. This means systematic, well-regulated notes, focused assignments, prompt feedback and useful booklists without the bother of stepping out of one's environment or spending time cooped up in a drab classroom:

The term 'distance education' covers the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organization.¹

While carrying on with the IGNOU diploma, the idea of being very fortunate with regard

to resource persons was always at the back of the mind. The course materials carried inputs from Khushwant Singh, Arun Shourie and Pritish Nandy, just to name a few. One could not even imagine learning first hand about their maiden experiences with creative writing. Even without their physical presence, the pleasure and inspiration of their experience could be comfortably garnered and in a style that ensured that no inattentive learner missed anything.

Distance education is education which either does not imply the physical presence of the teacher appointed to dispense it in the place where it is received or in which the teacher is present only on occasion or for selected tasks.²

Then, the whole distance education course is so well structured that a practicing teacher can not but wonder whether daily teaching with its strikes, bunks, power cuts and the usual disruptions could ever hope to present such a sleek and systematic progression! Standing before row upon row of students, the teacher is all alone and the be-all and end-all of every lesson. In most institutions today, budgeting is a big issue and with restrictions on faculty recruitments, learners get the limited benefit of a small teaching faculty. Even if the number of teachers is sufficient, one hardly finds them going round to each other's classes as learner stimulation. Where, in the classroom, the teacher is the sole resource, in distance education, there are many teachers who put their heads together to deliver study material on time and with an eye on considerable, self-sufficient input and consistent standards:

In traditional education a teacher teaches. In distance education an institution teaches. This is a radical difference.³

The little booklet of course content received by a student represents the experience, resources, research, administration and infrastructure of a full institution. In the classroom experience, a teacher may have hastily looked into lecture notes or other commitments which may lead to sketchy teaching, but the distance education course content is well thought-out, researched and planned since there is an infrastructure to support the teacher all through.

At various times through the IGNOU course, one felt all at sea when the assignments seemed too demanding. In a day course, in such a situation, entreating the teacher for spoon feeding would have been the easy way out, but the Personal Contact Programme was over and there was no option but to make an effort, however daunting the task might seem to be. As a teacher, this distinct advantage was later reinforced in the mindset when a few distance learners would come for guidance in their postgraduate courses and it would be a pleasant surprise that a learner who had not been granted admission in the regular department was more willing to apply the mind than the regular students. In fact, distance learners make better use of the texts, critical material, background information and course input than do the regular, daily students who attend classes. Perhaps, students who are enrolled in distance education courses know that there is only limited back up, so they make the best of whatever they are provided with. Whereas, the mindset of the regular student is more of dependence rather than self-sufficiency:

From the student's point of view there are important differences between the two systems of education. The distance system gives a radical new meaning to the concept of the independence of the adult learner.⁴

With the entry of so many off-campus universities and global examinations like the IELTS, learners increasingly are forced to turn to each other for solution and clarification. This slow transformation in the competitive spirit has been noticed even where students sit together in one classroom; it has been a major plus point of education in the distance mode all along. During the IGNOU experience, a new learning opportunity came the way of this researcher. As a teacher, one develops some kind of an inhibition in asking for academic aid, which is completely detrimental and antithetical to the interests of a teacher. For, a good teacher is one who never stops being a student. After meeting some fellow-students during the Personal Contact Programme, when a certain assignment became problematic, it became the most natural thing in the world to turn to one of them and seek clarification of some doubts, even arranging to meet in order to help each other with meeting deadlines.

Dialogue between a student and tutor is only one kind of dialogue. There is extensive evidence that, where distance-teaching materials are available, students can help each other to solve problems that in an ordinary class they would put to their teacher.⁵

For employed students or those who cannot adjust well to the constraints of a classroom, distance learning works best. In recent times, there have been instances of students feeling constrained in a classroom, but thriving in a distance learning course. With the changing environment, changing focus of education and the many temptations that globalization brings in varied shapes and forms, there is no need for learners to feel cooped up in the environment of the classroom; times have changed and society needs to come out of what can be termed the 'gurukul era'. The learner profile has shown radical changes, a learner is no longer content to remain a student and there is this pressure to gather a variety of experiences, take learning beyond the classroom and be financially independent at the earliest. Only a small percentage of students are happy to spend time in the classroom, to educate the rest, distance education is the answer:

Teaching from a distance liberates the student/teacher interface from the straitjacket of the lecture hall or tutorial room. The student may learn what he wants, whatever the hour of the day or night; he may learn wherever he wants; he may learn at his own pace.⁶

Moreover, where education pedagogy had once yet to come out of the mindset of the grammar translation method of teaching through which the teaching paradigm was more teacher-centered than learner-centered, today it has accepted a few facts that were once thought to be hypothetical:

The first of these is the recognition that each individual learns each content area or skill in different ways, and probably at different times from other learners; if learning has any one characteristic it is idiosyncrasy, and the concept of a class of learners is therefore a foolish paradox. The second principle is that effective learning is experiential; whether interpreted in a phenomenological or behaviorist's framework,

the principle is that one can best learn by experiencing. The third principle is that learning in the new world of rapid change must be lifelong, so that in youth one need not learn enough for a lifetime, but must acquire the skills to be a responsible continuing learner in adulthood.⁷

Most professions have a continuing education component. Medical professionals keep attending Continuing Education workshops, managers enroll for residential orientation courses at Academic staff Colleges and computer professionals keep updating their knowledge and skills through advanced level courses. Even teachers today need to attend refresher or orientation courses from time to time. With the top speed advances in every field, professionals from all areas will need makeovers from time to time to recreate themselves. Given the pressures of work and time, a distance course will be the need of the hour soon and the promise of virtual courses will make logistics simpler.

The virtual dimension that all fields of learning have taken on holds exciting possibilities for distance learning too. This means that the element of teacher-student interaction that many feel is missing in distance courses can be included to some extent. Also, disciplines that demand tutorials and practice sessions can benefit from the virtualization of the distance course; phonetics, for instance.

Distance learners are responsible for setting up their own learning environment. The new learning environment of the virtual university is different. Internet based learning media makes the isolated learning environment into a communicative one.⁸

With these changing trends waiting in the wings, the field of education in the distance mode will be modified in big ways. It would be difficult to predict every trend, but one development is quite clear: the faculty will be involved more actively than ever before. The old comfortable routines are sure to be modified in ways that pedagogues had not envisioned. The teachers form the cornerstone of any pedagogic modification and on this note one can conclude that:

The faculty will no longer need to simply instruct what he/she knows but will become a guide in the selection of materials, give direction in developing learning strategies within the materials provided on the web; give stimulus as to where something can be found, give advice and motivate students to construct their own knowledge; and be more responsive to the more frequent two-way communication with the students through prompt feedback. It is not merely a matter of taking existing material or even self learning materials and converting them to html code.⁹

NOTES

1. Holmberg, B. Distance Education: a Survey and Bibliography. London: Page, 1977, pp.9
2. Loi 71.556 du 12 juillet 1971: as quoted in Sewart, Keegan and Holmberg. Distance Education: International Perspectives. USA: Routledge, 1988, pp.6
3. Keegan, Desmond J. in Sewart, Keegan and Holmberg. Distance Education:

International Perspectives. USA: Routledge, 1988, pp.1.

4. Keegan: pp.14
5. Perraton, Hilary. A Theory for Distance Education in Sewart et.al. pp.40. Perraton illustrates this inter-dependence and self-sufficiency through the example of farm forums and radio schools. In India and Africa especially, Perraton found that learners solve one another's problems more readily when no adult is present. This agrees with communication theory, too: people are more likely to adopt an innovation if they can discuss it with friends or colleagues than if they simply learn about it individually or passively.
6. Sewart, David. Distance Learning: a Contradiction in Terms? in Sewart et.al. pp.47 This 'freedom' can sometimes act on the debit side, admits Sewart, because the learner lacks the supportive atmosphere of the classroom. Also, there is no framework against which to judge if the learner is 'doing well'. There will, of course, be comments from his tutor on his work, but this interaction is strictly between teacher and student alone. My experience with my IGNOU course also sensitized me towards this aspect; even after so many years, I have not been able to complete the course that I had started, for, the last bit, the project, will be completed only when and if I feel motivated enough to complete the novella I had started writing years ago! If I had been in a classroom situation with peers to compete with, I would have completed it in record time!
7. Moore, Michael. On a Theory of Independent Study in Sewart et.al. pp. 68. U.N.E.S.C.O. named this change from a teacher-centered mentality to a learner-centered mentality 'Copernican Revolution'. These three principles had long been accepted but not widely acted upon. Perhaps, the proliferation of distance education courses has been the result of this acceptance.
8. S. Manjulika and Reddy, V.Venugopal. The changing Context of Higher Education in the 21 st Century in Towards Virtualization Open and Distance Learning. Delhi: Kogan Page India Private limited, 2002. Pp34. This communication can be either synchronous or asynchronous. Asynchronous communication means email, news groups and electronic discussion forums. Synchronous communication where participants communicate with one another in real time is possible through the use of videoconferences, chat rooms and virtual classrooms. Sometimes, one gets the feeling that synchronous communication runs the world today, so why not the arena of education?
9. Ibid, pp3 7. This new technology needs a new pedagogy and therefore faculty needs to learn how to teach differently and help students to learn differently. Hence, faculty needs adequate training in technology and access to technology and technical support. Unlike their colleagues in traditional settings, online faculty faces the constant need to upgrade their technical skills and competence as new technology emerges and new software is written for online development and delivery. The quality of virtual, distance education will depend not only on the networking/connectivity but also on the quality of highly specialized and skilled educators.

DISTANCE LEARNERS : A STUDY IN ACHIEVEMENT MOTIVATION

Ravi K. Mahajan

ABSTRACT

The paper makes a modest attempt to study the level of Achievement Motivation in various segments of students in Distance Education. It also explores the role of Achievement Motivation in distinguishing 'successful completers' from 'non-completers' of the various courses.

Introduction

Distance Education is a recent development and doubts are often aired about its having sufficient academic support in terms of interaction of professionals and their publications constituting specialist literature in the manner it is understood by the contemporary researchers. Contrary to this perception, a perusal on the growth and expansion of 'non-contiguous communications' unravels chronicle efforts made by the exponents of Distance Education. Reviews specially undertaken by Coldeway, (1982), Sahoo (1992) and Satyanarayna (1992) suggest that the components of the system and students' feedback on components, and their success-rate have been of prime interest to the researchers in Distance Education.

However, the students adopting Distance Education mode have not received due attention of scholars engaged in educational and psychological analysis, particularly with regard to the study of their mental make-up and the like. And hence this modest attempt on 'Achievement Motivation' to fill the void.

A person's behaviour is guided by many psychological and physiological factors. These latent forces, mysterious impellers or propellers of activities, can be identified as motivation. McClelland defines achievement motivation as a performance in terms of standard of excellence or simply as a drive to success. Mohan and Gulati (1986) while reviewing the determinants of academic achievement observed 'a positive relation between need for academic achievement and achievement'.

The present study is based on the Lynn's Questionnaire which primarily measures Achievement Motivation. Rooted to the scale derived from factor analysis, Lynn's Questionnaire is basically designed for use on people in executive, professional and managerial positions and for research purposes on students. Thus in view of the varied

characteristics and the background of the students in Distance Education, Lynn's Achievement Motivation Test fits well in the frame of the study.

Objectives

The present attempt broadly revolves around :- comparing the sub-groups of students within the stream of distance education, and - exploring differences on 'Achievement Motivation' between successful 'completers' and 'non-completers' in distance education.

Data

The study is based on data collected from 444 students enrolled in various post-graduate courses in the Department of Correspondence Studies, Panjab University, Chandigarh.

The following tables give information on the Number, Arithmetic Mean (AM), Standard Deviation (sd) on Achievement Motivation for different segments based on sex, marital and employment status of students in distance education.

Group	No.	AM (sd)
Total Male	218	5.9083 (1.0254)
Total Female	216	5.6991 (1.1653)
Male-Unmarried-Unemployed (M00)	84	5.5453 (1.0345)
Female-Unmarried-Unemployed (F00)	160	5.8812 (1.074)
Male-Unmarried-Employed (M01)	88	5.7159 (0.5973)
Female-Unmarried-Employed (F01)	31	5.6316 (0.5973)
Male-Married-Unemployed (M10)	1	not computed
Female-Married-Unemployed (F10)	19	6.1935 (1.0139)
Male-Married-Employed (M11)	53	5.9245 (1.22687)
Female-Married-Employed (F11)	8	6.0000 (0.7559)

The following table gives t-values indicating differences between various segments amongst Female and Male groups.

Groups	Total Female	F00	F01	F11
	Total Male	M00	M01	M11
t-value	2.01	2.42*	1.96*	0.16

The following table gives t-values indicating differences between various segments amongst Female groups.

Groups	F00	F00	F00	F10	F10	F01
	F10	F01	F11	F01	F11	F11
t-value -	1.50	0.99	-0.31	2.19*	0.50	-1.35

A study in Achievement motivation

The following table gives t-values indicating differences between various segments amongst Male groups.

Groups	M00 M01	M00 M11	M01 M11
t-value	-1.05	-1.96*	-0.97

The following table gives information on Arithmetic Mean, Standard Deviation and t-values indicating differences between 'Non-Completers' and 'Completers' in various segments amongst Male groups. The number below each Achievement Motivation is the number of observations in that category.

Groups	Non-Completers AM (sd)	Completers AM (sd)	t-values
M00	5.2549 (0.8909) 51	5.9697 (1.1035) 33	-3.27*
M01	5.5538 (1.2378) 65	6.1739 (1.0292) 23	-2.15*
M11	5.9310 (1.2245) 29	5.9583 (1.1971) 24	-0.08

The following table gives information on Arithmetic Mean, Standard Deviation and t-values indicating differences between 'Non-Completers' and 'Completers' in various segments amongst Female groups. The number below each Achievement Motivation is the number of observations in that category.

Groups	Non-Completers AM (sd)	Completers AM (sd)	t-values
F00	5.7722 (1.1652) 79	5.9877 (0.9682) 81	-1.27
F01	5.9444 (1.1100) 18	6.5385 (1.6013) 13	-1.66
F10	5.5455 (0.5222) 11	5.7500 (0.7071) 8	-0.73
F11	5.5000 (0.7071) 2	6.1667 (0.7528) 6	-1.09

Results and Discussion

A global comparison on Achievement Motivation between Male and Female students enrolled in Department of Correspondence Studies reveals that Male students have exhibited a higher score on Achievement Motivation than the Female students. However, a peep into students' various segments based on their marital and employment status reveals that amongst the possible eight groups thus formed, while the 'unmarried-unemployed-male' students have scored the least on Achievement Motivation, 'married-unemployed-female' students have exhibited the highest score on Achievement Motivation, closely followed by 'married-employed-female' students. Further, within 'male' students, the 'married-employed-male' students have scored the highest and within 'female' students, the 'unmarried-employed-female' students have scored the least. The significant differences have been marked in the respective tables. The high scoring of female students on Achievement Motivation is suggestive of the changing social texture wherein females are all set to enlarge the scope of their role in the society.

The issue of 'overall higher Achievement Motivation in the male students in general but lower otherwise in their segments' can be viewed as a mere reflective of the 'aggregative problem' where the group score loses strength when breached into sub-groups. As regards, comparison between 'Non-Completers' and 'Completers', the investigation indicates that in general in all the groups the Completers have exhibited a higher score on Achievement Motivation than their 'Non-Completers' counterparts. However, the differences have been predominately significant in the case of 'unmarried-unemployed-male' students and 'unmarried-employed-male'. Notably, no significant differences have been found on Achievement Motivation between 'Non-Completers' and 'Completers' in the groups of 'married-employed' students.

Despite limitations on account of the restrictive scope of the study, in the overall scenario, the study makes a case for careful handling and counselling for 'unmarried-unemployed-male' students, who dominate the students strength in the institute of Distance Education but register low on Achievement Motivation and subsequently record poor success rate.

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2. Mohan, J. and Gulati. A., (1986). Academic Achievement: A Review of Determinants, Indian Psychological Review, Vol 30., No.4
3. Sahoo, P.K. (1992). Researches in Distance Education at University Level in India: Trend and Perspective, Kakatiya Jr. of Distance Education, Vol.1, No.1
4. Satyanarayana, P. (1992). Distance Higher Education in India: Some Concerns, Kakatiya Jr. of Distance Education, Vol.1, No.1

ROLE AND IMPORTANCE OF STUDY MATERIAL IN DISTANCE EDUCATION: A COMPARATIVE STUDY

By Geeta Bansal

ABSTRACT

Geeta Bansal has focussed on the issue whether study-material supplied to the distance learner is satisfactory and interesting enough. For her analysis she has employed 'Gaps Model' referring to the seven gaps, namely the Knowledge gap, the Standards gap, the Delivery gap, the Internal Communication gap, the Perception gap, the Interpretation gap and the Service gap. She hopes that these gaps will be plugged in future to render the study material more effective.

By using the Gaps Model, the gaps that exist in the service organizations can be bench marked against industry and other service-centric industries. These can be used to deliver customer/ learner delight (in case of DE) by plugging the existing gaps. This, in turn, would serve the cause of improving and providing quality education through distance mode.

India's rendezvous with the ICE Age (Information, Communication & Entertainment) has indeed, opened up new avenues for India Incorporate in almost every area, especially in higher education. Historically we come across the fact that human civilization has witnessed the Agricultural Revolution, which was followed by the Industrial Revolution and now it is the 'Information Revolution', which has followed suit. It is breaking all the previous records and has affected every nook and corner of the globe. There is a trend towards globalization in the literal sense where distance has been conquered and geography has become history. Simply put, globalization becomes visible when the nations are bulldozing the international boundaries in quest of greener pastures.

The same can be held true of 'Distance Education'. It is indeed catching up fast amongst the students due to it's potential and capacity. It is in this light that we intend to find out the importance of the distance education, taking a retrospective and a prospective approach with special reference to one of the most fundamental and important

pillar & support system i.e. the 'Study Material' which is provided by the Distance Education Institutes.

Statement of the problem

There is no exaggeration that the Study Material provided by the Correspondence Institutes makes or mars the reputation of the Institution. According to Satya Pal Anand, "The back bone of correspondence teaching is the material in print, which is sent to the students in regular instalments and without any oral supplementation. It is also called a lecture-script."

Similarly, Savita Kaushal also stresses the need of good instructional material where she maintains that the quality of distance education depends essentially upon the learning material provided to the distance learners.

But unfortunately the Institutes in Distance Education are not coming up to the expectations of the learners especially when it comes to the study material, which is most of the times hackneyed in nature. It is seldom updated and the quality is nevertheless conspicuous by its absence in these lecture scripts, thus defeating the very purpose of Distance Education.

With this perspective the present research study was envisaged to cull out the lacunae and problems in the study material and also to find out the various problems of the learners in Distance Education.

The research study also intended to find out how far the students were satisfied and feel motivated to read the study material.

Objectives of the study

The basic objective of the study was to find out how far the study material is satisfactory and motivating enough for the students.

Specifically the study aims to:

1. Measure the satisfaction score of the Distance Learners with regard to various variables of the study material.
2. Find out purposively what factors are important for the students in a lecture-script.
3. Discover out whether the learners of all the selected Universities are applying the same criterion in ranking the features of the self-learning materials.
4. See whether the Distance Learning Material is being converted into Self-Learning Material, as per latest guidelines of Distance Education Council of India.
5. Identify the lacunas in the study material and the problems of the Distance learners seeking their suggestions thereof and finally.
6. Draw a line of action to improve the Distance Education system through the Study Material to make it more student-friendly in nature.

Research Methodology

1. Sampling
2. Data collection
3. Data analysis

1. Sampling: The field of study.

Table: I shows that, the study has covered four universities in Distance Education i.e. The HP University, Shimla; The Punjabi University, Patiala; Kurukshetra University, Kurukshetra and Panjab University, Chandigarh. These universities have been chosen purposively from Himachal Pradesh, Haryana, Punjab and Union Territory of Chandigarh to find the state of Distance Education in the region of north India. The sampling size has been thirty percent of the total universe, where we further resorted to the stratified random sampling where students were chosen randomly from B.Com. 1, 2 and 3; and BA 1, 2 and 3. The sample is shown below. In all, 1089 students were chosen.

Table: 1: Showing the Sample of Distance Learners

<i>Name of the University</i>	<i>No. of students chosen</i>
1. P.U., Chandigarh	384
2. K.U., Kurukshetra	264
3. H.P.U., Shimla	174
4. Pbi. U., Patiala	267
Total	1089

2. Data Collection

The primary data has been collected through a Questionnaire, which was given to the students. Further some interviews and interactions with the students and the faculty members were conducted to seek their views on the state of the study material. For the secondary sources, the study material provided by these universities was seen and used to reach some conclusions on their qualitative and quantitative aspects.

3. Data Analysis

The data has been analyzed using appropriate tools of statistics i.e. Likert's Scaling technique for measuring Satisfaction of the learners towards the study material. Kendall's Co-efficient of Concordance for finding out whether the learners are essentially applying the same criteria in ranking the various factors/variables of a lecture-script in order of their importance and percentages etc., wherever required.

1.1 SATISFACTION OF THE LEARNERS TOWARDS THE STUDY MATERIAL

Table 2:- shows the analysis & findings of the Likert's Scaling Techniques with regard to learners satisfaction & dissatisfaction towards the Study Material.. The Likert's Scaling Technique Analysis has been used to reach the final scores assigned by the learners

to the various features of a good study material, on a five point scale ranging from 5 (Low) to 1 (High). There were 30 features which were outlined and the learners Satisfaction and Dissatisfaction towards these features was sought.

Table: 2 Likert's analysis with regard to the learners Satisfaction and Dissatisfaction towards the study material.

Degree of Satisfaction University	Satisfied (%age)	Neutral (%age)	Dissatisfied (%age)
1. P.U.Chd.	80	2	18
2. K.U.Kurukshetra	52	5	43
3. HPU, Shimla	72	9	19
4. Pbi. U., Patiala	83	1	16

1.1 (a) A Comparative analysis

Learners satisfaction towards the study material in the selected universities.

Figure 1, shows the comparative analysis of the learners satisfaction and dissatisfaction towards their study material. As is clearly evident from the data the learners are more or less satisfied with the study material.

The highest level of satisfaction has been found in the Punjabi University (83 percent) followed by Panjab University (80 percent) Himachal Pradesh University (72 percent). And Kurukshetra University (52 percent) has shown the lowest level of learner satisfaction.

Implying there by that the highest level of dissatisfaction is shown by the Kurukshetra University (43 percent) followed by Himachal Pradesh University (19 percent) and Panjab University (16 percent).

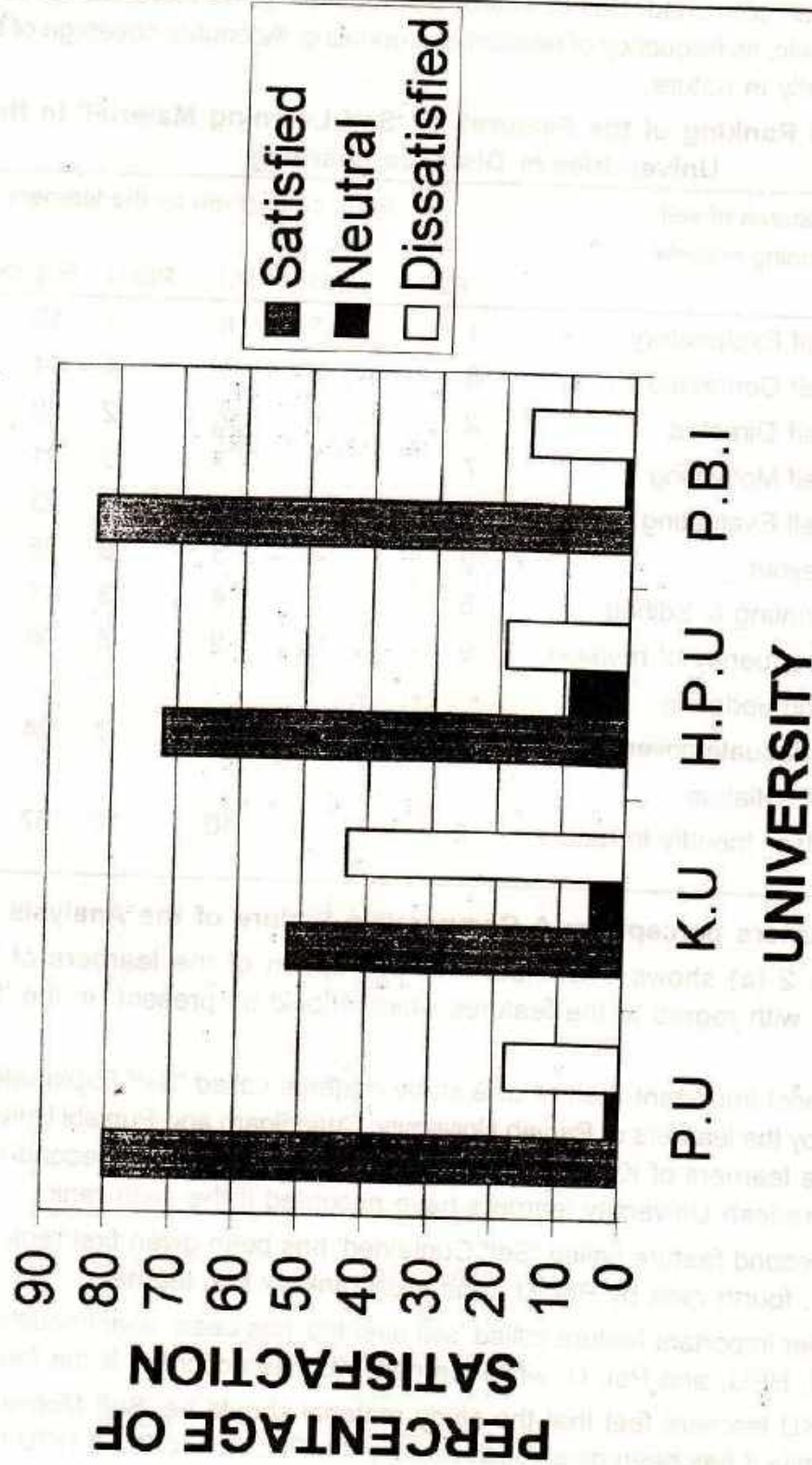
As can be seen from the findings, the learners of Pbi. U. have been very clear in outlining their perception with regard to the study material where only 1 percent learners were neutral in their response. The highest percentage of neutral response was given by HPU (9 percent), followed by KU (5 percent) and PU (2 percent). The neutral response shows the lackadaisical attitude of the learners towards the study material. Thus implying thereby that they are not using the study material, for their references. But the very fact that most of the learners have outlined their level of satisfaction or dissatisfaction towards the study material shows that they do refer to the study material. Some of them have even delineated the lacunae in the study material. They have also given some constructive suggestions to improve and to increase the dependability on the study material.

1.2 LEARNER'S PERCEPTION TOWARDS THE STUDY MATERIAL

Ranking of the Features of 'Self Learning Material'

Table 3, shows the ranks assigned by the learners to the features which should be present in the study material, by the learners of the selected universities viz., Self

Fig. I OVERALL SATISFACTION



Explanatory, Self-contained, Self Directed, Self Motivating, Self Evaluating, its layout and printing editing etc. its frequency of revision and updating. Adequate coverage of the syllabus and user friendly in nature.

Table: 3 Ranking of the Features of 'Self Learning Material' in the selected Universities of Distance Learning

	Features of self learning material	Rank order given by the learners					Overall Rank
		PU	KU	HPU	PBI.U	SR	
1.	Self Explanatory	1	2	6	1	10	1
2.	Self Contained	6	3	1	4	14	2
3.	Self Directed	2	4	2	2	10	1
4.	Self Motivating	7	1	7	6	21	4
5.	Self Evaluating	3	7	8	5	23	5
6.	Layout	10	6	3	9	28	7
7.	Printing & Editing	5	5	4	3	17	3
8.	Frequency of revision and updating	9	10	9	8	36	8
9.	Adequate coverage of syllabus	4	8	5	7	24	6
10.	User friendly in nature	8	9	10	10	37	9

1.2 (a) Learners perception; A Comparative Picture of the Analysis

Figure 2 (a) shows a Comparative perception of the learners of the selected Universities, with regard to the features which should be present in the 'Self Learning Material'.

The most important feature of a study material called 'Self Explanatory' has been ranked first by the learners of Panjab University, Chandigarh and Punjabi University, Patiala. However the learners of Kurukshetra University have given it the second rank while the Himachal Pradesh University learners have accorded it the sixth rank.

The second feature called 'Self Contained' has been given first rank by HPU, third rank by KU, fourth rank by Pbi. U., and sixth rank by PU. learners.

Another important feature called 'self directed' has been unanimously given second rank by PU, HPU, and Pbi. U. while learners KU has accorded it the fourth rank.

The KU learners feel that the study material should be 'Self Motivating' above all features, while it has been given sixth rank by the Pbi. U. and PU & HPU have accorded it the seventh rank.

Fig : 2(b) Features of SLM

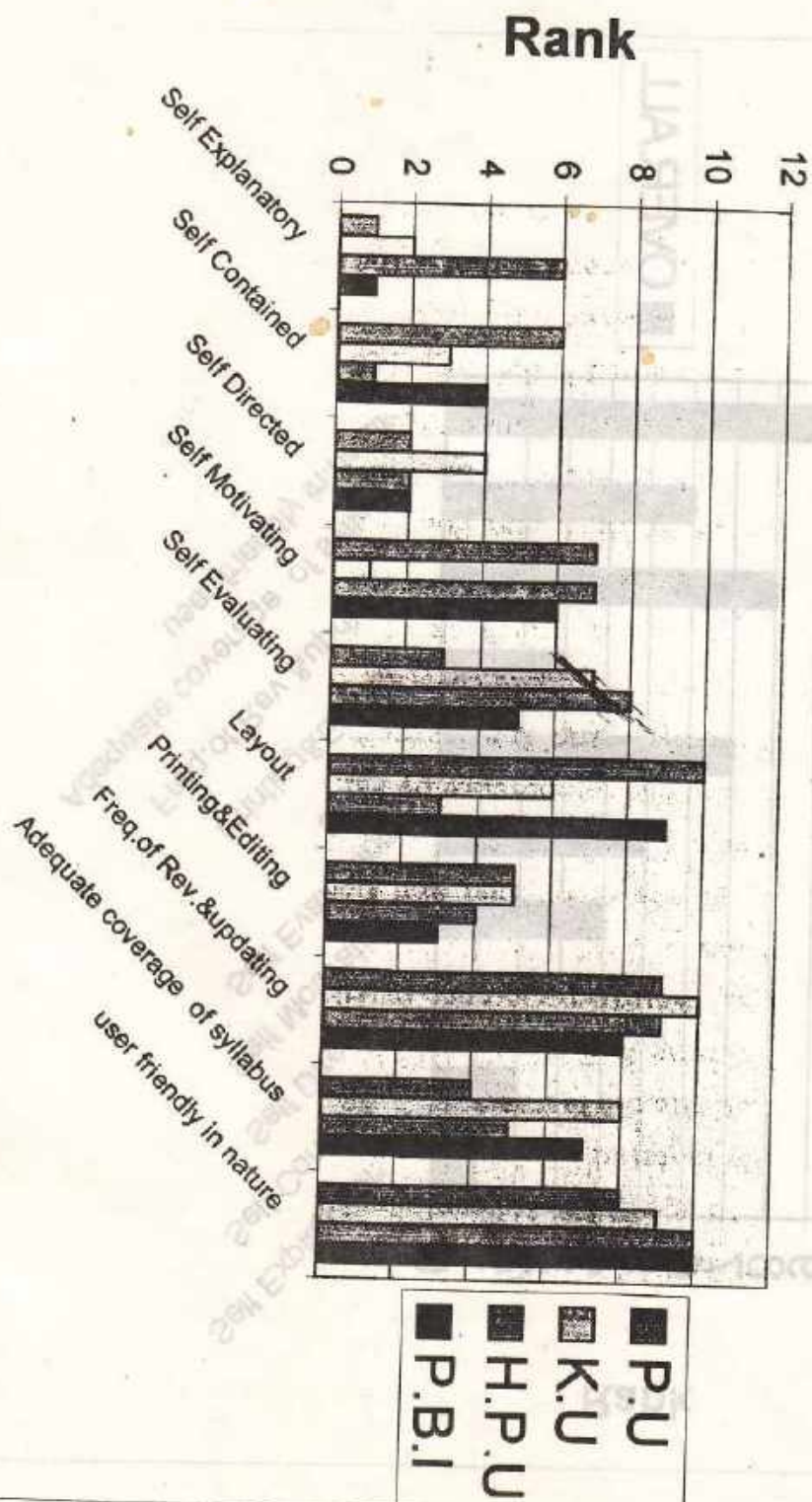
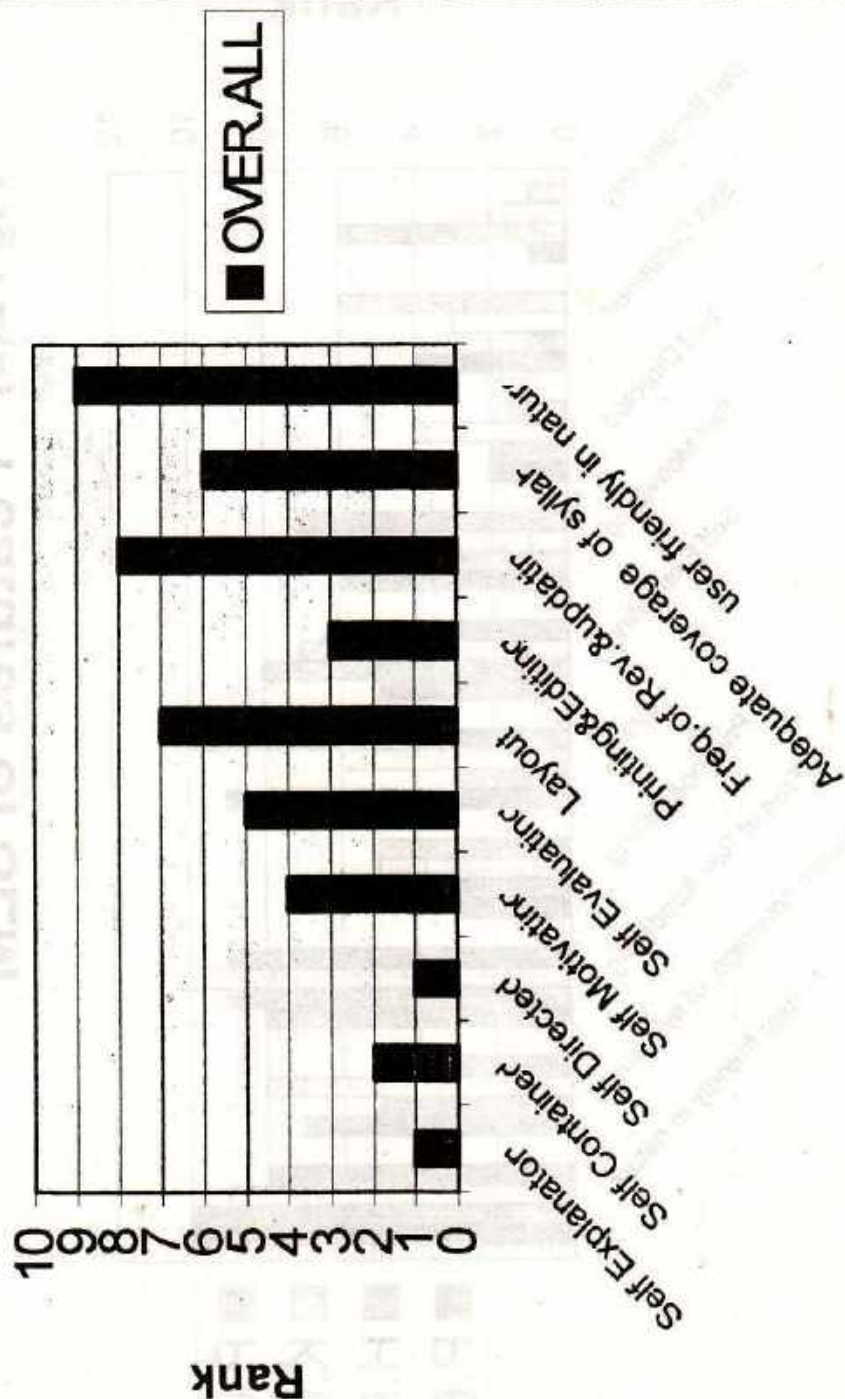


Fig : 2(b) Over all Ranking of SLM



The 'Self Evaluating' feature has been given comparatively more importance the PU (3rd), whereas at Pbi. U They have given it the 5th rank, at KU the 7th rank and at HPU it the 8th rank.

As far as 'Layout' of the study Material is concerned, it has been accorded least preference by the PU (10th) followed by Pbi. U, (9th) KU (6th) while interestingly the HPU has given comparatively higher rank to layout i.e. 3rd rank implying thereby that the layout of their study material needs to be taken care of and improved to motivate the learners.

The Printing & Editing; part has been given fifth preference by PU. and KU, fourth preference by HPU and third preference by Pbi. U Learners.

The frequency of revision and updation, of the lessons has been given least preference by the KU learners, 9th preference by PU and HPU and eight preference by Pbi. U.

On the other hand the learners have given comparatively more importance to 'adequate coverage of the syllabus' as they feel that it is the biggest drawback of the Study Material of the correspondence studies. It has been given fourth preference by PU, fifth preference by HPU, and Pbi. U and eight preference by KU. Surprisingly, the learners of all the Universities have accorded least preference to an attribute called 'user friendly in nature. The HPU & Pbi. U have accorded it the 10th rank while KU has given it the 9th rank and PU has given it the eighth rank.

Figure 2(b) shows that the learners of all the selected Universities have given first preference to 'Self Explanatory' and 'Self Direction. This is very obvious because they use the study material as the only medium of interaction between them and the teachers. The teachers communicate to the students through lessons only as there is very limited face-to-face interaction between the two. So these two are very important factors which holds the key to the success of any 'Distance learning Programme'.

Secondly, they feel that the study material should be 'self-contained' in nature i.e. comprehensive and detailed to enable them to understand the lessons more carefully and exhaustively.

Thirdly, the University should attach more importance to the printing and editing part of the study material. There is no exaggeration in the fact that a good printing with no mistakes and clear illustrations makes reading interesting and motivating rather than troublesome and demotivating if there are a lot of spelling mistakes and poor editing work etc.

Fourthly, it is the self motivation part that is important in a study material i.e. the lessons should be able to arouse the curiosity of the students. They should feel like reading it and should be able to increase their zest for learning which is conspicuous by its absence in most of the study materials.

Fifthly, it should be 'Self Evaluating' in nature, i.e. it should enable the learners to evaluate their performance on their own after going through the lesson scripts. It should

help them in writing answers to the response sheets given at the end of the lesson scripts and above all should enable them to appear in their exams successfully which is the main objective of the distant learners.

Sixthly, it should try to cover-up the topics of the syllabus adequately so that the learners are not troubled of looking into other references. They should be in detail, clearly explained with sufficient examples from day-to-day life to make them understand things better and in a simple manner.

Seventhly, the layout of the study material should be duly taken care of i.e. it should be attractive enough to hold the interest of the learners.

Eighthly, they feel that it should be frequently revised and updated to incorporate the latest changes and happenings around, especially in dynamic subjects which see frequent changes either by the change in the govt. policies or changes in the Business Environment etc.

Last, but not the least, the study material should be user-friendly in nature i.e. it should serve the purpose of the distant learners as far as possible. As the study material is the major and the most effective medium vehicle of instruction for the distant learners, every effort should be made to improve it to raise the standard of the distance learning programmes.

Looking at the findings of the survey we can safely say that the learners are more or less looking forward towards lessons which are written in a 'Self Learning Mode (SLM mode)'. Though an effort has been started in this direction but final results are yet to be seen.

Here at this juncture we are reminded of the famous lines quoted by Pt. Jawahar Lal Nehru.

"The woods are lovely, dark & deep, and

We have miles to go, before we sleep".

It can be thus observed from the findings of the research that features of a study material like 'Self Explanatory' 'Self Directed' and 'Self Contained' and printing & editing are the most important while 'Self motivating' 'Self Evaluation and Adequate coverage of the lessons is given preference to some extent while features like the 'Layout of the study material' and user friendliness have been given least preference by the learners.

Implied thereby that they are quite satisfied with the layout of the study material the material is frequently revised and updated and they do not have much problem with it and it is quite user friendly in nature.

While the features which they feel are missing in the study material like 'Self Explanatory', 'Self Directed' and 'Self contained' 'Printing & editing' etc should be taken care of to satisfy the learners needs and requirements and help them in self evaluating.

The study material is the only and the most effective medium device of interaction

between the learners and the teachers and thus should help the learners in acquiring knowledge on their own. This would help the distant learning Institutes to build a reputation for themselves and serve the society in a more efficient & effective manner.

1.2 (b) Consistency in Perception with regard to Study Material

Further, in order to find out whether the learners in all the universities were applying the same standard in ranking the 10 features highlighting the importance of the study material, i.e. to find out whether there is significant agreement or disagreement in the ranking by the learners in all the universities at 5 percent level of significance, Kennndall's Co-efficient of Concordance (W) has been applied. The hypothesis formulated for the purpose was:

H_0 : the learners of the selected Universities are not applying the same criteria or giving the same degree of importance/ranking to the different features highlighting the importance of self learning material.

H_1 : The learners of all the selected universities are applying the same criteria or giving the same degree of importance/ranking to the different features highlighting the importance of self learning material.

A comparative Analysis of (PU, KU, HPU, Pbi. U)

Table (4) shows the ranks assigned by the learners of all the selected universities, to the features of SLM.

As can be observed from the table, all the universities have given first preference to an attribute called 'Self Explanatory' and 'Self Directed' and least preference of their being user-friendly in nature.

It can be further inferred from the analysis that the learners of all the universities have essentially applied the same criteria in ranking the features of SLM. This can be seen from the analysis where $W=.636$, the $X^2 = 22.89$ is greater than the table of $X^2 = 16.91$, since $22.89 > 16.91$, H_0 has been rejected and H_1 has been accepted implying thereby that the learner of all the universities are in agreement with each over the ranks assigned to the various features of SLM.

Implying thereby that the learners unanimously want that the study material should be above all 'Self explanatory', 'Self Directed' and 'Self Motivating' which are a prerequisite for any Distance learning Programme. This would indeed ensure its success in today information age. Where the teacher is no longer 'Sage on the Stage but is a Guide on the Side' who is under constant obligation to interact with the learner through the 'Study Material' only.

1.3 Lacunaes in the Study Material: A comparative analysis:

The learners of all the selected Universities offering 'Distance Learning Programmes' are very Dissatisfied with the 'Untimely delivery of the SM'. This is one thing which is a common problem being faced by all of them.

Table 4
Ranking of the Features highlighting the important of Self Learning Material (PU, HPU, PBI, Uni.)

K=88	Features of Self Learning Material									
	Self Explanation	Self Contained	Self Directed	Self Motivation	Self Evaluation	Layout	Printing & Editing	Frequency of revision	Ad. Overage	User Friendly
1. PU	1	6	2	7	3	10	5	9	4	8
2. KU	2	3	4	1	7	6	5	10	8	9
3. HPU	6	1	2	7	8	3	4	9	5	10
4. Pb.U.	1	4	2	6	5	9	3	8	7	10
Sun of Ranks	10	14	10	21	23	28	17	36	24	37
RJ	144	64	144	1	1	36	25	195	4	225
(Rj-Rj)2	1	2	1	4	5	7	3	8	6	9
Overall rank										

W = .636, $X^2 = 22.89$, Table Value of $X^2 = 16.19$, Since $22.89 > 16.19$, Ho rejected

$$R_j = \frac{\sum R_j}{N} = \frac{220}{10} = 22$$

$$W = \frac{S}{1/12 K^2 (N^2 - N)} = \frac{840}{1/12 (.16), (990)} = .636$$

$$X^2 = K \cdot (N-1) \cdot W = 4 \cdot (9) \cdot (.636) = 22.89$$

As far as printing, editing and layout is concerned, they are not much bothered. But when it comes to the qualitative and quantitative aspects of the study material they are far from being satisfied. They feel that inadequacy in terms of coverage of the syllabus is the biggest shortcoming in the study material provided to them.

Further, none of the features of a study material written in a 'Self Learning Mode' i.e.; SLM are present in their scripts. Thus features like 'Self Explanatory', 'Self Directed', 'Self Evaluating', Motivating & Thought Provoking etc. are conspicuous by their absence in the study material.

Since the SM is not communicable, dependable intelligible or knowledgeable, it does not help them in either writing their response sheets or help them to appear in their exams and score good marks.

1.4 Suggestions: A Comparative Analysis

The learners have highlighted the shortcomings in the study material and they feel that the Universities should take concerted effort in improving the quality and quantity of the study material by plugging the existing lacunae in it.

All of them have unanimously put forward one major suggestion with regard to the delivery of the lesson scripts. They want that the study material should be handed over to them at the time of admission only to make optimum use of the material. Plus they want the material to be written in 'SLM' mode with proper introduction to the topic specifying the learning objectives, key terms explained and also referring further readings on the topic, they want some model papers to be attached with the lesson scripts to help them prepare for their exams.

Basically, since these lessons are the only medium of correspondence between the learners and the teachers they want it to be motivating and thought provoking so that they can depend upon them and should frequently refer to them wherever they are studying. Otherwise the whole purpose of the study material would be defeated if it is not put to optimum use by the learners.

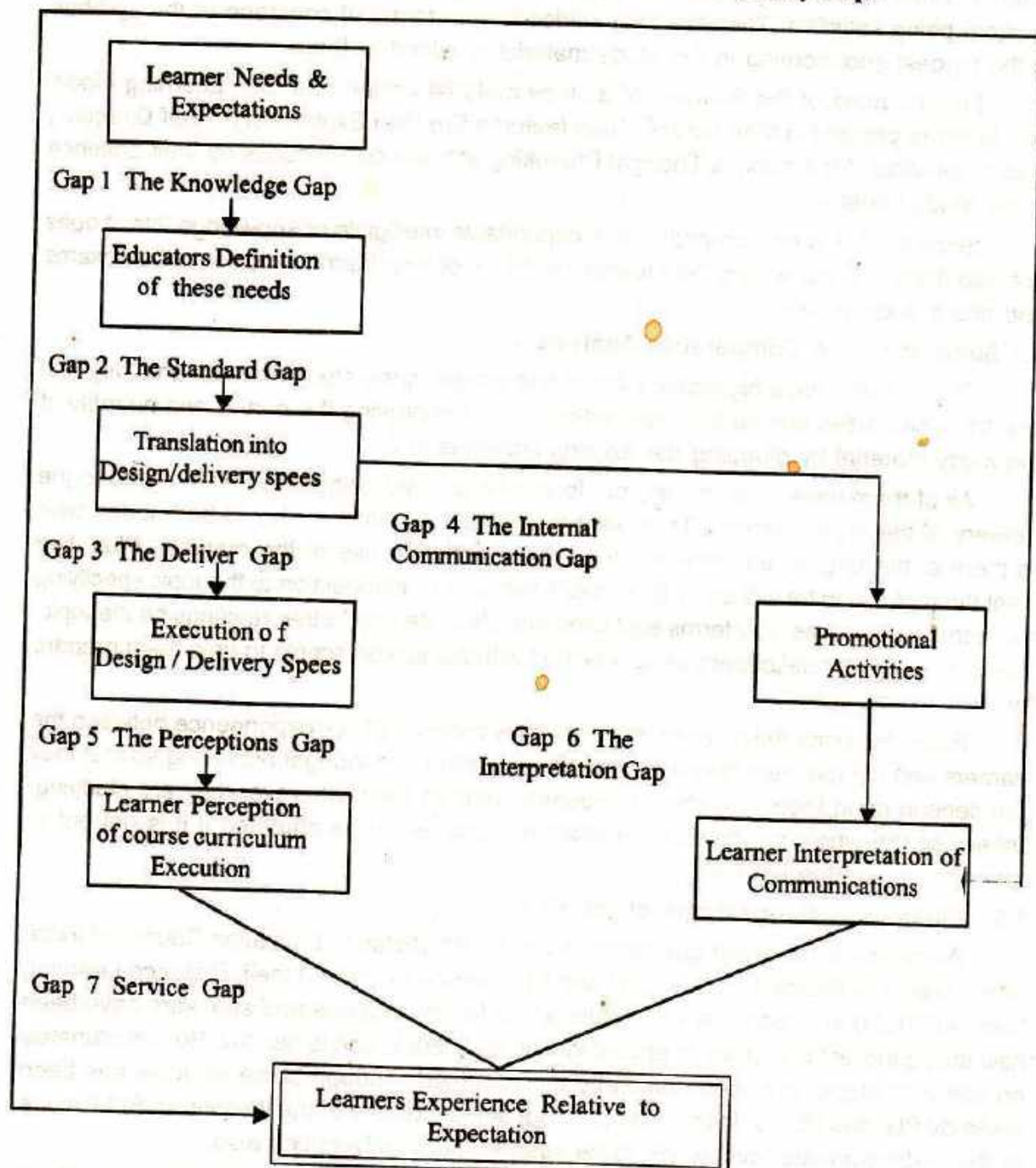
1.5 Findings & Suggestions of the study

According to the latest guidelines issued by the Distance Education Council of India, all the Distance Education Institutes have been asked to convert their 'Distance Learning Material' (DLM) into 'Self Learning Material' (SLM). Workshops and seminars have been held during the last four years to encourage the teachers to do the needful. But unfortunately no concrete steps have been taken by the HPU, KU. Though some initiative has been taken by PU, and Pbi. U. in this direction. But actual delivery of the lessons in 'SLM' mode at the undergraduate level is yet to be seen in these universities also.

Thus it is suggested that sincere efforts are initiated by the teachers to convert the DLM into SLM to increase the level of satisfaction of the students.

The students are though Satisfied with the printing editing & layout part, they want

Fig. 3 (a) Customer / Learner : Seven Service Quality Gaps



Source : Adapted from Marketing of services, Lovelock

the material to be improved both quantitatively and qualitatively. They have also suggested that the material should be provided in all the three mediums which KU, Pbi. U & HPU are not providing. They also want that the duration of the PCP's should be increased to cover adequate syllabus and increase the interaction between the teachers & the learners.

Table 5 : Medium of Instruction of the Study Material

Medium University	Hindi	Punjabi	English
1. P.U.	*	*	*
2. K.U.	*		
3. H.P.U.			*
4. Pbi. U.			*

As can be seen from the Table: 5 PU, CHD. Is the only University supplying the study material in all the three mediums at the undergraduate level.

The KU, is supplying the material only in Hindi Medium which is a major cause of dissatisfaction amongst the learners.

The HPU & Pbi. U is supplying the material only in English medium again creating problems for Hindi & Punjabi medium students.

Thus if these universities want to improve the satisfaction of the students they should provide the study material in all the three languages. As the distance learning subscribes to the needs and requirements of the students stationed all over who may or may not have knowledge of all the mediums of instruction. So they should be provided the material in the medium of their choice.

In the end we can say that the level of satisfaction is the Highest in Pbi. U. and Panjab University, followed by HPU and KU. Thus these Universities should look into the shortcomings outlined by their students and should take into consideration the suggestions given by them. This is the only way they can satisfy the learners and improve their reputation as the providers of quality education through distance learning programmes.

Recommendations:

The GAPS MODEL: Figure 3 (a) below presents a synoptic view of the seven service quality gaps in DE.

The GAPS model of service quality developed by Valarie A Zeithaml, A. Parsuraman & L.L. Berry and improvised by Christopher Lovelock, can be aptly applied to study the gaps in the service of the learners (customers) of DE.

The model framework has outlined seven types of Gaps that can be visualized at different steps during the course of the designing and delivering of a service performance. In the case of DE also these gaps can occur during the designing of the course curriculum to the final delivery of the instructional material and other support systems. These gaps

are (Marwah 2002):

1. the knowledge gap
2. the standards gap
3. the delivery gap
4. the internal communications gap
5. the perception gap
6. the interpretation gap
7. the service gap

A close scrutiny of these gaps would help any service organization to address the specific areas and issues of concern. Such issues are of vital importance to garner learner satisfaction, which is the prime concern of DE today.

According to this gaps model the gaps which are existing in the service organizations can be benchmarked against the industry and other service centric industries. These can then be used to deliver customer/learner delight in the case of DE, by plugging the existing gaps. Which would inturn help to achieve the desired objectives of providing quality education through distance mode

The Future role of distance learning :

Thus on a concluding note we can say that open and distance education is becoming more of a flexible learning system. It has provided ample possibilities to overcome the various socio-economic and other practical obstacles or difficulties for participation in learning activities. The distance education has indeed provided opportunities to use, for instance, both the workplace and the home as a 'classroom'.²

The last decade has witnessed an incredible growth in distance education through out the world. And it is not a wild guess to propose that this trend is going to be further strengthened, thanks to the new Information and Communication Technologies which are ruling our lives today. And the backbone of its success is of course the 'Study Material' which is one of the most important pillars of Distance Education. Thus every sincere effort should be made to make it as interesting as possible by incorporating both qualitative and quantitative aspects of learning.

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MANAGEMENT OF DISTANCE EDUCATION : SURVEYING THE ROLE OF RESPONSE SHEET ASSIGNMENTS

Pawan K. Kamra

ABSTRACT

Dr. Pawan K. Kamra has focused on the issue of better management of distance education by making an extensive study of the role of response sheet assignments (RSA). RSA holds an important place in distance education by providing an essential two way communication channel between the otherwise distanced teacher and the taught. The author is distressed that the students' feeble response accompanied by an indifferent attitude of evaluators has rendered RSA quite ineffective. He suggests that the students' interest can be sustained by making RSA a self-motivating and self-manageable exercise comprising a genuine mix of model, essay and short-answer type examination oriented questions.

In an era of social upheavals coupled with paucity of resources and fast changing technological developments, distance education for the survival and growth of country's development whether in a developing or developed world, is the sine-qua non for diffusion of education and equalization of educational opportunities.¹ This organized venture initiated about five decades back with different styles, nomenclatures and refinements has not only successfully overcome inherent lacunae of the age old formal system of education but has also great potentiality to act as a vibrant alternative to supplement the efforts of the Government for universalization of education as proclaimed in various policy documents and the Constitution. Today, distance education mode has proved to be a boon as also a magic wand for those teeming millions of learners who were deprived of the golden opportunity of formal education at their very door steps without any bias or territorial barriers

Summing up the importance of distance mode, ICCE President in one of the International Conferences rightly observed: "It is highly adaptable, most cost effective and aims at both, gaining experience and earning living at the same time"². Today, the development of distance education is a world wide phenomenon and has acquired firm

roots in our country too and is expected to continue at a greater pace in the present liberalized economy. The present position however, is not very satisfactory, as according to Tenth Plan Document³ distance education accounts for only 13 percent in higher education.

A. DISTANCE EDUCATION : THE CONCEPT

In distance education, the student is a faceless entity and there is little or negligible face to face interaction between the teacher and the learner.⁴ Its main characteristic is that it is based on non-contiguous communication i.e. the learner is at a distance from the teacher for much, most or even all the time during the teaching-learning process⁵. Consequently, there is a paradigm shift from classroom teaching to self learning system. It is infact, a system combining both teaching and learning activities. The distance mode offering initiatives like independence and flexibility to its beneficiaries encompasses a variety of modes and techniques involving dispatch of Printed Self Instructional Material, introduction of latest products like information technology and multimedia interventions (audio, video, radiotalks, gyandarshan telephones, e-mail, internet etc.); and Student Support Services like study centres, guidance bureaus, Evaluation of Response Sheet Assignments as well as conventional mode of teaching viz. Personal Contact Programme.

The present paper endeavors to study at length the key issues concerning response sheet assignments, its shortcomings and also some corrective measures. To collect the data needed for this study a questionnaire schedule was developed and administered on a sample of 120 randomly selected students both from graduate and post-graduate classes regardless of the subject or the total enrolment. The reaction of the faculty members was also elicited through informal discussions. Their valuable comments and suggestions have been incorporated in the text at the appropriate places.

B. RESPONSE SHEET ASSIGNMENT(RSA)

Students' Response Sheet Assignment is one of the major components of distance education system⁶. Since there is no direct linkage between the teacher and the taught in this framework⁷, the flow of information remains one sided only. RSAs not only provide a meaningful rapport between the two but also a useful feedback both to the students to overcome their weaknesses and the teachers to regularly observe performance of their students. The students therefore, need to take up the practice of such assignments very sincerely and regularly.⁸ The distance education institutions generally insist on submission of assignments compulsarily but with the passage of time, students more or less have given up this practice and as a result, institutions on their part are not rigid for its execution in letter and spirit. The present situation therefore leaves much to be desired.⁹

C. KEY ISSUES

(I) DESIGNING :

Designing an assignment is one of the most exacting features of the response sheet.¹⁰ The questions asked in it should be relevant to the literature provided and

examination oriented. Instead of copying from the scripts, the students should be required to put in labour to complete the assignments.¹¹ Interestingly, 83% of the student respondents reported that they just copy their material from the scripts.

This is not fair. The students ought to test their own knowledge and skills to complete assignments. Erdos goes a step further when he writes "the questions should not seek to find out not what the students knows and can do but also what he does not know and cannot do"¹². In contrast, 93 percent respondents opined that only examination oriented questions be given due weightage. The via media however, lies in introducing model questions. Students may opt one question each of essay and short answer type. Some faculty members suggested that the assignments may be small but evenly spread. Besides, assignments be designed in such a fashion that these are self motivating, self encouraging and self manageable, to sustain the students' continuous interest.¹³ If possible, the Department may set up its own website, so that through online/ internet a student can easily evaluate his short answer type questions whereas other students can send it by post. E-evaluation can therefore, help to save time as well as energy.

(ii) SUBMISSION OF ASSIGNMENTS :

Submission of assignments has always remained a controversial and debateable issue as both the teachers and taught have a casual approach on this account. Earlier the UGC¹⁴ had made it compulsory to submit 20 percent assignments, with the following reasons:

- i) That the student has understood and absorbed the course units sent to him.
- ii) That he knows how to organize the material involved.
- iii) That he gets a prompt evaluator's feedback through comments/suggestions which enables him to improve continuously.
- iv) That he studies continuously throughout the year.

There was however a mixed* response. Certain Institutions accepted it on the plea that non-submission may bring down the quality of instructions. The others considering it as "forced home assignments"¹⁵ refrained from making it compulsory because it will be a too stiff requirement and may lead to dropouts. Majority of the institutions belonged to the latter category.

Citing reasons, against the submission of assignments, students in one of the studies¹⁶ stated: examinations are enough to assess the capability of students; lack of seriousness on the part of evaluators, delayed or non receipt of evaluated assignments; mature enough to pursue studies without assignments, over burdening and loss of time etc. Studies also testify that a number of students although do not submit response sheets still show good results.¹⁷ An overwhelming 89% of the students spoke against the compulsory submission of assignments. The data clearly indicates that students are not interested in submission of assignments.

* University of Mysore desire 50 percent while H.P. University rarely Institution submission of RSA

The authors however, favour compulsory submission for the following reasons

If certain percentage of attendance is compulsory for college students why special privileges or leniency to distance education students, since they are appearing in the same examination and getting the same degree they should be treated at par. For the preparation of assignments the students atleast will be making certain efforts to read and locate the material which will give them good practice in writing and expressing themselves.

It will help the teachers to watch the progress of their students and to guide them on right lines.

Lack of time with distance students is a mere alibi, man by nature is complacent and restrains from putting in requisite labour if results are there without putting in extra pound of work.

A two way communication between the teachers and the taught.

During discussions the faculty members also vehemently supported the submission of response sheets by students.

(iii) SUBMISSION TIME :

There is no time framework with regard to the submission of assignments. The faculty members insisted that the submission of assignments should be time bound, so that by the time they come for the second stint of PCP, students have specific problems to raise, instead of just sitting as dumb spectators in the class-room. A few faculty members stated that periodical dispatch of assignments will help to relieve the students of extra burden.

(iv) NUMBER OF ASSIGNMENTS :

The number of assignments to be submitted also varies from one institution to another. IGNOU* insists for three while Hyderabad University desires one assignment only in each term in each course. The others' including Panjab University do not have any hard and fast rules. The students response in this regard was;

No of Assignments	Nil	1	2	3	4
Responses (%)	61	21	13	5	Nil

It is clear from the above data that the students are either not interested in submission of assignments or at the most they favour the submission of one or two assignments per course during one session. Most of the faculty members suggested that minimum two assignments per subject should be attempted by students while others felt that irrespective of number these should be properly attempted and sincerely evaluated. There is thus an utmost need to draw a balance between the coverage of the syllabus and the time constraint of the distance students.

* IGNOU: Indira Gandhi National Open University, New Delhi

(v) EVALUATION :

Assignment evaluation is a delicate but serious issue. Sustenance of students' interest to a large extent depends upon the quality of evaluation. Evaluation pattern invariably differs from teacher to teacher. Some believe in just tick marking while others act as serious evaluators. The former correct the assignments and give awards/grades while the latter not only correct but also give remarks and suggestions. As many as 67% of the student respondents stated that the comments given by the evaluators were merely of the general nature. Though unfortunate but surprisingly, a majority of teachers give general comments such as

You have done good job; very well done, keep it up; you can score good marks, your answer is not upto mark; elaborate more; hardwork is needed.

Such vague comments are of no use and rather act as demotivators and as such the students consider submission of assignments a futile exercise.¹⁸ One of the faculty members suggested that if evaluators can not give valuable and specific comments then why should submission of assignments be compulsory. In this respect observations of Dr. Carr are commendable. To him, "Comments on response sheets should neither frighten nor discourage students. They should be a means for creating an equation of relationship more in the nature of mutual understanding than merely mutual trust".¹⁹

The UGC guidelines in this regard provide that the students' response sheets should be properly evaluated. The evaluator's comments and suggestions can help the students in developing regular study habits and motivate them to comprehend the material. According to Rathore,²⁰ it establishes a two way non-contiguous communication channel between the tutor and the teacher.²⁰ Therefore teachers ought to evaluate the assignments carefully and pin-point the weaknesses and good points alongwith concrete and constructive suggestions. The comments should be well thought out, palatable, precise and purposeful.²¹

It may also be added that if possible the assignments of a group of students are evaluated by the same teacher throughout the duration of an academic year to ensure the continuity of evaluation and proper monitoring.²² Some of the faculty members stated that they are already abiding by this practice but due to lack of proper records the exercise remains futile. This can be made successful if a 'Student Record Card' is maintained by the concerned teaching Department to be handed over to the concerned teacher along with the response sheets for evaluation. Computerized records can make the job much easier.

(vi) TURN-AROUND-TIME (TAT)

TAT refers to the total time span since the submission of assignments till it is received back duly evaluated by the student. On an average TAT takes 60 days or a little more.

The research studies (B.N.Biswal 1981, Mouley 1986) revealed callousness in the dispatch of evaluated assignments leading to too much delay and thus, defeating the very purpose of providing regular feedback to the learners. Sometimes the evaluated assignments are never received by the students. Non return of evaluated response sheets often prove frustrating to the waiting distance learners. They are disheartened by such long-often futile wait for assignments.²³ The assignments returned to the students in time provide an important link and continuing relationship between the learner and the teacher. The ideal time framework is that the evaluated answer sheets must reach the students prior to the dispatch of next installment of lessons. According to the UGC, it would motivate the students to send their response sheets regularly if the time lag in marking and returning their response sheets could be kept to the minimum.

There was a consensus amongst the student respondents and the faculty that assignments duly evaluated must be received back by the beneficiaries within a month's time. Some of the faculty members also suggested that instead of central pool, the response sheet are directly received by the respective Departments and after evaluation, they should be dispatched back to the students by the Department itself. This will considerably cut the delay and reduce the TAT. In Panjab University evaluated assignments are dispatched directly by the respective departments instead of the central pool.

TO SUM UP:

RSA holds an important place in the distance education providing an essential two way communication channel between the otherwise distanced teacher and taught. But student's feeble response accompanied by an indifferent attitude of evaluators, RSA could not serve appropriately the cause of distance education. To sustain the continuous interest of the students, the RSA needs to be self motivating and self manageable exercise comprising a genuine mix of model, essay and short answer type examination oriented questions. Accepting time constraints of the non formal students, RSA should provide for a wide choice but limited attempt so that the students can make a sincere attempt rather than treating RSA as a formality. The evaluators on their part can ensure that these are not only marked and suitably commented but also supported by pinpointed weaknesses / drawbacks and remedial suggestions. Finally the success of the whole process would revolve around the timely receipt of the evaluated RSA by the students for feedback and to get back to their teachers if there are yet other problems. With the spread of IT, in all fields, the need of the hour is to develop Institutes' website so that the students having an easy access to internet are benefited by e-evaluation. Last but not least, we suggest that the RSA should remain compulsory, without concession to human alibis for the non submission of RSA.

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GUIDED DIDACTIC CONVERSATION: ASSESSMENT OF ASSIGNMENT RESPONSES

MEERA MALIK

ABSTRACT

The paper focuses on assessment of assignment responses of distance learners. In the process of "guided didactic conversation", this is a vital link to enhance understanding and enjoyment of the course and also to help the students to score well in the term-end examination. These should provide an extra incentive and motivate the student by being constructive, meaningful, positive and encouraging. Isolated from the peer group and the regular presence of a teacher, these comments can take the form of individual attention and give to each learner comments, relevant to his position and level of learning. Prof. Malik illustrates with an extended example from the lesson on Macbeth, by giving tutor comments to the different levels of students. There cannot be any 'standard' comments, for the individual needs can be as varied as the thumb-print.

Every distance teaching institution sends its students a set of assignments along with the Self-instructional material or the Lessons. The feed back from the students and the tutor comments on these form an important instrument of learning-teaching at a distance. For the learner there is no regular face to face interaction either with the teacher or with the peer group. The two-way communication through the assignments minimises this spatial distance and increases the academic closeness, at the same time providing a psychological support system which enhances motivation and learning capacity. John A. Baath places a specific emphasis on "two way communication for improving learner performance." He also notices that, "There was a clear tendency to reduce the amount of postal two way communication in the teaching system."¹ If there is a provision for compulsory assignments, the learner provides the second link in the chain of two-way communication by attempting the assignment. The assessment made by the tutor is the third link. The fourth link could be the doubts and questions raised by the learner in response to the tutor's assessment. This paper focuses on the third link or the tutorial input; its adequacy being of paramount importance in distance learning.

Holmberg is of the view that the core of education is learning by individual learners. The distance learner while engaged in 'self- study' or 'independent study' is not a loner. There is a whole team of administrators, writers, media producers, teachers, evaluators, tutors, educationists, counsellors who give academic support to the learner. This relationship, according to Holmberg is characterized by what he terms, " guided didactic conversation." Elaborating on this, he comments,

My theory of distance education as a method of guided didactic conversation implies that the character of good distance education resembles that of guided conversation aiming at learning and that presence of the typical traits of such conversation facilitates learning.²

Meaningful criticism and constructive suggestions through comments written on the assignments- responses will obviously be a very vital link in this "guided didactic conversation."

The type or level of communication between the teacher and the taught can be categorised into two broad areas.

1. **Personal:** - In the classroom situation a rapport is established between the teacher and the students. The students also get information and support from the peer group. Its vital for the tutor to provide this missing link to the distance learner. So that he does not feel 'isolated' or 'alone'. My twenty seven years of association with Distance learning has taught me that there is a deluge of letters and phone calls, as the examination draws closer. At all times this information should be factually correct, exact, timely, helpful, and sympathetic. The idea should be to provide extra incentive and to motivate the student.

2. **Academic:** - The major task of the tutor remains the communication at the academic level to assess and evaluate the assignments. In the process of assessing the tutor diagnoses the learning difficulties of the student. The idea is not merely to find out and correct what is wrong but also to write **constructive and meaningful comments** that suggest to the learner his/her learning style, level of performance, adequacy of information, limitations and how to overcome those for better performance. This is the crux of the two-way "real" communication. Besides these also assess the progress of the learner in comparison with the peer group (Holmberg, 1985).

How is assessment different from evaluation? The two terms are often used interchangeably. Broadly speaking, unlike evaluation, the specific function of learner/ student assessment is to diagnose learning difficulties. Evaluation follows assessment. Any educational programme consists of three components:

- Educational Objectives
- Learning Experiences
- Evaluation Procedures

When the teacher goes through the assignment-response, he has to write his comments before grading it. The comments are crucial in motivating, aiding and enhancing the learner capabilities. The following points must be kept in mind:

- 1) The distance learner is an independent learner. For learning successfully he needs continuous feed-back, in the form of constructive suggestions and encouragement, even if his work is not satisfactory or up to the mark.
- 2) The distance learner is isolated from the peer group and does not get many occasions to interact with them. Comparison with the peer group provides indirect but crucial feedback. It increases the competitive spirit of the learner.
- 3) Through the comments the distance teacher provides guidance and counseling and remedial suggestions to improve the study skills of the learner. The comments also relate to the answers so as to help the student to score well in the term-end examination.
- 4) The comments clarify the ambiguities or difficult portions in various units of the course. There is no homogeneity in the academic difficulties faced by the learner. The teacher must tune her comments to suit the individual needs and deficiencies of the students.

The golden rule always to be followed is to avoid the non-teaching comments i.e. comments that are discouraging, hollow, misleading or vague. After the various positive, negative, constructive margin comments the evaluator gives overall remarks, known as global comments. These justify the grade awarded to the assignment.³

It is now academically more acceptable to give grades rather than marks. It is acknowledged that accuracy of assessment cannot be fully ensured. It has been found that there is both inter-marker variability (variation between examiners) in scoring the answer-scripts, also there is intra-marker variability (variation in one examiner at different occasions) marking certain scripts. Grading is, more 'precise' and 'reliable' because it provides an overall estimate of the student's ability. Unlike marks, grades are not influenced by the variation in disciplines/subjects. Srivastava comments, "The acceptance of the principle of grading is an honest confession of our inability to be so precise in assessing human qualities".⁴

I would now like to take a practical example, William Shakespeare's great tragic play *Macbeth* is prescribed for our M.A. II Course. So far as the assignments are concerned, first there are the following questions for self-study with the study material.

QUESTIONS FOR SELF-STUDY

Now that you have read the play as well as a summary of it, we give you some questions for self-study which would help you to think about the play. These questions are based on specific scenes. On the left hand side details of the Act number and Scene number are given and on the right are the questions based on these. These are teaching

questions designed to help you on in your study of the play and to ensure that you are prepared for a critical analysis of the play in units (ii) and (iii).

- (1) Act I Scene (i) For what reasons is this scene an appropriate opening to the play?
- (2) Act I Scene (ii) What preliminary impressions do we form of Macbeth?
- (3) Act I Scene (iii) To what extent does this scene show that Macbeth is under the witches' influence? Is his temptation made more evident by Banquo's attitude to the witches?
- (4) Act I Scene (iv) How far does this scene show that "Fair is foul, and foul is fair"?
- (5) Act I Scene (v) How does Lady Macbeth differ from Macbeth?
- (6) Act I Scene (vi) How far does this scene contrast with the previous one, and provide a comment on the deceptiveness of appearances ?
- (7) Act I Scene (vii) What precisely is the conflict within Macbeth's conscience and how is it decided?
- (8) Act II Scene (i) What are Banquo's cursed thoughts?
- (9) Act II Scene (ii) Does Lady Macbeth appear more natural in this scene? If so, what forces her to adopt a harsher role?
- (10) Act II Scene (iv) Show how this scene, and the conclusion of the previous one prepare the audience for subsequent events ?
- (11) Act III Scene (i) Why does Macbeth fear Banquo? Consider this question with reference to this scene and the earlier ones.
- (12) Act III Scene (ii) How far does this scene reveal Lady Macbeth's and Macbeth's concern for each other?
- (13) Act III Scene (iv) Which scene does Macbeth's behaviour at the banquet recall? Give reasons for your choice.
- (14) Act IV Scene (i) Describe the apparitions; explain their significance and show what effect they have on Macbeth's later conduct ?
- (15) Act IV Scene (i) What purpose does this scene serve? How far does it mark the turning point of the play ?
- (16) Act V Scene (i) List all the incidents lady Macbeth recalls during her sleep walking.
- (17) Act V Scene (ii) Who is 'the medicine of the sickly weal'? Do you see any relationship between this and the inability of the doctor to 'minister' to Lady Macbeth and Macbeth in the previous scene and the following?
- (18) Act V Scene (iii)

The mind I sway by and the heart I bear

Shall never sag with doubt nor shake with fear.

How far does Macbeth reveal his ability to live up to this determination in this scene?

- (19) Act V Scene (iv) Do our sympathy and admiration for Macbeth revive at all in this scene? If so, discuss the reasons with close reference to the text.

The learner attempts these questions on his own, after the first unit. This ascertains that he is now ready to move on to the next two units dealing with the critical analysis of the various aspects of the play.

Assignment

1. To what extent was Lady Macbeth 'fiend-like'? By what means does Shakespeare evoke sympathy for her?
2. Illustrate the vividness of imagery which makes us share the moral and emotional conflict of Macbeth.
3. In what ways is Banquo a contrast or foil to Macbeth?
4. Macbeth is a tragic hero rather than a villain. Why does he engage our sympathy? When does he lose it? Does it revive at all?
5. The real tragedy of the play is in the inner conflict, rather than in the external events. Trace the conflicts of conscience and ambition, guilt and remorse in the Play.

These questions are the kind of questions which are set in the term-end examination. In considering the answer the teacher must keep in mind the following criteria:

Content (relevance, adequacy, appropriateness)

Form (clarity, coherence)

Presentation (resourcefulness, illustrations, quotations)

The comments of the tutor have to be positive to encourage a weak student to fare better, to motivate a mediocre one to improve further, and to 'instigate' a good student to be an excellent one. I would like to illustrate with the following comments:

For a Weak Student

I received your assignment well in time, much ahead of others. But I think you need to be more focused. Your introduction should be relevant to the question and not relate to Shakespeare in general. As revealed by comments on the margin your attempts are sketchy. You take up a point but do not go into the depth. Also at the end please conclude your answer.

I enjoyed your copious quotations from the text – I do hope you can memorize them for the examination – may be you can choose a few of them for the purpose.

I look forward to your next assignment.

For a Mediocre Student

Your assignment reveals that you have understood the text. But somehow you have not been able to perceive that Macbeth is quite unlike other tragic heroes. He is a villainous hero – not an out and out villain and certainly not an out and out hero. As he wades his

way through blood, commits murder after murder – he gradually loses our sympathy but at no point completely. Please re-read the relevant portions of the course. Once you understand this, the whole criticism will fall into place. Make short and lucid sentences. Develop the habit of breaking long, complex sentences into two sentences. I really liked your question on imagery.

For a Good Student

It was a pleasure to go through your assignment. It seems that you have not merely understood the text but also enjoyed it. Your perception of the criticism is commendable. You give both sides of the criticism but why don't you add a small concluding paragraph? Secondly, some of your peers (with a higher grade) quote the text more effectively. Keep up the good work.

The above given comments are not deemed as some kind of 'ideal' but only an illustration of academically fruitful support which aids the "guided didactic conversation". The comments, depending upon the tutor and the individual need of the learner can be varied and widely divergent. Ideally they should be as unique as the thumb-print.

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THE MULTIPLE ROLE OF TEACHER IN DISTANCE EDUCATION

Veena Singh

ABSTRACT

This paper intends to focus on the manifold duties of a teacher working in a distance education institution. Distance education has acquired great significance in recent years; as the formal mode of education cannot cater to the growing needs of the learning population. The effectiveness of distance education depends on teachers to a large extent, and they have a multiple role to play. They teach in classrooms during the personal contact programme, prepare study material, make changes and improve lessons, check response-sheets and guide the students. Though there is a lot of emphasis on the self-learning methods, the teacher is always at the centre of the teaching-learning process. He has a complex function to perform which involves the communication of knowledge, attitudes and skills to learners.

In this age of globalization and glocalization, education has been seen as the most powerful agent of change. Education is not just a matter of getting a degree or a matter of formal organization of knowledge; it is an experience of awakening to the real meaning of life and opening a whole new world of opportunities. It has enabled individuals to gain a profound understanding of human development and building relationships among individuals, societies and nations. Human development is the core of any development process. Even in times of economic adjustments and austerity some services such as education the empowerment of individual through the provision of learning, need to be given top priority. In 'Education For All Conference' at Jomtein in 1990, it was declared; that "Every person child, youth and adult shall be able to benefit from educational opportunities designed to meet their basic learning needs". However with the tremendous increase in population, the conventional system of higher education was unable to meet the growing demands of the aspirants, therefore the correspondence institutes and open universities were started in many countries of the world.

For the Indians the march from colonial imperialism to freedom has been a transfiguring experience. The country is moving rapidly towards super-power status. In

this march towards progress, the educational institutions contribute largely to the socio-cultural progress of the country. The educational scene in India has been evolving under the stress of changing circumstances. Prof. Murli Manohar Joshi, speaking of the 10th Five year plan, hinted that "formal face to face education does not have the required capacity to meet the challenge. It seems to me that distance education is the mantra for the present and near future". In India, now, many universities offer distance education to a large portion of student population.

The methods used for teaching in distance education are flexible, and different from those used in teaching in the regular colleges or departments. So the role of a teacher is also different from that of his counter-part. Distance learning involves the communication of knowledge, attitudes and skills to learners; and its effectiveness depends, to a large extent, on the teachers. There are technical tools like print material, audio-visual aids and the computer. However technology does not teach, it enables the delivery of teaching, and so transforms the relationship between teachers and learners. In distance education frequent communication between learners/tutors/teachers is a great motivating factor for successful learning. A teacher's interest is not only essential to overcome learning problems but also to enable students to measure their own value systems about their studies. Technological tools assist the teachers to reach their students. In this system of teaching, learning, talking, listening and discussing are encouraged. It needs no words to emphasize that a teacher constitutes an important link in any system of education. Dr. A.P.J. Abdul Kalam, our honourable president of India, speaking about the vision of, and quest of a developed India, on the eve of Teachers' day, called teachers "the best minds of the nation", who can guide and shape the future generation of students the nation-builders. He hailed teachers as vital members of society who instill knowledge and nobility, generation after generation. "For India to get transformed into a developed nation by 2020, education is an important component", according to him.

However, there are certain misconceptions about teachers working in the institutions of distance education or correspondence studies. It is believed by many that the function of a teacher here is only to pass on the study material to the learners year after year, and they have nothing more to do. In fact, the teacher here has a multiple role to play. The purpose of the paper is not to defend the teachers, but to make clear certain facts based on my personal experience of teaching in the Department of Correspondence Studies, P.U. for more than twenty years.

In today's age, with a lot of emphasis on literacy, the importance of higher education has increased. In this field, the institutions of distance learning/teaching are providing a great service to the students who can not attend the regular study programmes for some or the other reason. Therefore there is a large number of students enrolled as distant learners, and a large number of courses are offered to them. In India as well as in other parts of the world, distance education institutions are becoming very popular

because of the convenient and flexible mode of teaching and learning. To make this system of education successful, the role of a teacher goes a long way. This role is many fold; he

- (a) teaches in the classroom during the personal contact programmes.
- (b) provides counselling to the students through out the session.
- (c) checks the response-sheets, marking mistakes as well as giving remarks and guidelines.
- (d) prepares the study material; writing the lessons whenever there is a change in syllabus.
- (e) vetting, proof-reading, and editing of the lessons is part of his job.
- (f) makes changes and improvements in the lesson which have already been written.
- (g) motivates, inspires and guides the students.
- (h) is also involved in the research work, participating in, and attending seminars and conferences.

All these above mentioned activities involve a lot of time and hard work on the part of the teacher. People who take their work lightly can be found in any department. Most of teachers in the deptts of correspondence studies are as serious and conscientious as in the regular departments or colleges.

There is no doubt that in the distance mode of education, teachers and students have very little opportunity for face to face contact. The class-room teaching during the personal contact programmes is for a very limited period. Also, bulk of learning is through self-study. Nevertheless the effectiveness of distance education depends to a large extent on the teachers. They are still and should rightly be in the centre of this form of learning and teaching. They have to be the masters of their subjects and, their teaching has to be compact. The teaches here cannot beat about the bush or just pass time in irrelevant talk. They have to be well versed in their subjects to satisfy the students in a limited period of time, who spare time to come from far and wide to attend the classes. It is also a complex function to teach the unseen, unfamiliar students from a distance. The role of a teacher becomes manifest and clearly defined in the presence of students but the system of distance education is such that a teacher is without students and students are without teachers for a large part of the session. In such a scenario, the teacher sometimes ends up as a facilitator to help the unwilling students to pass the examination.

Another important factor is that the teachers of distance education commit themselves in writing and so are responsible for every word that is written and printed as study material and sent to thousands of students. They have to put in a lot of hard-work in whatever they are writing. In regular class-room teaching, at times, the approach is casual.

In many of the institutions of distance education, like the P.U. Deptt. of Correspondence Studies, there are a number of under graduate and post-graduate courses and a huge number of students. The under-graduate classes are divided into sections, as a result the teachers have to take many classes, and are busy with class-room teaching almost throughout the session. If we take the example of the subject of English (which is true in the case of other subjects also), on the post graduate level there are a total of eight papers. Each of these papers consists of eight books. In the undergraduate courses there are compulsory and elective papers, and for each class 3-4 books are prescribed. Many a times the changes, major or minor, keep taking place in the syllabi. It involves rewriting of the lessors, if not the whole, a part of it, and there are always additions and improvements to be implemented. In the regular departments from the month of March onwards when the preparatories begin to the month of July, the time of admission, the teachers are practically free as there is no teaching work. But for the teachers in the Departments of Correspondence Studies, this is the time for vetting, writing and preparing the study material for the coming session. Unlike the teachers of other colleges, for the teacher of distance education, the work extends far beyond the class room.

Another constraint for the teacher of Distance Education is that because of the short duration of the personal contact programmes, there is no opportunity for the relationship between the teacher and students to develop. By the time they become familiar with each other the P.C.P. is over. The students range from very brilliant, to average to much below average. So for the teacher, it is a very challenging job. Nonetheless despite all these difficulties, sometimes, there is a life long affinity established between the teachers and the students. The short duration personal contact programmes, and counselling sessions provide opportunity to both the students and teachers to interact with each other. The problems of the students are also solved through letters. Some teachers become the role models, and as tutors and mentors guide the students. In the field of distance education they become innovators and creators of new teaching learning experiences. They have to be the masters of contents as well as of educational technologies. In the self-learning system the teacher is still at the centre who inspires confidence in the students. As the teacher is an important part of the system of distance education, the quality and quantity of the faculty has a direct bearing on the sound performance of this system. The distance education being different from regular teaching deserves special faculty development programmes and meaningful initiative. Without proper and adequate training for faculty the system cannot be successful.

Our century has witnessed some remarkable achievements and events, the end of colonialism, a free flow of information, advancement of science and technology, establishing of democracy, and a greater access to education. Bill Gates, the great technological enterprenuer, in his recent book, *The Road Ahead* rightly observed that "we are all beginning another great journey. We are not sure where this one will lead us

either, but again I am certain this revolution will touch even more lives and take us all further". In this age of rapid growth and development teachers have to move further as educators. The teachers play an important role to meet the challenges of the modern world which is complex, multipolar and interdependent. To quote WICHT SRISA-AN, "As educators and educational administrators, it is therefore our present mandate to provide the students with the proper global competences as well as the appropriate environment and educational delivery system that would roster global education which is a borderless education – borderless in number and kinds of students, borderless in subject matter covered, borderless in venue, borderless in method of delivery". ("Making Distance Education Borderless", in *Indian Journal of Pen Learning* Vol. 6, No. 1-2, 1997).

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JOB SATISFACTION AMONG DISTANCE EDUCATION TEACHERS

Sarita Kamra

The role of teacher is as critical to the open system of education as it is to the conventional system. However, there are few studies dealing with the problems emanating from the peculiar nature of their work. Negative orientation towards distance education system and its marginalized position in the universities, which are geared to needs and day-to-day demands of the conventional teaching departments, lower the morale as well motivation of even the most committed among its faculty and adversely affect their job satisfaction. Working within this premise the present study was undertaken **firstly** to examine the extent of job satisfaction among distance education teachers; and **secondly** to identify correlates of job satisfaction, if any. Taking cue from sociological studies of social role, an attempt was also made to examine the self-perception of their role as a distance education teachers, and how these were different or compatible with their formal role expectations as university teachers.

REVIEW OF LITERATURE AND THE CONCEPT OF JOB SATISFACTION

Review of literature on distance education yielded a few studies dealing with distance education faculty though prestige and status of distance education faculty and motivating factors have been addressed by some. A study was commissioned by the National Education Association of U.S. (2001) to help in shaping its policies for distance learning courses so that "students receive of good education and distance learning faculty receive fair treatment." Among other issues the study examined the attitudes towards distance learning courses. It was found that 72 per cent among the distance learning faculty and 51 per cent among traditional faculty held positive feeling towards distance learning courses. And about 14 per cent and 22 per cent respectively had negative feelings. The published excerpts of the report do not say anything about the distance education faculty per se. Schifter (2000) is concerned with identifying the motivating and inhibiting factors in participation of teachers in distance learning programmes. The distance education faculty regarded the professional prestige and status as one of the very important motivating factor, (mean score was 3.19 where 4 represented the highest score). Teachers in the conventional system, assigned prestige the average score of 2.95 and those in administrative positions assigned it an average score of 3.44. These two studies indicates that the prestige and status are more important considerations for the distance education faculty than traditional faculty.

Prestige and status associated with a position lead to enhancement of self image and thus produce feeling of satisfaction with one's position. And it helps to orient a person positively towards his job. But as the following discussion brings out it is only one of the multitude of factors that influence job satisfaction.

The studies of job satisfaction began in the western societies during the period of hectic industrialization in the early 20th century. By 1970's these studies matured into an important area of research in management studies, concerned not only with industrial workers but also with managers of modern industrial corporations. Today a vast literature exists on the problems of job satisfaction and its correlates not only among workers and managers in the industry but all sorts of segments of employees including teachers and doctors. These studies have been undertaken by scholars from diverse disciplines which include psychologists, management experts, sociologists and other social scientists. A review of these studies reveals the complicated nature of the concept of job satisfaction and the multiplicity of factors affecting it.

Job satisfaction has been conceptualized in a variety of ways. To begin with, it can be described as a state of mind, produced by a number of factors. Locke (1969, p.309) suggests that job satisfaction is a function of employee's comparison of what exists on his job with what he seeks on the job. But in certain cases the difference between what exists and what is expected can itself become a cause of high or low job satisfaction. Job satisfaction has been reported in different studies to be influenced by age, seniority, personality types, need patterns of individuals, level of motivation, attitudes towards work, working conditions, rewards (mostly monetary), past experiences, interpersonal relations and group dynamics within organizations. This long list mentions only few of the many factors influencing job satisfaction. It is also known that working people may be satisfied with many of the conditions of their employment and still be markedly dissatisfied with other features of their job. Another complicating factor is that the importance attached to different facets of work varies from individual to individual. For example teaching, research, and administrative responsibilities satisfy different types of urges of a teacher. And different individuals will assign different importance to each of these. Moreover, it must be realized that job satisfaction is not a permanent condition. It is subject to variation over a period of time.

The studies in job satisfaction highlight two dimensions of job : the job content and the working conditions which enable the employees to realize their potential. Herzberg, a pioneer in the field of studies in job satisfaction indicates two dimensions of job satisfaction (Herzberg et al. 1959) *one* is represented by external factors like salary, interpersonal relations, social prestige or status attached to one's job. He termed these as "hygiene factors" which are primarily environmental or extrinsic to the job per se. The *second* dimension comprises of "motivator factors" which are concerned with job tasks, job content or the work itself. These include challenge, growth or advancement, achievement, recognition for achievement and responsibility. The motivator factors are intrinsic to job. The "hygiene" factors involve cost (except interpersonal contacts). The improvement in "motivators" leads to more long-lasting job satisfaction than "hygiene" factors. The "hygiene" factors avoid job dissatisfaction but do not necessarily lead to higher job satisfaction, which is affected more by "motivators". Herzberg was hailed for his work and continues to inspire contemporary studies of job satisfaction even today. But many have rejected his theory for lack of evidence and he has been criticized for his methods of data collection (Nagy, 1996).

An important question that cannot be neglected in studies of job satisfaction is "what is the relationship between level of performance and job satisfaction?" According to Nagy

(1996) job satisfaction is not necessarily related to job performance. Lawler and Porter (1976 pp.208-10) found from their study that though level of performance determined job satisfaction (because it influences one's rewards) job satisfaction itself does not lead to better performance.

The above discussion reveals the complicated nature of job satisfaction. It is outside the scope of the present study to examine all the factors influencing job satisfaction. Only some of the correlates influencing job satisfaction have been examined. Broadly it was hypothesized that job satisfaction will be low due to passive nature of work of the distance education teachers (i.e. work content), negative orientation towards distance education system, marginalized existence within the university, and lack of satisfaction with access to facilities for work (or working conditions).

SAMPLING AND TECHNIQUE OF DATA COLLECTION

The data for the present study were collected from a sample of 30 distance education teachers working in a northern university of India. The sample was drawn randomly. However wherever the selected person was not available he/she was replaced by another person of the same rank. The sample constituted roughly one third of the total number of distance education teachers working in the University's distance education department.

The data were collected with the help of a questionnaire that was supplemented with 10 indepth face to face interviews to explore deeply into the issues involved. The questionnaire had three components, 29 statements comprising an index of job satisfaction, questions concerning satisfaction with various organizational facilities and whether the present job utilized their potential talent or not. It also included the question on professional prestige and status of the distance education teachers. The third component was related to their role perception as distance education teachers.

The index of job satisfaction (IJS) was adapted from Pike and Hudson (1993) with some modifications. Firstly, the original scale contained seven response categories. These were convert one into five point response categories (see Appendix). Secondly the original scale contained 30 statements. Out of these a statement "My boss is a fool" was eliminated for its extreme overtime. Thirdly, six more statements were added as the original IJS was too general. In their own words the IJS, according to Pike and Hudson, is "designed for use in any organization, program or work unit as a device to help staff to evaluate their level of job satisfaction." (Pike and Hudsan, 1993). The six statements added to it refer to utilization of potential talent in the present job, opportunities of professional growth, opportunities to improve teaching skills, and availability of intellectual challenge in the present job. The status (social honour and professional prestige) of component missing from the original index was also added. The values of the index vary between 0 and 100, where low score signifies the lowest level of job satisfaction and the highest level of job satisfaction high sis represented by high score. The details of the index are provided in the Appendix given at the end of the paper.

RESULTS

As mentioned earlier it was hypothesized that the level of job satisfaction will be low among the distance education faculty. The score of each respondent was calculated from his/her total score with the help of formula suggested by Pike and Hudson (See Appendix)

The scores thus computed for the 30 respondents varied between 35.63 and 61.49. The higher the score the higher the level of job satisfaction. It may be mentioned here that job satisfaction surveys usually report very high scores which occur due to "faking" tendencies on the part of some employees who want to show either themselves or their organization in more positive light. The current study was no exception. Sometimes high scores can also occur due to response set bias, though efforts were made to avoid it through steps suggested for construction of the statements in the index. To eliminate the influence of extreme scores it was preferred to calculate the median score instead of the mean. The median score for the original index containing 29 items was 50.57, and the modified index with 35 items worked out to be 47.61. The rank order correlation between scores for the original index and the modified index was .896, which is quite high. Some of the respondents obtained slightly higher score for the 35 item index while others got relatively lower scores. But their position in the overall ranking did not change much.

The respondents were divided into two groups on the basis of the median score of 47.61. Out of 30 seventeen respondents scored above average, while thirteen obtained less than the median score. Four individuals tied at the median value were classified with those having above average score. Thus contrary to our hypothesis higher level of job satisfaction was more prevalent than the lower job satisfaction in the present sample of distance education faculty.

The index values themselves are not adequate to explain why some individual are more satisfied than others. Therefore an attempt was made to correlate the level of job satisfaction with some variables concerned with organizational facilities such as access to reputed journals, new technology, opportunities to modify syllabi, freedom to frame new courses, level of satisfaction with communication with one's students, opportunities to experiment with new ideas and introduce them in carrying out day-to-day tasks related to one's job, professional prestige and status of distance education teacher, and general concern about the quality of course material. The table 1 reveals that there is no relationship between these factors and the level of job satisfaction. A comparison of level of satisfaction with each of these facets of work reveals that the maximum number of respondents were dissatisfied with the access to new technology, freedom to modify syllabi and access to journals of high repute. (Table - 1) On the whole moderately satisfied individuals are most frequently represented in the sample. How do we explain absence of any correlation between job satisfaction and access to facilities. Herzberg's (1959) theory suggest, as mentioned earlier, that the "hygiene" (or external) factors do not necessarily lead to decline in job satisfaction, because job satisfaction is influenced more by the "motivator" factors which are higher order factors.¹ There is some indication of this trend among our respondents.

In order to explain variation in job satisfaction additional variables were added to the analysis. These included seniority of position, interpersonal contacts, more responsibilities in addition to one's routine duties, the time last promotion was granted and gender.

1. It must be pointed out here that the statement about access to reputed journals and new technology were misread by at least 5 respondents. While assessing their level of satisfaction they considered not only the place of work but also their own resources at home or elsewhere.

Table -1
Degree of Satisfaction with Various Facets of work as Distance Education Faculty and the Level of Job Satisfaction

	Opportunities to Introduce New Ideas			To Develop New Courses			Modify Existing Syllabi			Access to New Technology			Concern about quality of Course material			Interaction with Students			Access to Journals of High Repute in Subject		
	IJS Score			IJS Score			IJS Score			IJS Score			IJS Score			IJS Score			IJS Score		
	Below	Above	Total	Below	Above	Total	Below	Above	Total	Below	Above	Total	Below	Above	Total	Below	Above	Total	Below	Above	Total
	Md.			Md.			Md.			Md.			Md.			Md.			Md.		
Satisfied	46	47	47	46	41	42	31	31	31	23	31	27	46	41	42	46	47	46	38	31	34
Moderately satisfied	31	29	30	31	35	34	38	31	34	15	19	18	31	35	34	23	47	37	15	38	27
Dissatisfied	23	24	23	23	24	24	31	38	34	62	50	55	23	24	24	31	6	17	46	31	38
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N.	(13)	(17)	13	13	17	30	13	16	29	13	16	29	13	17	30	13	17	30	13	16	29

Foot note:

* Figures are in percentages rounded off to the last digit
 ** Total varies due to no response cases.

Table - 2

Some other correlates of Jobs Satisfaction

Level of Job Satisfaction	Degree of Interpersonal Interaction (a)			Assigned Additional Responsibilities (b)			Experienced Promotion (c)			Gender (d)		Seniority (e)			
	Low	Medium	High	Never	Sometime	Frequently	Never	Long time ago	Some time ago	Males	Females	Junior Lecturer	Lecturer	Reader	Professor
Above Average	-	6	11	7	3	7	3	3	11	6	11	4	2	5	6
Below Average	8	5	-	7	6	-	1	9	3	6	7	-	5	4	4
Total	8	11	11	14	9	7	4	12	14	12	18	4	7	9	10
Gamma = 1				Gamma = .83			Gamma = .43			Gamma = .22		Gamma = .5			

Interestingly many of these variables did seem to account for variation in the level of job satisfaction (Tables-2). It can be observed from the table that those who have not experienced any promotion since last ten years or so have lower level of job satisfaction than those who were promoted relatively recently. In case of gender, highly satisfied category showed a greater concentration of female teachers. While there were no differences by gender among those who obtained less than average job satisfaction scores.

Likewise, group dynamics and interpersonal relations also explained variations in job satisfaction. Those who have higher interaction at the informal level with their colleagues also have higher level of job satisfaction. Similarly there was also positive relationship between the level of job satisfaction and those enjoying additional responsibilities.

ROLE PERCEPTION

The respondents were asked to describe the role expectations from a distance education teacher in order to see how they perceived their own duties. The responses were heavily loaded in favour of their duties as a teacher. Some of these responses are reproduced below. Responses from a to d were mentioned most frequently, though the degree of role elaboration varied from individual to individual.

- a. Guiding, counseling, students to improve their academic performance.
- b. Short duration class room teaching.
- c. Writing lessons in simple and clear language.
- d. Improving lessons.
- e. Create enthusiasm for a subject among the students during the personal contact programme.
- f. Inculcate confidence among the distant learners who are on their own.
- g. Arouse the learning instinct of the students to make them willing to learn on their own.
- h. To be accessible to the students whenever they have problem in understanding any concept.
- i. Evaluation of response sheets.
- j. Adopting latest teleconferencing and computer technologies to communicate with students.

In addition to this, two respondents also mentioned about respondents the sharing the administrative jobs of the department as the role of a distance education teacher. One of them included writing books as their role. It is significant to note that none of the respondents mentioned undertaking and guiding research as one of their duties. Though some of them are involved in doing these activities. When asked is research not one of their role expectation, they agreed it was but even they failed to perceive it as their role.

The reason for this are not difficult to fathom. Although U.G.C. requires evidence of having undertaken research for promotion from a lower position to higher position however unlike conventional teaching departments research does not form part of the majority of

2. Many university departments/institute of distance education have not been able to get research included in their course curriculum in spite of their efforts to do so. Research has somehow remained the sacrosanct activity of the conventional teaching departments. However if the remarks of the Vice-Chancellor of IGNOU are any indication they are all set to start research programmes in his university. (Inaugural address of the Vice Chancellor of IGNOU in national seminar on distance education held at Panjab University, Chandigarh 2003), which has remained a neglected part of the distance education system in most universities.

the courses being offered through the distance education mode. This has led to a gap between the formal role expectations, and self perception of their role as a teachers that was conceived largely in term of their actual role,² situation. It is the contention in of the researcher that this has led to the condition of role strain and also role conflict because the distance education teachers find it difficult to reconcile to the conflicting demands from the University and the department which requires him/her to focus only on teaching and not research. Whereas evaluation of performance of teacher for promotional purposes is by and large based on participation in research activities.

CONCLUSION

The present study was undertaken to examine the level of job satisfaction among distance education teachers and factors influencing it. A number of correlates of job satisfaction were examined. Among other things the findings signify the importance of additional responsibilities, promotion and interpersonal interaction at the informal level as influencing job satisfaction. The findings of this study are only suggestive in nature. A more broad based study is required to draw generalization.

To conclude I would like to indicate some steps which can lead to better performance and greater job satisfaction among distance education faculty. This involves going beyond the immediate concerns of the study and to some extent combining my own observations. *Firstly*, the role of distance education teacher must be made compatible with the formal role expectations to serve a fair deal to the faculty. *Secondly*, we can borrow and apply Herzberg's concept of job enrichment. It may be argued that Herzberg (1976) was concerned with business corporations. While an educational institution is a non-profit organization. However his idea of job enrichment is applicable to any type of organization concerned with improving the quality of performance and job satisfaction. Three of the seven measures suggested by him are directly relevant. *Firstly*, giving a person a complete natural unit of work (module, division, area) which will add to feeling of responsibility achievement and recognition; *secondly*, introducing new and more difficult tasks not previously handled. This will contribute to growth and learning. Research and introduction of higher level or new courses can be undertaken to achieve this. *Thirdly*, assigning individuals specific or specialized tasks with in their area of work and enable them to become experts. *Fourthly* and finally, increasing the accountability of individuals for his/her own work which becomes hazy in the distance education system where there is a long chain of administrative staff between the teacher and the taught required to disseminate the teaching material. This would contribute to feelings of recognition as well as responsibility.

Appendix - I

Index of Job Satisfaction (IJS)

The index of job satisfaction has been developed by Pike and Hudson (1993) to measure the degree of satisfaction with one's job. Job satisfaction scale or index is one of the most widely used test. As such a number of scales as well as indices are available in

literature. The present index was chosen because it touches upon very crucial aspects of one's state of mind while on work such as liking or disliking one's work, organizational adequacy, appreciation of one's efforts by the boss, support from the boss, job security, and fairness in the distribution of organizational rewards. However, it was slightly modified by adding five more items to the original scale which included 30 items only. These items are related to the specific tasks of a distance education teacher. One item stating "My boss is a fool" was omitted from the scale in order to get co-operation from the respondents. The five modified statements measuring degree of satisfaction are as follows :-

- 30 Utilization of your potential talent in the present job.
- 31 Availability of professional growth opportunities.
- 32 Opportunities to improve your teaching skills.
- 33 Professional prestige and status as distance education teacher.
- 34 Availability of intellectual challenge in present job.
- 35 Facilities available here to utilize your potential.

The second modification was done in the pattern of response categories. The original index had 7 response categories which were reduced to five as follows- never, sometimes, rarely, most of the time, always.

The IJS contains in all 30 statements as shown below, some are negatively worded statements in order to contain the response set bias. These are item number 1, 2, 3, 4, 5, 6, 7, 11, 13, 17, 20, 21, 23, 24, and 27.

Item in the Index of Job Satisfaction

INDEX OF JOB SATISFACTION (IJS)

1. My job is very boring
2. I hate my job.
3. I cannot stand my boss.
4. My boss is a fool.
5. I really like my job.
6. If I won a lottery, I would quit this job.
7. I like to "good off" on the job.
8. The best part of my job is coffee breaks, lunch, and vacations.
9. I work very hard at my job and I am very conscientious about doing it well.
10. I enjoy thinking about my job when I'm not at work.
11. I don't like to think about work when I'm at home.
12. The work I do is important to me, personally.
13. My job is just a way to make a living.
14. I enjoy taking on new responsibilities in my job.
15. My job is more than just a way to make a living.
16. I enjoy thinking of ways to improve the work I do in my job.
17. The best part of my day is having work.
18. I get personal rewards from the work I do.
19. My organization provides the resources and tools I need to do my job.
20. I get through the day by planning what I'll do when I retire.
21. I think about looking for another job.

22. My job is interesting to me.
23. My boss doesn't appreciate the work I do.
24. My organization does not support my work.
25. My organization makes it easier to accomplish my work.
26. I can depend on my boss to back me up.
27. My boss doesn't support me when my work is challenged by others.
28. I believe I have job security.
29. Organizational rewards are distributed fairly.
30. Management supports my work efforts.

IJS SCORING PROCEDURES

The Index of Job Satisfaction (IJS) scale is designed for use in any organization, program or work unit as a device to help staff to evaluate their level of job satisfaction. It is designed to produce scores from 0 to 100 where higher scores reflect greater degrees of job satisfaction. Lower scores reflect lower job satisfaction.

To calculate the IJS scores first the negatively worded items are reverse scored. Scores on each item are added up and the following formula is applied.

$$\text{IJS Score} = (\text{Sum X} - N) (100) / (N \times 6)$$

Where

Sum X = Total score

N = Number of items in the Index or the total number of items to which the individuals has actually responded out of total 35 items in the Index.

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STRENGTHENING THE DISTANCE EDUCATION SYSTEM

Jaspal Kaang

ABSTRACT

*The paper takes up distance education as being essential to educate the ever-increasing population. Prof. Kaang is concerned about the different challenges facing this mode of education, and how most of the time this is ignored. So that distance education remains a poor relation to the university to which it is attached. The plea is for more openness and for the use of various technologies to gear up the system. The author also pleads for **Akshar Gyan** - literacy for all.*

Distance Education has earned wide international acceptance, credibility and popularity over the past two decades as being academically as well as economically viable for imparting education to all types and levels of learners. The reason is that this system has accountability because the course material is open to public scrutiny. The other reason being that conventional universities and colleges have limited seats and therefore they admit limited number of students with high scores. There are many other reasons for its popularity. But I want to focus on the subject of need to strengthen the Distance Education system by facing the new challenges of globalization. Living in this age one fact that intensely affects us and the one that we acutely feel is the revolution in the field of Information Technology in making this world a global village. Globalization is a direct result of this technology. Knowledge is instantly available; it is no longer unreachable but becomes a part of our lives in a matter of a few moments or a few clicks. New mediums of communication have influenced all spheres of life, especially in education. The positive effect of this technology is most deeply experienced in the field of Distance Education. New knowledge and innovative techniques of accessing this knowledge have opened up new horizons and vast possibilities. It has made it possible for Distance Education to reach every strata of society, be it from any age group or any region. In a country like India which has a large population, an exceedingly large number of this population is not only very poor but also illiterate. These people have neither the means nor time and awareness to avail the education. They have limited access to the conventional educational system. In such a scenario the new modes of Distance Education offers the possibility of reaching these people. The purpose of the Distance Education is to reach the door steps of the

students. In the atmosphere of penetrative communication the responsibilities of Distance Education have increased manifolds and the focus of my paper is to seriously discuss and debate these issues. The first part of the paper deals with the present prevailing situation in the field of Distance Education and the second part with the challenges that the system is faced with and the ways and means of its possible solutions.

It is a known fact that the system of Distance Education in most of the Indian universities is still in its initial stages. This system of Correspondence education is limited to the students being provided with the printed course materials and invited for an occasional contact programme. Such an education is incomplete for many reasons and also inferior to the education being imparted by the regular departments. It is not possible in this system to sharpen up the intellectual capabilities of the students and neither it is possible for the student to develop an all-round perspective by simply reading the course material because there is no direct contact with the teachers. As a result most of the students are only limited to acquiring degrees, passing the course or simply to enhance their matrimonial prospects. The second major flaw is that the syllabus, the examination pattern, time limit and organization of the courses in the Departments of Correspondence Courses is similar to those of the regular departments. The syllabus is decided by the faculty of the regular departments who are unaware of the limitations of distance education. It is pertinent to note here that this system is different from regular teaching, but the tragedy is that the universities refuse to understand and acknowledge the different nature and character of this system. There is further injustice to the students of this system as they are to compete with the students of the regular departments. The scale of assessment for both the systems is similar whereas the output is quite different. In such a situation the gap between the teachers and students of the Departments of Correspondence Courses and those from the regular departments is regularly maintained by the tension of inferiority and superiority. The consequence of this for the students of the Departments of Correspondence Courses is more detrimental as they have to compete with the students of the regular departments for jobs and are often considered second-rate. Their education and qualification is considered inferior to that of the regular system. Their personality is considered to be incomplete and therefore unacceptable. What this entails is that they don't get accepted in the mainstream and their degrees remain only a piece of paper. In the present situation some universities like Panjab University and a few others are taking the example of IGNOU and trying to face these challenges.

One major factor for the unfortunate situation of the Departments of Correspondence Courses is the way the universities treat them. It is considered a money earning department and the primary objective for its existence in the university is not the education that it imparts but the money that it generates. All universities mete out step motherly treatment to these departments especially when it comes to providing facilities. It is indeed unfortunate. The Departments of Correspondence Courses are faced with the challenges of accepting and

overcoming this crisis. The revolution in the communication technology has provided the Distance Learning the possibilities of new and varied modes of imparting education with excellent results and the Departments of Correspondence Courses are faced with the challenge of applying and utilising these devices for their benefit. The possibilities as envisaged for the programmes of Distance Learning will undoubtedly have to be wider in its scope from the regular departments. Along with the traditional courses such courses have to be introduced which are not only academically superior but their teaching and their understanding has to be different from the ones being taught in the regular departments. Problem arises when one system becomes the model for the other system which is structurally different. The need of the hour is that not only the syllabi of the departments of Distance Learning should be different, but that the students should be relieved from the time limit required (which is again similar to the regular departments) to pass a particular course. This has to be understood by the authorities that the student who opts for a course in the Departments of Correspondence Courses is already bound by so many limitations. His/her priority like a regular fresh student is not only his/her studies but s/he also has to take care of the family, do a job or any other work in which he/she could be preoccupied with. Such a person is not only a student but a learner. If we understand his/her position as a learner then we have to provide him more facilities as compared to a regular student. For instance the first facility that has to be given is that the learner decides for himself/herself the time required to pass that course. It is not important that the course has to be finished in six months or a year; it can even take longer than that. At the time of the examination the standards set by the examiner for the question papers should be stiff and qualitatively tough. The relaxation in the time period is given precisely for this reason that not only should the learning be complete but overall. All this is only possible if the courses designed for the Departments of Correspondence Courses are different from the regular departments, the challenges and the scales of examination have to be different as well. The biggest challenge facing the Departments of Correspondence Courses is to move away from the regular departments and create a separate identity.

Another major challenge that I had mentioned in the beginning of my paper is that the programme of Distance Learning needs to be made relevant for the 21st century. The revolution witnessed in the field of communication in this century also needs to be incorporated in designing these new courses. All of this is again possible if these departments are equipped with the latest modes of communication. TV, record players and cassette players etc. remain useful. The need of the hour is that the departments should be up linked to the Internet. Each department should have its own web site so that the students can access these sites anytime and anywhere (be it the home or a cyber café). The student can download the latest information from the departments. The facility of the Internet is no less than a miracle especially in the field of information and knowledge. It is also helping in bridging the gap between the teacher and the taught. In fact the Internet has brought all the information of the world on a single table. In the present scenario the

organization of the courses in the Distance Education will have to look beyond creating simple lesson plans and include material which is helpful to the student in understanding and preparing the course. It becomes imperative for the teachers and the experts to create videocassettes, floppies and CDs for the benefit of the students so that they no longer rely only upon the written material but also avail of these facilities. The authorities should not only equip these departments with better facilities but also implement programs and plans to upgrade the teachers' computer knowledge. This will no doubt facilitate the imparting of the education and also in solving the problems that the students face from time to time.

Another objective that we have to keep in our mind in this context is that the department should be able to provide online services to the students at least 2/4 days a week, so that these students can contact their teachers any time during their course and not be limited to the period of personal contact programmes. This is one of the major reasons for the success of the programmes of Distance Learning in various countries. This makes the learning process smooth. We should adopt the guidelines from a country like Australia where most of the education is based on the system of Distance Learning. It is still a challenge in India to provide on-line services and the latest technology for the students of the Departments of Correspondence Courses. To be able to surmount these challenges is our moral duty. The need of the hour is to motivate the teachers of these departments, offer them more incentives for upgrading their skills so that better and useful educational packages are prepared by them for the students. Again all this is only possible if the teachers demonstrate teamwork and this teamwork is recognized by the authorities for their assessment.

To prepare courses for different levels of learners is another challenge that we have to look into. For instance the first level would take into account the learner who is yet to explore literacy. Most people in our country especially from the rural background are still languishing in the darkness of illiteracy. Poverty and illiteracy are two major ills afflicting the nation and these people have lost the right to be considered human. A team of dedicated teachers from the Departments of Correspondence Courses needs to be built up and they visit such remote areas where there is a need for basic education in simple and colloquial language. This team should be able to reach out to those people who have been deprived of basic facilities of education. They should be able to design courses in such a manner that they become more accessible to these people. In such a situation special programs prepared for the television and on video cassettes become more useful. In this context I feel extreme pleasure in sharing it with you that IGNOU has set a goal of imparting basic literacy (Akshar Gyan) to every citizen of India by 2005. On the second level we need to prepare short-term need-based professional courses for the already employed people so that they become skilful and better equipped in their professions. This is possible through implementing professional courses and imparting training. The third level courses should be job oriented so that the students are immediately

inducted into various jobs. Finally the fourth level should prepare the students for higher education. It is significant to note that the reach of Distance Learning extends into every other field. It can fulfil the needs of every kind of education. With the advent of the latest communication modes it is possible to teach music, dance and painting. In fact the laboratory work can also be taught through these modes. The specialists and the experts can experiment and create kits for such subjects so that the scope of the Departments of Correspondence Courses can be extended to other fields. Further the academics of the Departments of Correspondence Courses should be sensitive to create special and different courses for the disabled and the disadvantaged. It is not only a challenge but a moral duty.

In the end I want to bring to the notice of the teachers, experts and the authorities associated with Distance Learning to a few things. Along with the acceptability of Distance Education it is imperative to make it as perfect as possible. To provide maximum facilities to update the knowledge of the teachers in the field of new technologies and to provide incentives and encouragement for making new programmes. The department should be financially equipped in facing new challenges. The university should recognize the different nature of this revenue earning department and accord it its due respect and rightful stature so that the department is able to fulfil its duties. Through the successful accomplishment of its functions the message be conveyed, that this is not second-rate education. It is open to all but only those who are responsive will succeed. It is important to make this system a creditable system and to make it challenging for the students so that the final products are accomplished in all possible ways. There is no question of their being considered second to anyone for the jobs later on, simply because they were not educated in the formal system.

REDUCING 'DISTANCE' IN DISTANCE EDUCATION: HARNESSING MODERN INFORMATION TECHNOLOGY

Praveen Sharda

ABSTRACT

This paper highlights Collaborative Learning in Distance Education, the aim being to reduce 'distance' between the learner and the teacher in the Distance Education mode. Modern information technology can increasingly enhance collaboration both among institutes of distance education (national and international) and the peer group of distance education learners. By placing their self-instructional material (SIM) on the net, all distance education institutes can nullify duplication and pave the way for increased interaction. It is only communication on a wide scale which sustains learner motivation and completes the learning objectives. Distance Education institutes can be the pace-setters for the conventional universities for adopting new communication technology to reinforce their class-room teaching.

India is faced with numerous challenges - internal as well as external. These are the tremendous growth in population, which is in need of education and training at various levels, the socio-economic disparities and the cultural, linguistic diversities. The facilities of good education are concentrated more in some selected urban centres keeping a vast rural population and territory neglected. For those who are otherwise employed and yet wish to pursue higher learning, the formal system in education offers little scope. For those who have not been able to secure seats in the main centers of learning, higher education becomes a far cry. In response to the priority for second-level university education and limits on the number of colleges and universities; various forms of open path, distance learning programmes have been developed. Correspondence education is developing rapidly for college and university courses and teacher training programmes. Since the correspondence diplomas and degrees have the same value as those of the regular class students, distance education is becoming more and more popular.

The correspondence educating processes are integral to the total contrived educating processes of society. The learning tools and subject matter in the correspondence educating processes are not identical to those in the total educating process but the end

in view is the same - learning by the individual human being. In the total educating process or the formal system, there is a closeness between the teacher and the taught, which can be strengthened if a healthy interaction takes place between the two. In Distance Education learning, this contact between the teacher and the taught is limited to a very short span and sometimes may not take place at all. How is it possible then to reduce 'distance' in Distance Education? What needs to be identified and analyzed are concepts and technologies which would bridge both the physical and mental distance between the tutor-student and the peer group involved in distance education programmes and would be useful for adaptation in a variety of societal situations.

Whatever educating system we may follow, the common purpose of the educating processes is to facilitate learning by an individual human being. In distance education, provision for communication over the physical distance between the learner and the teacher is a distinguishing characteristic of this group of strategies. It is the means of communication that is characteristically unique about the correspondence group of strategies. In the correspondence educating process, there is a shift from the teacher teaching to the learner learning. There is a "de-emphasis on the time, place and fixed methods for learning in favor of learning competence and performance after learning takes place" (Ripley Sims: 271). In distance education, students differ widely in social background, education, aspirations, age and learning styles.

Humanity is undergoing a great transformation into information society through newer communication technologies and their adoption in life and work situations. In such a changing scenario, the major concerns of higher education are the increasing access to larger number of learners and in ensuring equality in offering learning opportunities and facilities. Educational technologies and communication media are the key to the world of open and distance learning. What is required is a shift in the way we view education and the roles of educators and media personnel. The use of technology and media in the learning environment must be planned and designed in a manner that is transparent and unobtrusive to the learner. The world has, "... become a 'global village' and 'globalization' of economy and culture is now a living reality." (Khan and Williams: 8)

In Education and training, the focus has shifted to learning rather than teaching. According to the new theory in education, teaching and learning is an interactive process, which involves collaborative learning as well. Philosophers and Visionaries like Mc Luhan and Leonard (cited in Thorvaldson, 1980) foresaw that "the student of the future will truly be an explorer, a researcher, a huntsman who ranges through the new educational world of electrical circuiting and heightened human interaction just as the tribal huntsman ranged the wilds". They pointed out that the main "works" of the future is education, and that people will not so much earn a living as 'learn' a living. Education of all forms is dependent upon the communication process and interaction between the teacher and the learner. In the traditional pattern of education, face-to-face transmission of knowledge from the teacher

to the student in a lecture mode, the discourse following and the feedback process through questioning strategies provided this type of interaction. "The importance of technology to distance education is to facilitate this same type of discourse and feedback in spite of the barriers of distance" (Khan and Williams: 17).

Such interaction and Communication is one of the most important elements in achieving and sustaining learner motivation and ensuring successful completion of the learning objectives. A system that encourages constant learner support and monitoring of progress is a major factor in reducing drop-out-rates in distance education. Whatever be the technology used, it must be used in a way that exploits its best features and supports the interactive capabilities (Ibid: 17).

In the modern times, the world communication net has transformed communication into dialogue rather than monologue. It has joined people everywhere. Thus our place of learning is the entire planet we live on. "The little red schoolhouse is already well on its way towards becoming the little round schoolhouse. Some day, all of us will spend our lives in our school, the world." (Thorvaldsen: 1980).

With Computer science and telecommunication science getting integrated on a single plane, distant education learners stand to gain a lot. Academic study material which has till now been sent by post to different locations in the country is now available on the electronic media and networking agencies such as the OPENET (National and State Open Educational Net) and the INTEND (Indian Training and Education network for Development) allow for the sharing of resources by the open and distance education institutions. The OPENET benefits distance learners immensely by linking all the open universities and distance education institutions in the country. It links all their regional centres, study centres and partner institutions. INTEND is an umbrella network used by various agencies and organisations under the Ministry of HRD and its sub-nets are the MHRD Teacher Training Network, UGC Information Network and OPENET. These networks linked on-line can be used as a distributed classroom and many functions such as tele-conferences and tele-meetings can be organised to initiate activity among participants.

If all distance education institutes place their self-instructional materials (SIM) on the net, then this material will become learner centric, allowing for the learner to learn independently while working. That does not rule out the possibility of interaction and the role of the teacher. The two networks mentioned above ensure higher interactivity amongst learners as well as between teachers and students. Collaboration on the Internet is of two distinct types: Collaboration amongst the staff involved in distance education and open learning in different institutions and collaboration amongst students in the same course. The former is professional collaboration and the latter is collaborative learning according to Alistair Inglis of the RMIT University, Melbourne, Australia. By communicating via the Internet, staff on different continents are still able to collaborate quite effectively on joint projects even if they cannot afford the costs of meeting in person. Collaborative learning involves creating something together. Institutional collaboration leads to improvement in

the quality of the resulting products while at the same time being more efficient. Whereas learning in-groups may be constituted to exchange information or pass on instructions. Collaborative learning can be made a reality in distance education institutes in India with the peer group interacting and exchanging information on the internet. Possibilities for greater interaction are becoming frequent with the increasing use of computers.

A whole new range of communication technologies has created a great deal of optimism about the enhancement of educational development in India. As distance education instructors, it is important to examine technologies from the perspective of their additional values to the overall learning environment. Distance education and its associated technologies allow us to increase access to education, 'democratise' education, control the cost of education and provide a quality otherwise often not possible through traditional means. Secondly, most theories of learning suggest that effective learning needs to be active. Interactive learning involves learner response to the learning materials sent and feedback, which provides the learner with knowledge of results. Interactivity assumes greater importance in distance learning where teachers and students are separated by long distance. Thus mediating technologies as the printed material, audio and videocassettes, radio, television, telephone, computer and teleconferencing are immensely important for interaction and student response.

The new communication technologies include satellite television broadcasting, long distance telephony, computer conferencing and video-conferencing. The computer conferencing technology facilitates two way communication and provides learners with the opportunity to store and retrieve messages and respond at will to messages posted on the conferencing system. The advantage of this form of communication can be found in the time that the participants have to process the information and analyze and think through comments and questions to posting responses. Computer conferencing is especially useful for higher education where the participants have the opportunity to clarify any comments within the message they may not fully understand. The nature of computer conferencing allows for sustained interaction between teacher and learner and among learners to promote critical analysis and deep and meaningful learning. It does this by providing a shared learning environment particularly well adapted for the support of collaborative learning activities. It is a very useful tool in collaborative learning.

The Open University of Hong Kong has adopted the use of online instruction for distance education. Some course coordinators established an Internet information service in 1996 like web sites to provide their students with information about their paper-based courses, which were already being presented. The new courses would partly be presented in print-mode and partly on Internet. The primary motive, of introducing an Internet part is to provide general Internet literacy to students. The online instruction has the great potential to provide immense interactivity at both inter-student and student-tutor levels through e-mail, list serves and online chat services. These levels of two-tier interactivity are unimaginable in conventional face to face tutoring mode, which is the primary mode

of student learning support almost all over the world. The limited time and students' shyness in face-to-face tutoring are the great impediments for students to freely and liberally interact among themselves and with tutors. These obstructions can easily be removed through online tutor student and student-peer activities. Many institutions in Asia are rapidly turning to online technologies. There is thus a need to get into it and determine the level of urgency and volume with which an institute should adopt it. Online instruction and interactivity between the teacher and the taught would diminish any distance that exists between them.

All distance education institutes offering on line instruction or wishing to develop the culture of using Internet technology for its students must start by offering non academic service such as web-based or e-mail based access to counseling on such things as the aims and objectives of study programmes offered by the institute, listing of course topics and pre-requisites for courses if any. Students should have easy access to information such as introduction to the establishment, tuition fee structure and entry conditions to join study programmes. This helps students to learn the computer skills, and the technologies to communicate, view and download information. Once the students are used to using Internet technology, provision of online education will follow with ease. The supply of academic services will include supply of courseware online, supply of assignments and receipt of completed assignments online and provision of tutorial support. The use of the Internet has its own non-academic benefits as quick transmission of course-material to students, quick updating of course content and no mail losses. The real academic services like collaborative learning through inter-peer and student-tutor interactive discussions can be conducted through chat services and personal e-mail.

It must be understood that the running of electronic tutorials is highly beneficial but not an easy task "... there is bound to be a heavy tutors involvement in online education compared to bi-weekly or monthly face-to-face and phone tutoring." It requires tutors trained in Internet technology and, having the belief that online instruction is a better learning support than the conventional 'chalk and talk' one. For the success of such a measure, it is better to experiment running electronic tutorial support for a small number of courses and assess critically the benefits that accrue out of it. The thing that must be assessed foremost is the quality of learning support provided to the students. On line tutorials if properly organised can mean an efficiency of 100% as opposed to a tiny part of it in face-to-face mode.

Modern information and communication technologies especially with the merging of telecommunications and computers are revolutionizing the quantity and speed of information being produced and transmitted. In recent times, compressed video conferencing has become one of the attractive tools for distance education and training in the developed countries. Video-conferencing involves two way transmissions of voice and moving image between two or more sites. Each site is equipped for both receiving and transmitting of video and associated audio, to enable the instructor or presenter to

see and hear the participants at the remote site or sites. The most common modes of transmission are "full motion" video or "broadband" video and "compressed" video. Compressed video enables interactive conferencing with as few as two or as many as 24 digital telephone lines. The increasing use of video conferencing in distance education is a result of low equipment costs and economic telecommunications tariffs. Although there is a loss of quality owing to high compression in video conferencing yet it is very effective in tutorials, seminars and committee meetings. The effective use of video conferencing requires training in not only the use of technology but also in the instructional techniques suitable for video conferencing. Advance preparation is required to develop the material to be presented.

Audio-teleconferencing is an interactive communication device which links individuals or groups located at different sites. It consists of a telephone set or group audio conference terminals, telephone network and bridging device through which telephones are linked. Based entirely on two-way voice communication, lesson planning becomes one of the most important skills in the effective use of this technology. It helps students participate actively in the conference and ensures interactivity, particularly important in distance learning environments. It is particularly being used in developing countries like India, Malaysia, Kenya, Guyana and St. Lucia because of its low cost and user friendly equipment.

An *audiographic conference* is slightly different as each site has a standard computer and modem in addition to the telephone or group conference unit. The main feature of audio-graphic teleconferencing is the shared screen, which allows the students to interact with the instructor through voice communication and on-line graphics in real time. The successful use of this system depends upon the instructor who has to prepare the learning material in advance which can be saved on computer disc and copied to sites. Using on-line commands, the instructor can bring the required material onto all the screens. The learners interact through voice and graphics and can alter the graphics at their end. This system needs other sophisticated material such as a document scanner, camera, VCR or camcorder to be added to the software.

Whatever be the technology used to facilitate learning in distance education systems, it must encourage and pave the way for a new set of interaction dynamics. Both the instructional designer and the instructor must make interaction and communication possible on a wide scale as this alone sustains learner motivation and completes the learning objectives.

The integration of new communication technology in distance education is a must for reducing the distance between the teacher and the taught but at the same time is a challenge in most universities in India as compared to developed countries. Although many open universities have taken the lead in adopting reasonably good communication devices, distance Education institutes have not paid adequate attention to this aspect and much more needs to be done in this regard. A wide range of communication technology devices

is now readily available and open universities have adopted quite a few of them.

Communication technologies have a great capacity to reach the unreached and to bridge the gap of disparities. The main aim of all distance education institutes in India should be to supplement the instructional material with electronic media in order to keep the learners motivated, well-informed and move towards self-learning practices. The distance learner should no longer feel to be 'distant' as s/he is now free to choose what/whose and when and from what source s/he is to access the instructional course content. In the use of communication technologies, it is the open universities in India which have taken the lead. Their methodology is fast being adopted by the Distance learning institutes. Gyan Darshan is India's first truly educational channel launched jointly by the Ministry of HRD and Prasar Bharti with the Indira Gandhi Open University as the nodal agency. Programmes for Gyan Darshan are contributed by major educational institutions such as IGNOU, UGC/CEC/NCERT/CIET etc. A unique feature of the channel is the high degree of 'Interactivity' which will, enable learners of all categories to just 'phone in' directly to the studios from their homes and seek clarifications from experts. Similarly Gyan Vani endeavours to bring about educational and social development of the community through radio. The Interactive Radio Counselling is another medium offered by the Indira Gandhi National Open University to bridge the distance between the "learner" and the "educational provider". The Interactive live counselling is provided by invited experts from the studios. The listeners can put across questions for clarification right from their homes through the telephone. It is presently being broadcast for one hour weekly from about 184 radio stations across the country of which two Sundays are on the national hookup.

A major milestone in distance education is running teleconferencing through the Training and Development Communication channel and the Gyan Darshan Channel. It is a one-way video and two-way audio satellite based teleconferencing facility managed by ISRO and IGNOU since 1993. The purpose is Tele counseling with student groups and Extended Contact Programmes (ECP) with students.

Distance Education institutes will have to adopt a rational and practical approach in selecting a judicious mix of the communications media relevant to their needs and in keeping with their resources. Distance education institutes can be the pace-setters for the conventional universities for adopting new communication technology to reinforce their class-room teaching which would soon become a necessity for these universities.

Another effective step in reducing the 'distance' among institutes of distance education is adequate collaboration at the provincial, regional, national and international levels. This would help in pooling of resources, a wider choice of course offerings and sharing and exchange of expertise. National bodies of distance Education like INTEND and OPENET and International bodies like the International council for D.E., European Home Study Council, Commonwealth of learning (COL) in Vancouver, Canada can accomplish a great deal in this regard. Proper networking of all distance education institutes in India is the key factor in avoiding duplication of distance education programmes and courses

in subjects when the content is more or less similar.

Teachers too can be trained at covering up and reducing the 'distance' in distance education. They must break away from the traditional pattern in the conventional universities. In fact distance education institutes should provide training for their staff to be well equipped with multi-media distance teaching methodologies such as handling and practically using audio-visual aids in the Classroom. A more viable suggestion would be communicating with their distant students on the 'net' or during teleconferencing.

The distance/correspondence education institutes tagged to the conventional universities are considered as mere extension centres who would fall in line with their directives. If there is proper collaboration between the day departments of conventional universities and the departments offering courses in correspondence, the 'distance' between them could be reduced as well. Correspondence departments by placing their course materials on-line can take the lead and be of tremendous support to the main departments where students are perpetually on the hunt for prepared course materials. This could even lead to the much-needed mobility of students from the conventional universities to distance education institutes for doing some courses more relevant to their needs and vice-versa. Active collaboration among institutes of distance learning at the national and international levels would not only reduce their physical distance but would pave the way for achievements of excellence, innovations and relevance of distance education programmes and courses.

It is usually felt that distance learners hardly get a chance of interaction with their teachers and fellow students. Some of them develop the feeling of isolation and this has led to large dropout rates. A well-organised Support services network (comprising experts in various fields) at the study centres of Distance Education would supplement the printed course material through direct counselling and face-to-face contact programmes. Teachers engaged at such study centres can take the help of audio and visual aids like cassettes and films to make their guidance sessions more interesting and interactive. The personal contact programmes could be of greater frequency (say ten days at a stretch) and also held as frequently as three to four times a year. This would be a very significant factor in reducing the 'distance' that distance learners experience from their fellow students and teachers. Some cultural activities planned during the year to encourage personal contacts would also be a significant contribution. It is only by giving special attention to the provision of Student Support services that a proper exploitation of the much more expensive distance teaching materials can be ensured, according to Michael G. Moore.

The marvels of communication technology have undoubtedly reduced all kinds of 'distance' in Distance Education. Covering the barriers of physical as well as mental distance, Distance Education has overcome inequities and democratized education in a big way. In reality, there is a danger lurking behind all of the euphoria concerning the use of technology. By embracing new technologies the objective of reducing distance may lead

to a further division between those who have access to technology and those who do not. This is especially true when educational institutions begin to rely on more sophisticated and expensive media not widely available to the normal consumer. This problem can however be redressed through the provision of access to technologies and media through community-based learning centres. Such centres can go beyond the provision of student and tutorial support and become the modern 'technology' hub through which learners connect in real or delayed time with the instructional base.

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ROLE OF MODERN TECHNOLOGY IN DISTANCE EDUCATION

M. Arumugam

ABSTRACT

Highlighting the role of modern technology in distance education. Prof. M. Arumugam, has focused among other things on the issue of the sustainability of distance education. According to him, the system of distance education can be sustained by developing the infrastructure as quickly as possible. Every possible effort should be made to render distance education so effective that the learner does not consider it a second grade system of education. Inadequate financial resources and lack of trained manpower for utilizing technology to design, develop, produce and deliver distance courses are major hindrances in the path of better management of distance education. There is a need to provide education and training to professionals of distance education system in order to make them aware of the potential of the network based information sources.

The education system in India is facing a new defining moment. While the present classroom system is unable to meet the growing demands for education the Indian state has neither the resources nor the qualified personnel to expand the formal education. If our constitutional avowal to provide free and compulsory education is to become a reality, it is not going to be achieved through the conventional system.

Distance Education is intended to overcome the rigidities of the formal system and thus develop a more flexible pattern of education suited to the needs of the learner.

OBJECTIVES

The main objectives of distance education are

- to provide a system of student-centred self-paced learning;
- to provide a flexible, diversified and open system education;
- to develop an egalitarian society by providing wider access to higher education to persons of all ages, sex, economically or otherwise handicapped and persons residing in remote areas;

to provide means of upgradation of skills and qualifications; and to develop education as life-long activity so that the individual can refresh his knowledge in an existing discipline or to acquire knowledge in new areas.

Distance education is essentially based on the supply of reading materials for home study by the learner, supported and supplemented by personal contact programmes, student assignments/response sheets, library facilities, study centres/learning resource centres, radio TV programmes and audio-visual aids, etc. A well-conceived programme of distance education can be as effective and meaningful as regular day-time instruction in a college or a university department. Every possible effort should be made to make it so effective that the learner does not consider it a second grade system of education.

STUDENT SUPPORT SYSTEM

To be successful and more effective the Distance Learning System (DSL) should have a strong and properly planned Student Support System (SSS), which is the backbone of Distance Learning. Let us discuss the various components of SSS.

STUDY CENTRE

The institute should identify the important locations for the study centres, based on the geographical concentration of students. All the study centres should be equipped with full fledged library, in addition to audio & video equipments. It should also possess audio and video cassettes of relevant subjects. The centre should be controlled by a Liaison Officer. It can also provide additional facilities like the services of counsellors or tutors to clarify the doubts of students. The centres should have information-desk which can provide information regarding admission procedure, eligibility criteria, examination results and other related matters.

CONTACT PROGRAMME

The objectives behind the personal contact programmes are to clear the doubts in difficult subjects and provide some guidance to the students. The point to be noted is that it is a condensed way of teaching to cover important and complex areas. Some programmes are compulsory and some are optional. Decisions regarding the number of days, portions to be discussed, frequency, and laboratory or exercises to be included have to be taken after careful considerations.

SELF-LEARNING KITS

The students can be provided with simple do it at your home kits to understand the basic fundamentals. This would improve the self-learning ability. The institute may develop these types of kits by keeping the standards of the student segment in mind. The kits could be in the form of floppy disks or CD-ROMs or any basic experimental kits.

STUDY MATERIALS

The institutes should despatch the study material to the students immediately after their admission. The lessons should be prepared by a group of experts in that particular

field of study and language should be simple and easy to understand. Review and editing of the lessons should be done before printing. In addition to the above materials the following would help the students to a great extent in learning the subject.

1. A separate booklet consisting of model questions or question bank.
2. Despatching previous years' actual examination question papers.
3. Resource packs which may contain informations about latest developments, relevant research articles in the field of study and extra references.

Even though printed study material would continue to be the mainstay of Distance Learning System, integration of Information Technology could greatly help in strengthening the teaching-learning practice. The various media presently used are listed below. The success of giving information through anyone of the following depends on, clarity of preparation, credibility of content, ability of the student to understand and time they devote to the subject.

- **Print**
- **Radio**
- **Television (IGNOU has recently started using a separate satellite for telecasting programmes)**
- **Audio Cassettes**
- **Video Cassettes**
- **Telephone (Tele-Conferencing & Tele-Tutoring)**
- **E-Mail (using Inter-net facilities)**

The last two media are extensively used in foreign countries and it may take some more time before they are used in India.

ACADEMIC ADMINISTRATION

This wing should ensure the smooth functioning of the institute by keeping in constant touch with the Grievance Handling Cell, which continuously feeds the required information. This department is usually expected to solve the following kinds of problems: Non-receipt of study material, late receipt of study material, wrong receipt of study material, delay in publishing results, non-receipt of provisional certificate and mark list, wrong entry of marks and subjects in the examination, delay in intimating the examination centre and collection of hall ticket are some of the typical examples of problems faced by this wing. Apart from these, updating/revision of the lessons in the study material at appropriate time, designing of work book, collecting feed back from the students about the quality of study materials and teaching, fixing of centres for Personal Contact Programme and informing the date and venue to the students in time comes under the purview of this wing. To do all these things, meticulous planning, a lot of persuasion and inter-personnel skills are required.

EVALUATION

The most important area in SSS is how the students are evaluated. The purpose of evaluation is to inculcate the habit of regular study among the students. This objective can be accomplished by asking students to write answers to response sheets, work books and assignments. The point to be kept in mind is that the institutes should take enough care to send them back to the students with corrections and some useful comments to improve further. This will motivate the students to rectify their mistakes and perform in a better way in the examinations. This could be also a part of internal assessment which carries fixed marks.

SUSTAINABILITY

The sustainability of any distance learning system depends upon the following factors:

1. Designing of job-oriented Courses.
2. Fee Structure (without any profit motivation)
3. Developing Infra-structure facilities as quickly possible.
4. Training the faculty with an orientation towards distance learning system which is different from the formal system.
5. Ensuring student satisfaction by designing an efficient Academic Administrative System.

The present age is the age of technological innovations. Hence, there is an ever growing technology and information explosion. Access to information is essential for economic and educational development in turn educational development is very essential for the development of human resources in the country. The students of formal system have ample scope to avail themselves of the benefits of information technology. In contrast, the students of distance education have limited scope in utilizing the recent information technology.

First of all, there is a need to trace out the content and coverage of information technology. It deals with the collection, storage, processing information and use of information or new ways of storing, processing and transmitting information brought about by a rapid development in electronics, computer and telecommunications. Here the problem is how to use information technology in distance education. It could be noted that distance education system is less teacher intensive. It has disadvantages resulting from the absence of the teacher who otherwise would have mediated between the instructional materials and learners. This leads to lack of interaction between the teacher and the students.

The distance education system neglects the role of teachers in shaping and reshaping the personality of human beings. This system educates the students through conducting Personal Contact Programmes, which is somewhat similar to traditional system of learning. The Personal Contact Programmes are conducted for limited number

of days. The hours per paper are limited. So complete information on teaching and learning process is not possible. Hence, the utilization of information and communication technology* is inevitable today. There is a growing realization of the utilization of information technology in distance education programmes with regard to printing, storage, and retrieval of information and knowledge with a view to promote faster, more comprehensive and more meaningful interaction between learners and information. The possible role of information technology could be analyzed in terms of printing, telecommunications, computing devices, micro-electronics and softwares.

Indian correspondence education system is mainly based on printing and despatch of instructional materials. It is a costly method. The paper-oriented method of production and supply of reading material have less duration of utility as they are vulnerable to attack from insects. In case of information technology based on electronic publishing it offers cheaper, faster and longer lasting devices for processing, transmission and retrieval of information transmission. It has vast potentiality for mass production and distribution of information. The application of word processors and text processors have made text editing much less difficult and they now provide easy availability of simpler version of text book to suit the competence of individual learner. The utilization of video-text is desirable in distance education system. Video text system comprises a telephone, a television set for moving, a computer-fed database, a keyboard controller and a modern unit video-text. It is relatively faster and provides easier access to and more fruitful use of computer database. Video-text has greater use to Indian open learning system. The utilization of video-text has some limitations. In India the majority of people are poor. The adoption of video-text system depends on access to computer and other required IT materials. The rural areas in India lack this facility, so the adoption of video text method is restricted by economic status and geographical location.

The role of telecommunications is highly significant in dissemination of information for the benefit of distance education learners. It is noted that All India Radio, Doordarshan and Insat - 10 are good examples of telecommunications based on transmission of information. The process of teaching and learning is essentially a process of communication between the teacher and the learners. The communication technology play a very significant role in distance education. The output of communication technology includes radio, audio tape, broadcast television, video tape, audio teleconferencing, computer assisted instruction, computer conference, cable and satellite television, interactive television, facsimile, video conferencing, video disk, CD Rom and multimedia. They are expected to play a significant role in distance education system in the years to come.

Advances in technology enable the students of distance education to learn what they find most relevant to their needs. Modern technology frees the students from formal system of learning. It is a boon for the learners of distance education. The utilization of information and communication technology has a lot of advantages for the learners of distance

education. The reach of information and communication technology is expanding. Wide-band two way communication channels through satellite and fibre optics have considerably enhanced the potential of technology not only for providing exclusive channels for education but also for interactive audio video conferencing, and thereby removing the barrier of time and space. Though we have greater access to communication technology the problem is that the universities should make use of these technologies to support the printed materials. Information and communication technology provides greater flexibility in choosing reading materials.

The output of information technology develops interactive capabilities. It is interesting to note that audio conferencing, computer conferencing, radio talk back, videodisk, CD-Rom and multimedia are powerful interactive tools in the hands of distance learners today. The output of information technology is said to be more powerful cognitive tool. It enables one to perform complex problems with relative ease.

LIMITATIONS

There are some limiting factors with respect to information technology in distance education system, hence a brief discussion about them deserves due attention in this part of the present paper. The application of information depends on adequate trained man power. Owing to lack of trained man power to use technology to design, develop, produce and deliver distance courseware, the application of information technology is being hindered. In India, most of the public institutions suffer from inadequate financial resources to acquire and maintain new educational technologies. Even when they can acquire relatively less expensive technologies, the cost of delivery of material is often expensive. Many people oppose the application of information technology on teaching and learning process as it neglects the inter-personal relations, development of humanitarian values and personality development.

The application of information and communication technology in distance education system is restricted by many other factors such as limited electrification, poor communication facilities, poor reception of radio and television signals, poor transportation services and inefficient postal services. Many people in rural areas do not have access to television reception facilities, cassette player VCR, telephone and computer. Many universities offering distance education programmes have tried to overcome this problem by providing these facilities at the study centres. The students from remote areas could not avail themselves of these facilities. The lack of awareness among the people further inhibits the adoption of information technology in distance education learning system.

Most of the rural people do not know how to operate a computer and it affects the benefits of IT on distance education system. The learners of distance education lack control over the pace of Radio or Television Programme. They cannot repeat the material to give themselves time to catch up with their thinking. The learners are constrained to listen at a fixed time. The broadcast time of Radio or Television may clash with their work or social engagements.

time learning and need education programmes to provide networking and bench marking. So the business program needs to respond to these ongoing challenges. Moreover executives need to update themselves from time to time without being glued to their chairs. They can be anywhere in any part of globe and they can update their knowledge from a university located on the other side of the globe. Internet-based education can be a best alternative. With a modem laptop, a New Zealander no longer needs to study at a local university. Within minutes of logging on, he can be communicating with his tutors in any part of the world. The managers, as far a field as Abu Dhabi, Kuala Lumpur and New Delhi shall stay in touch with each other via the Internet and Global Conferencing System (GCS), conducting group exercises and study projects over the World Wide Web (WWW). The best executives are always pushing themselves to learn more.

New business trends will dramatically transform management education during the next decade. Not only will many traditional business schools not survive, but also the roll of management professors will differ fundamentally from what is today (Moore, 1997). Role of business professors will be more defined. Gone are the days, when the students had to attend regular classes to listen to the limited knowledge of a traditional tutor. Today's open education is open in the real sense of the term. Internet-based education has an unlimited boundary. In addition to the prescribed course material, one can have a lot of references and an electronic library (e.g. www.amazon.com) to enhance the knowledge in the field. Important libraries, databases, journals and published papers are available on the net. Given the right environment, resources and time, experienced managers can learn much from each other and from the net.

Considering the price part, it is not surprising that as many students would be footing the entire bill themselves. It may happen that a few students are reimbursed entirely by their companies. Sometimes, the companies, in addition to the reimbursement of registration fees, may provide existing infrastructure facilities like fax, e-mail, VCP, and Internet connectivity. What all one needs, is permission from the top management. Alternatively, one can earn an MBA degree on the Internet if he/she has Internet access and the money for tuition. Internet-based distance education may lead to a success, as it is targeted for older adults, not 18 to 22 year old youngsters. Probably, one may not want to give up the job or relocate or contend with college environs at an older age.

CASE EXAMPLES : INTERNET-BASED DISTANCE EDUCATION IN MBA

The following case examples can prove that Internet based distance education is not a myth but a reality. This has been in practice in a number of universities/institutes all over the world.

Henley Management College in England offers MBA course to students around the world using net. The Auckland Institute of Technology has been coordinating the Henley course for New Zealanders since 1992 and now has 240 students. Students receive regular deliveries of course notes, videos and assignments that they complete at their own pace.

- * Melbourne's Deakin University in association with the Association of Professional Engineers, Scientists and Managers, Australia (APESMA) relies mainly on paper-based study. As Robert Thomson, general manager of APESMA education and training says, "If you put a lot of information in the Internet, people just print it off anyway - so why not just send them the book?" Recently, APSEMA jointly with Deakin University has developed a unique, distance education MBA and Technology Management Programme. The programme has been launched in India and can be completed in 18 months. This MBA has been suitably referred and developed for Indian professionals by leading Indian academicians from IIMS, Indian Institute of Science (IISc), Bangalore and Faculty of Management Studies (FMS), Delhi University etc. The study material has been customised to suit the demand of Indian industries. Federation of Indian Chamber of Commerce and Industry (FICCI) has promoted the programme.
- * New Hampshire College (NHC), Manchester, USA, in association with Institute of Technology and Management, have made it possible for management executives to earn the NHC Executive MBA degree in Mumbai, without going to US. The online programme will commence in July 1999 and can be completed in 15th months. The participants will have direct interaction with reputed New Hampshire College faculty and senior ITM faculty. The online classes are supplemented with weekly tutorial classes need bases.
- * The University of Auckland is involved in PAGE (Professional and Graduate Education), a consortium of Australia and New Zealand universities that run a technology based distance learning programme. Students receive information via the internet, fax or mail. At present all students on these courses are Australian but they hope to enroll students from New Zealand.
- * Canadian business schools have invested time and effort into developing effective distance management programme. In addition, U.S. schools like Michigan and Duke have introduced innovative executive style MBA programme delivered over the Internet to managers around the world.
- * Some corporate universities like Motorola are already using very sophisticated technologies, such as virtual reality, to train their plant managers around the world. They have experimented that managers learn more quickly when they are allowed to do mistakes and see the implication of those mistakes. Very few plants can afford on the job trainees to make critical mistakes, which could cost millions of dollars in lost production. Virtual reality allows these kinds of errors, so to speak, cost free (Moore, 1997).
- * Duke University thought of the face-to-face dilemma when it launched an on-line MBA programme in May, 1996. The Fuqua School of Business's Global Executive MBA programme, or GEMBA (www.fuqua.duke.edu/programs/gemba), combines Internet learning with limited on-site education. The Duke programme lasts 19 months..

Students take three classes a semester for five semesters for a total of 15 classes, all of them required, with no electives. Each semester consists of two weeks residency session, 11 to 12 weeks of on-line work and a three-week reading period that leads into the next semester (Nacinovich, 1997). Duke provides laptop worth around \$7,000 to each student.

- * Regis University in Denver (www.regis.edu) offers on-line MBA programme. Each course costs around \$ 1,500. A student can participate in a class discussion via a bulletin board on the Internet that's available to students in his class. A student can clarify his doubts from his professors via e-mails.
- * The University of Phoenix's on-line MBA programme (www.uophx.edu) can be completed entirely on the Internet. Its price tag is more in line with Regis's. Overall, a Phoenix online MBA costs about \$ 20,000, a price that includes everything and usually spreads over a period of two and half years. The Phoenix programme has 2,500 students and has been in existence for seven years, ancient for the Internet. Phoenix distance learning is rigorous by nature. Each one has to visit their class discussion on an Internet bulletin board five times a week and contribute comments each time. Grades are based partly on the quality and quantity of comments posted on-line. Further more students are expected to complete group projects and coordinate their efforts with others over the internet (Nacinovich, 1997).
- * Internet was used to provide detailed information about programme and contents for an Executive Development Programme (EDP) at IIT, Delhi. An Internet assignment was also developed ([http:// members.rediff.com/momaya](http://members.rediff.com/momaya)). Internet is extensively used in delivery of some courses in MBA programme of IIT, Delhi (<http://iitd.ernet.in>).

LESSONS FOR IGNOU : SHARING EXPERIENCE FROM LITERATURE SURVEY

The aforesaid case examples are sufficient enough to enlighten the distant learners/teachers about the Internet-based distance education. Examples are numerous across the globe. 'Learning in Cyberspace' is not a novel concept. It has been in practice in developed countries since a pretty long time. Perdue University's School of Management has been teaching students via email since 1983. Biggies like Harvard and Wharton offer Management Development Programme (MDP) via the Executive Education Network. Nearer home, Asian Institute of Management, Manila is developing interactive multimedia courses and exploring the use of the net for workshop and discussion. IIM, Bangalore is planning to have two groups of students; one group in regular classroom environment and the second group are to be taught through Internet.

It is the right time for IGNOU to click the mouse for launching the Internet-based MBA programme (Cyber MBA) at the international level. With the increasing growth of Internet, IGNOU must explore the net for its proposed Cyber MBA programme like the others around the globe. Given below are few operational strategies that would enhance the competitiveness of distance education.

(i) Establishing and activating the networking backbone of the university

IGNOU has to progressively set up a university wide networking backbone. All schools and divisions need to be connected with LAN, which is yet to be activated. The high-speed fiber optics leased line can be a great help in faster access and instant data transfer both internally and externally. Presently all schools and divisions are having an individual Internet connection which performs as a stand-alone system. What is needed is a centralised server at the university that would serve all schools and divisions. At the click of the mouse from a computer in any corner of the university, anybody can be connected to the Internet. It would bring more transparency in operations and make the system more efficient.

(ii) Introducing on-line admission, examination and evaluation

On-line admission through Internet would be a great help to the diverse students. They can fill up their entrance test application form from any remote location. Fees can be deposited on-line through a banker's cheque or a master card where the cheque or card number is the only requirement. All that is to be done is the collaboration with on campus Punjab National Bank (PNB) for e-commerce application. Student's registration can be taken care of via Internet. More interestingly, the examination and the evaluation can be done on-line and the feedback is instant through the Internet. This would save a lot of time and resources both to the student and the university.

(iii) Enhancing the student support services via Internet

The present text material on CD-ROM may be a better alternative to the existing form of printed text materials. Conversion of the existing library to the electronic form where the textbooks, journals, research articles etc. can be referred via Internet. Students would have the ample opportunity to browse the related text material. Both academic and admission queries can be replied back using e-mail, bulletin board, voice mail and fax. The study centres and regional centres can be provided with Internet infrastructure to facilitate the students.

The present information system consists of audio/video, TV-Doordarshan open channel, All India Radio (AIR), interactive radio counselling and some extent the web site on internet. Provision of teleconferencing through two-way videos can be introduced at the regional centres. The student viewership can be broad based via cable operators at different cities. On-line development of courseware can make distance learning really effective. This would really allow a tutor to update the course content as and when required for the benefit of the students.

(iv) Redefining the Role of Teachers

The existing distance educators need to have orientation towards computer knowledge. Internet savvy teachers can have competitive advantage over others those who have the computer phobia. The role of the teachers would like to be transformed

from the existing one. They will find themselves busy with computers updating the on-line courseware befitting the industry need from time to time, answering the student's queries via e-mail, bulletin boards and remain busy in chit chatting. Like teachers, students can browse the Internet from their own work place or home. They have the flexibility of interacting with teachers and fellow students.

Since this web-based distance education can allow students to take course at their own time, space and convenience. They can attend classes from home, school, work place or public places. Students learn best when they are in their own environment and determine how and when to study. This environment will make the teacher-learner interaction more effective thereby allowing students to see, here and sharing experience with teachers. This determines, the role of a teacher in Cyber MBA. This is much more than the standard class rooms lectures or developing a new course in distance education.

(v) Introducing a Pilot Project for Internet-based MBA

The whole effort of this paper is to explore IGNOU's foray into Internet-based MBA programme, i.e. Cyber MBA from its existing manual operation of distance education. It is an approach to strengthen IGNOU's flagship management programme by integrating Internet technology and facilitating students to carry out the study at their own place, pace and convenience. What is suggested here is to pick up a pilot project for imparting Cyber MBA. The School of Management Studies (SOMS) can experiment with two groups of MBA students, say 500 students in each group. Admission procedure would be same for both the groups and other delivery mechanism would be similar to what is done today. The first group may be termed as 'Open MBA' and the second group is 'Cyber MBA'. The Open MBA's are to be administered with the present practice of distance education in terms of course material delivery, assignment evaluation, counselling, term-end examination and so on. But the approach for Cyber MBA would be different. At the time of admission, students would have to ensure of having a computer, Internet connectivity, e-mail facility and fax either at workplace or at home. Moreover, the students would have cable TV and VCP etc. at his/her disposal. These are the prime requirements for entering into the 'Cyber MBA'.

The modus operandi is different from those of 'Open MBAs'. The text materials would be posted in the web site or in a server located at SOMS. Students can access the course material for which they have been registered. All courses are needed to be stored electronically in the server and subject to frequent updating. The assignments are to be answered via net. Students can generate 50 objective questions at random from the question bank, answer and submit on-line from their remote terminal. To their surprise the result would be displayed as soon as they submit the keys to the computer.

The response time between appearing in an examination and getting the result is minimised to a minute. They can consult and discuss their doubts and make queries via e-mail and bulletin board in the Internet. The counselling session for the Cyber MBAs

would be done via web and teleconferencing. The present form of face-to-face counselling at study centres may not be applicable to Cyber MBAs.

Instead, they are required to visit their class discussion on an Internet bulletin board five times a week and contribute comments each time. Grades are based partly on the quality and quantity of comments posted on-line. Further, students are expected to complete group projects, something that requires to coordinate their efforts with others over the Internet. The term-end examination may be adopted presently as that of an "Open MBA" student as a measure of security and rationality.

What is important here is to observe and experience the challenges and hassles on the way of offering the on-line "Cyber MBA" programme. The following activities may be noteworthy of experimentation during the programmes delivery through Internet.

- * *Student admission systems.*
- * Preparation and distribution of on-line course material.
- * *Teleconferencing session and on-line video counselling.*
- * Teacher-student on-line interaction via e-mail, bulletin board and fax.
- * On-line assignment and its evaluation.
- * Technology driven faculties and their performance in the Internet-based programme.

Based upon this evaluation, the university can arrive at a conclusion about the effectiveness, cost structure and delivery mechanism of the "Cyber MBA" programme and its implementation for whole of the programme or any options thereof. If it comes out with flying colours, the university can go for global launching of its "Cyber MBA".

Conclusion

Distance learning has always been the poor cousin of classrooms and campuses. There is no substitute for face-to-face interaction. But networking technology offers management schools/universities a new way to develop distance learning courses. Internet based learning has changed the face of management education. IGNOU, being the premier university in distance education, has yet to make a headway to Internet-based management education in the country. The SWOT analysis has revealed that IGNOU has to explore the net for the opportunities ahead and safeguard the threats all around. The existing operational strategy needs to be integrated with technological strategy by adopting Internet-based technology. As a measure, IGNOU should have networking backbone to accelerate the proposed on-line admission, examination, counselling services and tutor-student interaction. The student support services should be improved via e-mail, bulletin board, fax etc. to enhance the information flow. It is suggested that IGNOU could adopt a pilot project for Internet based management education termed as 'Cyber MBA' and see the practical feasibility thereof.

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MANAGEMENT OF STUDENT SUPPORT SERVICES AND ITS COST IN INDIRA GANDHI NATIONAL OPEN UNIVERSITY.

S.Kishore

ABSTRACT

Quality in distance education can be attained not only by the delivery of good quality learning material but also by strengthening the support to learners facilitating two-way communication to enable effective self-study of the distance learners. The study thus proposes the course material provided to the students to be supplemented with the student support services.

Introduction

The aim of any distance/open learning institution is no longer confined to the democratisation of education but also concerned about the quality of outcome and its parity with the conventional system. Recently, in distance education (DE) the emphasis has started shifting towards learner - centred education with the advent of features like independent learning, individualisation, two-way communication etc. The distant learner who is separated from the teacher and involved in self-study requires continuous support during the course of his/her study. The support extended by the distance learning institution (DLI) to meet all the varied needs of the learner is called student support services (SSS). In DE, normally, support is extended in the form of counselling, audio-video and library facilities, conduct of practicals etc.

The concept of SSS has received wider attention as well as impetus in the DLIs of advanced countries mainly due to the worldwide advancement witnessed in the field of communication and information technologies. But the same is not the case with our country and still the SSS concepts have not percolated sufficiently in the Indian DE scenario.

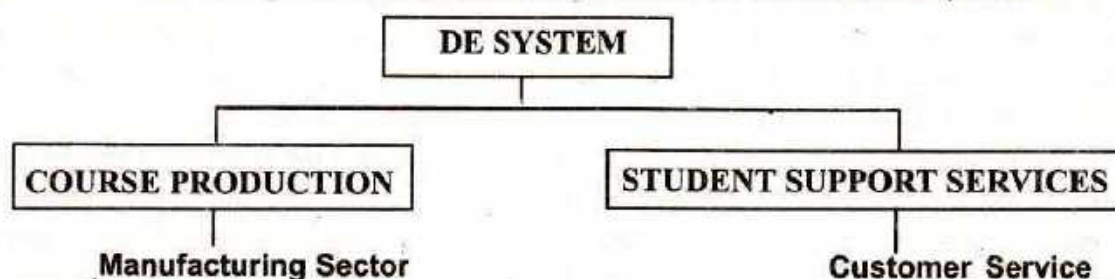
Since educational activity requires inputs in the form of human, infrastructural, and financial resources. Judicious management of these three resources, especially the financial resources vis-a-vis the varied educational activities of any DLI is a vital factor for the successful functioning of the institution. Indira Gandhi National Open University (IGNOU), a premier DLI in the country, has completed a decade's operation and is also an apex body for the maintenance of standards in DE in the country. Therefore, this paper traces the various student support activities in IGNOU as well as the cost involved in operationalising them to examine whether financial resources available at the disposal of IGNOU are managed efficiently.

Student Support vis-a-vis Service Industry Approach

Distance education is an alternative, convenient non-formal channel providing equity and access to higher education to the heterogenous learners differing in age, sex, social status etc. Moreover, DE is also considered as a flexible mode to those who want to pursue life-long and continuing education irrespective of their place, pace and time.

Distance Education, if we examine closely, is a mass higher education activity and has characteristics associated with the industrial operation. For instance, the activities commencing from the production to the delivery of print materials are undertaken on a large (mass) scale as well as there is a division of labour too in the multitude of activities connected with the DE. All these activities in DE have similarity to the assembly-line approach adopted (starting from the production of goods to the delivery to its customers) in an industrial enterprise. Therefore, activities in DE a priori, can be subject to the industrial management principles. The industrial management principles inter alia view the concept from the angle of systems approach, which involves the bifurcation of a system into subsystems so that the various subsystems can be analysed from the point of their need-based contribution to the integral functioning of the whole system.

In conformity with these principles, the two major sub-systems which can be identified in DE are course production and student support services and these are equated respectively with the manufacturing sector and customer service of an industrial enterprise¹.



Systems approach to DE

In an industry, the customer service is as significant as the manufacturing sector. The success or failure of the industrial enterprise depends upon whether the customer is satisfied or dissatisfied with the service, since the customer is the one who normally receives the service; that is customer satisfaction is given prime importance for which both the sub-systems must work in an integrated fashion. Akin to this, in DE, the success or failure and the overall image of the institution is determined by the strength or weakness of the SSS. For the balanced and successful functioning of any DLI, it is to be ensured that the student support sub-systems is not only given due significance but also gets integrated with the course production sub-system. Moreover, from the learner and institutional perspectives, SSS in the form of learner — learner interaction, learner-teacher interaction, learners access to library and other resources are deemed essential and beneficial for their progress and success.

1. Lewis (1993)

However, implementation of the sub-systems approach in an integrated fashion needs sound planning as well as optimal utilisation of financial resources on the part of any DLI. Perceptibly, the integration too demands the balancing of the resource allocation between these two sub-systems. But for a DLI it may be a formidable task considering the fact that the course production is a one-time off cost and the average cost for course production (unit cost) comes down when the enrolment goes up. But this is not the case with the SSS whose cost would go up when there is a progressive increase in the annual enrolment owing to increased operational expenses. Consequently, SSS sector is a high volume cost operation centre and it has got its own financial implications for any DLI. This could be one of the primary reasons for many DLIs in failing to pay sufficient attention to SSS sector without realising the fact that it forms an important arm of DE as the customer service for an industrial enterprise.

Student Support Activities in IGNOU

IGNOU which came into existence in 1985 has completed a decade of operation. IGNOU is a central university and has jurisdiction all over India. IGNOU offers instruction in different branches of knowledge at the degree, diploma, and certificate levels. It offers courses mainly in relation to the needs and employment development in the country including in the areas of engineering and technology, computer and nursing. The salient feature of IGNOU's courses is that it mainly caters to adult learners and in-service personnel. At the end of the first decade (in the year 1995) it has been offering 38 programmes and 372 courses. The enrolment in IGNOU has been steadily increasing every year and it has been about 1.0 and 1.3 lakh respectively, during the year 1995 and 1996.

As student support services (SSS) form the backbone for any DLI, it has to start immediately after the delivery of the course materials and the support has to continue till the conduct of the term end examination. IGNOU's SSS is mainly based on the United Kingdom Open University's (UKOU) student support model. The structure consists of three tiers — the Headquarters, the Regional Centres and the Study Centres. It is a decentralised model planned to provide effective support to the distance learners. The Regional Services Division (RSD) at the IGNOU headquarters formulates the politics of SSS. The support services are implemented by a network of about 250 Study Centres (SC) situated all over the country with the help of the Regional Centres (RC). The RCs are playing an intermediary role and coordinate the functions of a cluster of study centres in the region. There are 17 state-based RCs which are permanent offices of IGNOU and the SCs have been housed in educational institutions with the part-time staff drawn from the host institutions looking after the functions of the SC.



The major activities and functions connected with the student support at the RC and the SC are summarised in Table 1.

Table 1 : Student Support Activities at the Regional and Study Centres

Regional Centre	Study Centre
1. Publicising and promoting IGNOU programmes and courses in the area.	1. Giving advice, guidance and information to the students
2. Providing admission related details and guidance as well as responding to student queries	2. Arranging and conducting academic counselling
3. Acting as an interface between headquarters and Study Centres in implementing SSS policies	3. Discussion of individual problems - both academic and personal
4. Conducting orientation/training programmes for Study Centre functionaries	4. Providing library and audio-video facilities to the learners
5. Conduct of long term/extended programmes for the learners	5. Facilitating individual learning
6. Selection and appointment of academic counsellors	6. Evaluation of tutor marked assignments of the learners
7. Looking after the admission activities	7. Conduct of Term-end examinations
8. Provision of teleconferencing support to the learners	8. Providing laboratory/work centre facilities for science/technical courses
	9. Distribution of course material and maintenance of students records

Cost of Student Support in IGNOU

As cost is one of the key inputs for any educational activity, and also has been referred in terms of the value of real resources made available for that activity. In IGNOU, the SSS is one of the three major cost centres, others being course production and course delivery. SSS is always a high volume activity meaning that the higher the rise in enrolment each year, the greater would be the size of operation. Moreover, as it is essential to balance course production and support activities, it is pertinent to have knowledge about the financial resources made available for SSS in IGNOU.

In IGNOU, the expenditure related intrinsically per-se to the RSD, RCs and Study Centres (SCs) constitutes the cost of SSS. Even though, the cost in terms of expenditure incurred for the SSS signifies the total input for the support extended, rationally the unit cost (or cost per student) for SSS has been considered to be of more diagnostic value and is a measure of not only the input but also the benefits transferred to the learners in the form of

knowledge/skills imparted, achievements in learning etc. Table 2 projects the SSS cost of IGNOU for the year 1987-88 to 1994-95.

Table 2 : Cost of Student Support in IGNOU for the Period from 1987-88 to 1994-95

Year	Enrolment	Number of Study Centres	Total SSS Costs (Rs. lakhs)	% of SSS costs to total expenditure	Unit Cost for SSS (Rs.)
1987-88	16811	94	28.45	7.6	169
1988-89	42324	120	69.98	9.2	165
1989-90	48821	133	118.67	10.6	243
1990-91	52376	170	162.36	NA	310
1991-92	62375	202	226.21	13.9	363
1992-93	75666	219	249.55	12.0	330
1993-94	84200	229	386.66	18.4	459
1994-95	91398	244	410.94	19.1	450

Source : Annual Reports, Annual Accounts and official documents of IGNOU.

NA : Data not available.

A glance at Table 2 shows that the enrolment has registered a five-and half fold increase from 16,811 in 1987-88 to 91,398 in 1994-95 but the SSS cost have shown a 14-fold increase from Rs. 28.45 lakhs to Rs. 410.94 lakhs during the corresponding period. Thus there has been a steady increase in the allocation of resources for SSS in IGNOU over the years and the percentage of SSS cost vis-a-vis the total expenditure has been also on the rise from 7.6 in 1987-88 to 19.1 in 1994-95. That is, by 1994-95, almost one-fifth of the total resources has been spent on SSS.

A closer examination of the details in Table 2 reveal the following three stages in SSS operation.

Stage 1 : The years 1987-88 and 1988-89 are the initial phase for IGNOU. During this initial phase, the number of programmes and courses on offer has been fewer and the support activities also functioned only through 95 and 1,200 study centres. Therefore, the unit cost has been Rs. 169 and Rs. 165 respectively for these two years.

Stage 2 : This is an expansion stage for IGNOU during the period from 1989-90 to 1992-93. This could be seen from the high growth in the number of study centres by 86 (133 in 1989-90 to 219 in 1992-93). This four-year period has been marked by considerable enhancement in the enrolment which must have necessitated in the establishment of more study centres for the sake of strengthening the student support. This has been reflected in the rise of unit cost from Rs. 243 in 1989-90 to Rs. 300 in 1992-93.

Stage 3 : The years 1993-94 and 1994-95 can be called as diversification phase for IGNOU. Surprisingly the number of study centres and enrolment have shown only marginal increase as compared to that of stage 2 (Table 2). But the unit cost and the total expenditure on SSS have shown a phenomenal increase respectively by about Rs. 100 and Rs. 135 lakhs in the year 1993-94 in comparison to the year 1992-93. The reason being, in these two-year period, IGNOU has launched more programmes especially in the areas of Computer, Engineering and Technology and Health Sciences. The intensive support required for these programmes, especially the inputs in the form of laboratory, work centres etc. has caused an upward trend in the cost of SSS in the third stage.

The resource allocation to the extent of one-fifth of the total expenditure by the year 1994-95 (incurring Rs. 450 per learner) definitely points out the kind of attention the support activities has received in IGNOU. Moreover, the unit SSS cost which also happens to be one of the operational costs can be a useful parameter for deciding the fee structure by a DLI. This is because it is essential for any DLI to balance it per student operational cost and per student fee income for which the knowledge of unit SSS cost is a very critical factor.

Conclusion

In IGNOU, the unit cost of SSS has shown a two - and half-fold increase in eight years from Rs. 169 to Rs. 450 and this reveals the endeavour of IGNOU in giving thrust to the student support activities. Quality in distance education can be attained not only by the delivery of good quality learning material (print material) but also by strengthening the support to learners to make distance education highly learner-centred and relevant. The continuous student support alone would facilitate the process of two-way communication for the effective self-study of distance learners. IGNOU being an apex body for maintaining and coordinating standards in distance education has taken an earnest lead in this direction. This should also act as an eye opener to other correspondence/DLIs in our country for initiating policy decisions on similar lines so that the allocation of sufficient resources can make the state-of-the-art student support a reality.

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FARM JOURNALS AS A SOURCE OF OPEN LEARNING - READERS' OPINION

C.S.Arneja

L.S. Gill

ABSTRACT

The paper highlights the role of farm periodicals, brought out by research institutes, as a media of imparting farm information to the rural community in the context of new methods of cultivation and also provides a means of interpreting the specific information to the concerned authorities.

Introduction

Open learning system of education covers a wide range of teaching-learning methodologies to educate people. Printed matter is an integral constituent of this system. Farm periodicals brought out by research institutes are one such type of material that are considered an important carrier of farm information to the rural community. These periodicals are playing a vital role in the agricultural development of our country. With the increase in literacy rate, farmers are going to rely more and more on this system for seeking farm information. Even when only a few individuals in a village can read a farm periodical, as in the case of most developing countries today, the information contained in these magazines may reach a large number of persons through what Rogers (1963) termed as the *dependent literacy route*. The two important roles that agricultural journalism performs include :

Informing and educating the rural people about new methods of cultivation and secondly explaining and interpreting the information to the rest of the society. Thus the importance of such an important source cannot be denied and effective utilization of this system for open learning is the need of the day.

Methodology

As per the specific objective of the study, *Indian Farming* — a monthly farm magazine basically for farmer-readers published by Indian Council of Agricultural Research, New Delhi was selected for this study on account of its comparatively larger readership spread throughout India. For the selection of the respondents, a list of the regular subscribers of

this magazine was obtained from the concerned office. Of the 952 individual subscribers sorted out from the list, fifty per cent were selected by following a systematic sampling technique, i.e. taking every alternative individual from the list. So finally 476 readers constituted the sample of the study. For collection of data, a pre-tested schedule was mailed to all the selected respondents out of which 227 filled questionnaires were received back. Three questionnaires were rejected on account of their incomplete information leaving behind 224 clear cases. The data so collected was done with the help of frequencies and percentages and the major findings are presented in Table 1.

Findings and Discussion

The findings of the study revealed that majority of the readers (82.15%) considered the existing volume size of the farm magazine as appropriate while 17.85 percent wanted it to be increased.

Table 1: Opinions of the Readers regarding **Indian Farming** to go at the end of the Table 1 against the heading Source : Farm magazine used as source of farm information

	Frequency	Percentage
1. Existing Volume Size		
Appropriate	184	82.15
Not appropriate	40	17.85
2. Periodicity		
Satisfied	164	73.22
Not satisfied	60	26.78
3. Readability of the cover page		
Very easy	212	94.65
Easy	12	5.35
Not easy	00	--
4. Understandability of the cover page		
Easily understandable	196	87.50
Not easily understandable	24	10.72
Not understandable	4	1.78
5. Design of the cover page		
Very appealing	68	30.36
Appealing	148	60.07
Not appealing	8	3.57
6. Colour combination of the cover page		
Very attractive	104	46.44
Somewhat attractive	116	51.78
Not attractive	4	1.78

7. Need base of contents		
Fully need based	144	64.98
Partially need based	76	33.94
Not need based	4	1.78
8. Timeliness of contents		
Very timely	16	7.14
Timely	156	69.64
Not timely	52	23.22
9. Comprehension of Contents		
Fully comprehensible	108	48.22
Partially comprehensible	100	44.64
A Little comprehensible	16	7.14
10. Practicability of Contents		
Fully practicable	156	69.64
Partially practicable	44	19.64
A little practicable	24	10.72
11. Method of content presentations		
Very interesting	80	35.72
Interesting	128	57.14
Not interesting	16	7.14
12. Length of articles		
Lengthy	28	12.50
Medium	180	80.36
Short	16	7.14
13. Trustworthiness of information		
Very much trustworthy	128	57.15
Some what trustworthy	92	41.07
14. Technical terms used		
Very frequently	124	56.36
Frequently	100	44.64
Rarely	00	00
15. Understandability of illustrations		
Very easy	188	82.92
Easy	32	14.29
Not easy	4	1.79

16. Usefulness of message in the advertisements		
Very useful	76	33.93
Useful	108	48.22
Not useful	50	17.85
17. Attractiveness of advertisement		
Very attractive	56	25.00
Attractive	128	57.15
Not attractive	40	17.85
18. Proportionate number of advertisements		
Excess in number	32	14.28
Appropriate in number	124	55.36
Less in number	68	30.36
19. Liking for the magazine		
Liked	200	89.28
Disliked	24	10.72

Source: Farm Magazine used as a source of farm information.

Regarding the periodicity of magazine, majority of the respondents (73.22%) showed their satisfaction with the existing pattern. Regarding the cover page of the magazine majority of the readers (94.65%) were of the opinion that it was very easily readable as well as understandable with an appealing designation and attractive colour combinations used. Thus it could be concluded that maximum number of the readers had a high opinion about the cover page of the farm magazine which they were reading as a source of farm information. As far the utility of the information published in the magazine in terms of their immediate needs, the contents of the magazine were found to be need based in the opinion of the majority of the readers. Regarding timeliness of the contents, most of the information appeared in the magazine was timely in accordance with farm operation as perceived by majority of the readers (67.64%). It may be due to the reason that the contents of the magazine might be the tailored to the information needs of readers at different points of time. The opinion regarding comprehension of the contents appeared in the magazine revealed that these were fully comprehensive as reported by the majority of the readers (48.22%). This may be because the language used in the magazine was simple and content presentation was in accordance within the readers' comprehension.

Regarding practicability of the contents appeared in the magazine, majority of the readers (69.64%) considered the information as fully practical. This could be ascribed to the fact that the main aim of the magazine is to provide information of practical use to the farming community. Concerning the length of the articles appearing in the magazine, the majority of the readers (80.36%) were of the opinion that the length of the articles was

moderate in size. Further it was found that the information carried by the magazine enjoyed a highest degree of trustworthiness with majority of the respondents (57.15%). The opinion regarding the method of content presentation showed that the majority of the readers stated that it was interesting. The opinion regarding the use of technical terms in the articles revealed that the writers should be careful in using technical terms while writing articles and should try to minimize these terms as far as possible. As for the understandability of the illustrations used with the contents published in the magazines, majority of the readers (83.92%) were of the opinion that they were easy to understand. This may be attributed to the large number of illustrations in the articles. The opinion concerning advertisements appearing in the magazine under study, the majority of the readers reported these contained useful messages, were sufficiently attractive and were appropriate in number. It may be due to the fact that the information given in the advertisement must have appealed to the readers at large and had benefitted them. Further majority of the readers (89.28%) also indicated that they liked the magazine whereas 10.72 per cent showed their dislike.

The various reasons given by those who liked it were: (i) very informative (ii) carried need-based contents (iii) imparts latest knowledge regarding crops, animals and farm-machinery (iv) printing is very good (v) cost is low and (vi) carried research based information. Those respondents who did not like it mentioned the main reason for their dislike was that it was not serving to the region they belonged. As far as the feedback behaviour of the respondents, it was found that majority of the readers interacted with the editor of the magazine to make suggestions for its improvement. This shows their concern for the magazine they were using as a source of farm information.

Thus it could be concluded that the majority of the readers had high opinion about the farm magazines and they were utilizing them as a source of farm information for their day to day needs in the field.

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DISTANCE EDUCATION — A BOON FOR THE SERVICE CLASS

Meena Dutta

ABSTRACT

The paper premises on the benefits of non-formal education in India where it has emerged as formidable system of higher education. It is admittable that conventional education has played a significant role in expanding education in the urban areas. However, it has limitations as a means of mass education where distance education fills the void and helps people literate faster and making education more accessible.

The idea of distance education with the nomenclature of correspondence studies came on the world stage as far back as in the third century. However, it was in the middle of the nineteenth century that correspondence education took a modern form. In India the public funded distance teaching university was established in Andhra Pradesh under its founder Vice-Chancellor Prof. G. Ramareddy an illustrious educationist. He also invited other academician like Prof. P. Satyanaryanan and Prof. C. Sesharatham to join him. Earlier, when they asked him, if they could fit in this new system. He smiled and replied, "you can work in this system provided you become 'converse' and have concern and commitment towards deprived social groups and believe in educational advantages and technology".

The present mode of distance education in the country began in 1971. It was the result of sincere resolve of earlier times educationists. It was widely used in different parts of the world to widen educational access at all levels. It was seen as a way of making educational resources go further for providing education to many without incurring the extra cost of building new schools and colleges.

Distance education and open education are interchangeable. Open education has been described as arrangement to enable people to learn at the time, place and space which satisfies their circumstances and requirements. While distance education refer to the process of learning in which there is spatial and usually temporal distance between the teacher and the learner. (Table enclosed on page 2-A)

On the other hand open education refers to the process of making learning available to the learner at a place and time of his/her choice and at a rate available to the learner.

The term 'education' implies open access to learning syllabus of previous qualification or age of the learner. It is probably the most cost efficient method of education available and accompanied by the advantage that one can learn while one is earning i.e. one can both gain experience and earn his living at the same time thereby becoming, the bread winner of his family. Another advantage of distance education mode is that it is devoid of any rigid formalities of age and attendance.

It is in this sense that the Directorate of Correspondence Courses of university of Delhi became a pioneer in the field of non-formal education in India. Correspondence / Distance education was, therefore, started in the country by the university of Delhi on an experimental basis in 1962. Its success led to the beginning of many other schools, institutes and Directorates in the field of correspondence education.

Distance teaching like any other of its form is based on the general law of motivation and application which constitute the core of all human learning's. While teaching through correspondence one has to keep such notions in mind. Its delivery is largely through a composite process comprising despatch of study material; correction of response sheets by way of feedback operations imparting a personal touch through counselling; personal contact programmes and dispelling knowledge through the electronic media such as audio video methodology.

The preparation and mailing of study material is fundamental to the scheme of things. Though it invariably proves educative in same cases but it alone is not sufficient. A practical problem also arises if the study material is not updated revised, reviewed or rewritten at regular intervals and fall average or below average in standard.

This is specially true of the areas where the information and knowledge is growing very fast. A nation like ours which has advocated the promotion of the welfare of its citizens as its clearly defined goal cannot stay nor content with the formal types of education, which has been existing for over the past century and a half. The traditional single channel or full time formal education has turned out to be both selective and prohibited, and is, therefore, inadequate.

Personal Contact Programme (PCP's) serves a dual purpose of imparting classroom education and removing doubts and giving clarification on the study material provided to the students. The importance of personal contact programme has steadily increased and it has become the second important tool of correspondence education. Through personal contact programme classes student establish a rapport with the teacher and it further helps fasten the pace of learning by providing easy access to the understanding of the study material.

However, it is observed that the personal contact programme faces both administrative and academic problems. It requires careful planning so that this facility is universalized to cover all the students who are enrolled with a particular institute.

It is also essential that chain of adequately equipped study centres along with library

and reading rooms facility are provided at the places where students attend their personal contact programme. It is advisable that distance education institute spread over the various parts of the country cooperate to accommodate the students on reciprocal basis. It is imperative that the administrative staff that helps in the organisation of personal contact programme should be equipped to answer the queries of students in respect of matters of combination of subjects, scope of syllabus, fees and other charges the dates of examination etc.

Table 1

Charateristics of Openness Pace

Question	Open End	Closed End
Who ?	Anyone can enroll	Conditions must be met e.g. age or qualifications
Why ?	Students' own decision	Choice is made for the students e.g. by school/parents.
What ?	Student chooses content of the curriculum	Syllabus is pre-determined.
How ?	Many routes many media One method	Many methods One route One medium
Where?	Anywhere	One place only
When	Start anytime Finish Anytime Fixed pace	Own pace Fixed start Fixed Finish
How is the Student doing?	Student choice of assessment methods Frequent full feedback on performance	Fixed assessment methods Infrequent, sketchy feedback on performance
Who can help The student ?	Help provided Student can choose (e.g. from several teachers)	No help provided No choice
	Teacher Offers varied help	Teacher in a limited role
What can the Student do next?	Many possible destinations (e.g. jobs, activities, subjects)	Only one destination

Source : Satyanarayana P Distance Education What ? Why ? How ? Booklinks Hyderabad 2000.

The arrival of distance education on the scene first through correspondence and later as an open and distance university based on providing an alternative path way to pursue higher education is not only for basic degree courses but, also for professional courses in management, education finance and nursing etc.

Currently, the distance education system in this country is offered through eight open universities and 58 Distance Directorates attached to the conventional universities. The Indira Gandhi National Open University is the Flag ship of Distance Education system in the country. Under its Act Distance Education Council was established to promote and maintain standard. These universities and open schools are playing a momentous role in the domain of higher education in our country. The students enrolled here comprises not only the inservice personnel, but also those who could not secure admission due to paucity of seats or are working in remote places. The pursuit of studies through distance education helps these men and women to spend time meaningful and also to come into contact with well informed and educated people. It also enables them to improve their employment 'potential and find better jobs.

With all the hurdles, the distance education system has progressed well than expected due to the overwhelming student response in both professional and conventional courses. The telecasting of specific topics on all week days on the national television network and the individual programme for undergraduate students for 18 to 30 minutes duration are the incentives, students have liked.

In India, distance education has emerged as formidable system of higher education. Here one must admit that the conventional education system has played an significant role in expanding education particularly in the urban areas over the last fifty years. However, accepting its limitations as a mean, of mass education and especially quality education in the rural areas, the distance education serves as a linking bridge - a growing healthy stream of imparting education because, the country wants to see its people literate faster and make higher education accessible.

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A STUDY OF FARM PERIODICALS AS SOURCE OF FARM INFORMATION- READERS JUDGEMENTS

C.S.Armeja

D.P.Singh

ABSTRACT

A study was conducted to know the judgements of the readers regarding various aspects of Indian Farming, a national level farm periodical, and the findings revealed that a majority of the readers had high opinion about the general aspects of the farm magazine including its volume, size, periodicity, and outlook of cover page. Regarding information utility aspect, majority of the readers showed their satisfaction with the contents which were found to be need based, timely, very trustworthy and practicable in field situations. As far as the information comprehension aspect is concerned, it was found that the method of content presentation was very interesting and length of articles was moderate. Moreover the illustrations were easily understood and advertisements contained very useful messages. The overall liking for the magazine was found to be 89.28 percent and some important reasons mentioned for its liking were : (i) carried need based contents (ii) imparted latest knowledge regarding crops, livestock and farm machinery (iii) not very expensive and (iv) carried research based technologies.

INTRODUCTION

Farm periodicals being brought out by research institutes are considered as an important carrier of farm information to the rural community. With the increase in literacy, these periodicals are going to play a vital role in the agricultural development of our country in the days to come and farmers are going to rely more and more on this system for seeking farm information. Even when only a few individuals in a village may read, as is the case in most of the developing countries today, but the information contained in these periodicals may reach a large number of persons through what Rogers (1963) termed as the dependent literacy route. Thus the importance of such an important source cannot be denied and effective utilization of this system as a carrier of farm information is the need of the day. Keeping this in view, this study was conducted with the specific objective of knowing the opinions of the readers regarding *Indian Farming* - a national farm journal as a carrier of farm information to rural areas.

The use of cassettes have some limitations, viz., (i) learners are less likely to have cassette and record players and the distribution of cassettes requires more organization and administration, (ii) there is a need of professional broadcasting organization to help in producing materials that will not be broadcast, (iii) although cassettes could be interchanged between the teacher and the learners, interaction is difficult and (iv) using cassettes on a large scale will increase the cost.

Telephone teaching is one of the components of using IT in distance education. Though, it has some advantages like individual attention, diagnosis, wide coverage, decentralization of teaching and reduction of isolation. It has limitation in terms of many of the learners in India may not have access to telephones. Even when learners do have access to telephone, the telephone system may be over-used. Telephone teaching is expensive, particularly when used for individuals rather than groups.

SUGGESTIONS

In order to overcome the problems in the application of information technology in distance education system, the following measures can be considered.

1. Utilization of multimedia approach to teaching and learning process in distance education system. This is due to difference in cognitive styles of individuals which have long been recognized in the field of educational communication. The socio-economic and cultural background of a person also influenced his ability to learn from different media.
2. Utilization of appropriate media in teaching and learning process. This is due to variation among the institutions of distance education in respect to student population, number and level of courses offered, financial and physical resources, capability to use technology, availability of physical resources and so on.
3. There is a need to provide training to the user of information technology.
4. Internet access should be provided to each study centre along with increasing the capacity of the server.
5. The institutions of distance education system should publish a larger number of electronic journals and bulletins.
6. Information awareness drive must be carried out for improving the quality of information seeking behaviour of the students who pursue distance education.
7. Proper steps need to be taken for the systematic development of information and communication infrastructure in every nook and corner of the country. This helps to ease the dissemination of education through distance education system.
8. There is a need for the establishment of new rules and relationships for professionals of distance education system in the context of network environment. Professionals need to be prepared in all respects to cope with the net work environment.

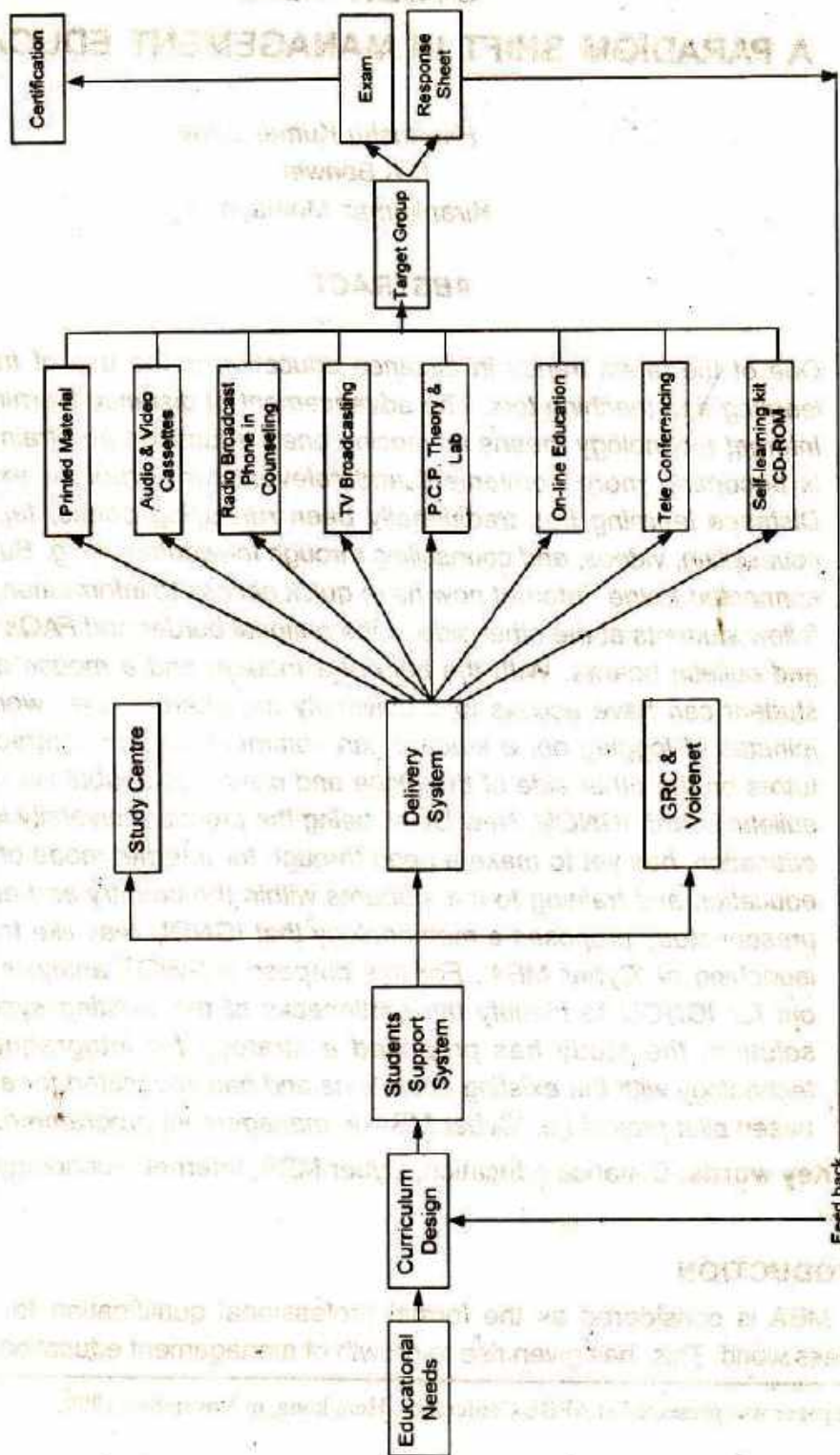
9. There is a need to provide education and training to professionals of distance education system in order to make them aware of the potentiality of the network based information sources.
10. Enhanced efficiency of the existing search engines should be used for accessing the union databases on line through WWW.
11. The catalogue of central library in institutions imparting distance education can be put on Internet, so that the learners can access the catalogue from their study centre.
12. To make distance education system more flexible, even the course materials of the university can be put online.
13. There is a need to start teleconferencing services to learners as started by IGNOU.
14. The holdings of journals can be prepared on the basis of using library software. They can be put online, so that the students of distance education can also access the information. They can make subsequent requests through e-mail facility.
15. The library in distance education system should go for digitisation of its resources and make it available online.
16. There is a need to provide E-mail facilities in the study centres of the institutions offering distance education, so that distance learners can utilize this facility. Along with reference, assistance can be provided through their study centres.

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APPENDIX - I

Role of Multi Media in Student Support System under Distance Education



CYBER MBA: A PARADIGM SHIFT IN MANAGEMENT EDUCATION

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ABSTRACT

One of the latest trends in distance education is the use of Internet as learning and teaching tool. The advancement of distance learning via the Internet technology means advancing one's education and training which is becoming more convenient and relevant for corporate executives. Distance learning has traditionally been run using books, tapes, radio counselling, videos, and counselling through teleconferencing. But students connected to the Internet now have quick access to information, lectures, fellow students at the other side of the national border and FAQs via e-mail and bulletin boards. With the help of a modem and a mouse an Iceland student can have access to a university anywhere in the world. Within minutes of logging on, a student can communicate and interact with the tutors on the other side of the globe and clarify his doubts via e-mail and bulletin board. IGNOU, New Delhi, being the premier university in distance education, has yet to make a head through for Internet mode of imparting education and training to the students within the country and abroad. The present study proposes a methodology that IGNOU may like to follow for launching of 'Cyber MBA'. For this purpose a SWOT analysis is carried out for IGNOU to identify the bottlenecks of the existing system. As a solution, the study has proposed a strategy for integrating Internet technology with the existing operations and has advocated for an Internet-based pilot project i.e, 'Cyber-MBA' in management programme.

Key words: Distance education, Cyber MBA, Internet technology, SWOT analysis, IGNOU.

INTRODUCTION

MBA is considered as the formal professional qualification for entering into the business world. This has given rise to growth of management education in a rapid manner

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in recent years. Graduates from all disciplines are eligible for admission to MBA programme through a common admission test. Presently around six hundred management institutes including 124 universities are offering management education in India. These management programs are intended for regular MBAs, for those who can afford to attend the face-to-face regular classes, interact with tutors and fellow students, and learn decision making skills through case discussion in a classroom environment. Most MBA programmes offered by Indian Institutes of Management (IIMs), Indian Institute of Technology (IITs), University MBA departments and All India Council of Technical Education (AICTE) approved institutes etc. fall in this category of regular program. What makes these MBA programmes different from other courses is the intensity, the fact, that students go through the whole experience as a group, have frequent contact with one another and complete the whole thing in one go, within a finite time frame. It is a total experience (Law, 1997).

A good number of universities started offering correspondence courses in management education. One can think of this as a transformation process from the regular to correspondence course where the same books, teaching aids etc. are supplied to students, contact classes are arranged for some 10 days towards the end of each term and finally exams are conducted. These types of programmes are suitable for working people who can afford to attend the regular classes in the evening/morning or on weekends. This is termed as an executive MBA program by some institutes. This type of program allows students to spend considerable amount of time, as it is as good as that of regular program.

Moving still further, one can talk of another program that has been in practice is distance or open learning programme. Some of the key features of distance education are outlined below to make it distinct from traditional and correspondence education systems. Indira Gandhi National Open University (IGNOU) is a premier university in India, has been offering MBA program along with postgraduate diploma in management for more than one decade. Presently the university has extended its offering to the Middle East countries for the MBA programme along with other few programmes. A few state level open universities have also collaborated with IGNOU and offer the MBA programme in distance mode. Some of the special features of the open and distance education system currently practiced by IGNOU are:

- Relaxed entry requirement.
- Provision of equal opportunity of admission to people from all over the country.
- Provision of learning at one's own place, pace and time.
- Multimedia approach in the preparation of course package.
- Self-instructional printed and audio-video course material.
- Face-to-face counselling through countrywide study center.
- Provision of terminal examination two times a year.
- Interactive satellite aided communication network (teleconferencing).

Hence, the present state of open and distance education is an emerging trend quite distinct from the regular traditional university systems. It facilitates the students to carry out the MBA program according to one's own place, pace and time. Flexibility in all respects is the key issue in this program. With this background, an attempt has been made in this paper for the following objectives.

1. To carry out SWOT analysis of IGNOU in order to identify the bottlenecks with the existing system of distance education.
2. To develop an operational strategy and to integrate the same with Internet technology.
3. To elaborate the importance of Internet-based management education in distance learning.
4. To put forth few case examples for getting a more clear picture and understanding of the Internet-based management education.
5. To highlight few lessons for IGNOU for implementation of 'Cyber MBA' in the country and abroad.
6. To draw meaningful conclusions with regard to 'Cyber MBA'.

SWOT ANALYSIS OF IGNOU

Indira Gandhi National Open University (IGNOU), New Delhi, India was established by an Act of Parliament in 1985 to achieve the following objectives:

- * Democratising higher education by taking education to doorsteps of the students.
- * Providing access to higher quality education to all those who seek it, irrespective of age, region and formal qualification.
- * Offering need based academic programmes by giving professional and vocational orientation to the courses.
- * Promoting and developing distance education in India.
- * Setting and maintaining standards in distance education in the country as an apex body for the purpose.

Ever since the management programme started from 1987, there has been a constant rise in the number of students being enrolled for various programmes in management. Management programme had started admitting around 2,800 students in 1987 and has come to the level of admitting approximately 20,000 students per annum and around 61,000 (including re-registration) students in 1999. In 1999, total degree/diplomas awarded to management students are approx. 16,500 out of which 10% are the MBA degree (See Appendix-1). The students of management programme come from various walks of life. For example, they come from government organisations (23%), public sector (30%), private sector (27%), banks (10%), self-employed (3%), and others. The level of students includes high commissioner, diplomats, ministers, senior IAS (Indian

Administrative Service) and IPS (Indian Police Service) officers, officers from other services, senior executives from industries, defense services, and prisoners etc. Eighty percent of the working students are from urban set up, whereas the rest are from the rural set up. Students admitted to the management programme are degree holders (48%), post graduate diploma (12%), postgraduates (33%), M.Phil/Ph.D. (3%) and others. 81% students are married and 34% students are in the age group of 31-40 years, 49% are in 31-40 years, 13% are in 41-50 years, and 3.5% are above 51 years. Male students constitute 93% of the total management programme (Naidu, 1996).

Though there is a provision for admitting non-graduate students in the programme, but the number of non-graduates actually being admitted is negligible (less than 1%).

Meanwhile, for a better understanding of the management programme offered by IGNOU, a strategic review can be outlined through a SWOT analysis.

(i) Strengths

1. **Open University with a difference:** Management programme of IGNOU caters to the requirement of different categories of people; primarily to the educationally disadvantaged groups like the people living in remote and rural areas, working people who cannot afford to attend regular institutions, housewives and similar groups, and prisoners etc.
2. **Cost-effective and cost-efficiency:** Being a central university, the IGNOU has been offering its management programme in a cost-effective and cost-efficient manner. Presently, the admission fee per course is Rs.500 in comparison to Rs.300 last year. Obviously, the total cost of the MBA programme, 19 courses and a project (12-credit course), is Rs.10,500 (\$245). Though the target group is working executives, the financial burden on the part of a student is much less in comparison to the other regular programmes conducted by management institutes ranging from Rs.60,000 to 1.5 lacs.
3. **Multimedia approach:** IGNOU MBA programme adopts multimedia approach in the preparation of course packages. The students are provided with self-instructional printed material, audio and video cassettes of MBA courses and have the facility of viewing the DD-1 (Door Darshan) programmes, face-to-face counselling through countrywide study centers, phone-in programme and teleconferencing via satellite.
4. **Flexibility:** In view of the open nature of the university, requisite flexibility has been provided to enable students to pace their studies. Though the entry is via an entrance test, it has got provision of learning at one's own place, pace and time frame. A student has got the flexibility of adding/dropping the course(s), submitting assignments and appearing in the term-end examination at one's convenience. It has the possibility of continuous and lifelong education through open system.
5. **Course wise registration:** Once the learner enters the programme via an entrance test, he can register for any of the four courses offered. About 42 courses are

presently offered in both the semesters. This enables the learner to choose courses relevant to his present job assignment and future perceived needs at any point of time.

6. **Technology aided service:** In addition to the face-to-face counselling through study centers, IGNOU provides intensive interactive counselling through satellite aided communication network. Presently altogether 125 regional and study centers are extending the teleconferencing facility to the students. The up linking of the programmes is done from the EMPC (Electronic Media and Production Center) located at the university campus, New Delhi.
7. **Counselling system:** Academic counselling is an important instructional component of distance teaching-learning at IGNOU. The university has a network of regional centers functioning in various states, and various study centers operating under each regional center. At present there are 21 regional centres and 403 study centres operating in the country. Total number of academic counsellors are estimated to be 18,991 in 1999 who are engaged in academic counselling i.e. informing, advising, counselling and tutoring the students. In addition, other facilities like video library, textbook library, and information regarding rules; regulation, procedure, scheduling etc. are available.
8. **Nation-wide talent resourcing:** IGNOU follows a well-organised course development plan to ensure the quality and effectiveness of its study material. It draws a nation-wide talent to support the core academic staff. Management experts are invited from the stage of course formulation. They contribute in course design, print material development and audio-video production. Also local subject experts are invited for teleconferencing session and update seminars from time to time.
9. **Internationalization:** IGNOU has taken up the responsibility of providing management education along with other higher education to the people of third world countries in general, and to the expatriates and non-resident Indians.
10. **Goodwill and credibility:** IGNOU, being a central Open University, has reached the top of academic excellence of its kind. It has gained reputation and earned goodwill both at the national and international levels.
11. **Collaboration:** IGNOU being the apex body, few other state open universities started collaborating for academic support and services. Recently Indian Institute of Bankers (IIB), Bombay, has collaborated with IGNOU to start an MBA (Banking and Financial Services) programme in school of management studies, IGNOU. The programme was scheduled to be started in 1999-2000 session.

(ii) Weaknesses

1. **Open and distance education:** Distance learning has got its own limitations. It is always targeted for certain cluster of students who cannot afford to attend the regular routine classes. Despite the growing trend in distance education and innovation, both

traditional and corporate business schools keep on investing in new buildings and other infrastructure. One might say that there is no substitute for face-to-face learning. So distance learning is a merging rather than an emerging trend.

2. **Quantity vs. Quality:** IGNOU produces a large number of MBAs each year. In 1999, total number of degree and diplomas awarded were 16,528, out of which 1,683 are MBAs. Obviously, quantity and quality never seem to go side by side. Increase in quantity may lead to sacrifice quality. Meeting the quality standard of course materials, program delivery, effective multimedia approach and technology-enabled service can help achieving the quality objectives. Skill development through distance mode is really a tough task. Though the learners are all working executives, the school has to continuously devise assignments which are targeted at enhancing managerial skills.
3. **Reach:** There is not a single business school which can or would want to deliver the services with confidence in all other locations. IGNOU's MBA programme has mastered this challenge by offering distance education countrywide with the help of its regional centers, study centers, teleconferencing via satellite, audio and video programmes. Recently IGNOU has launched its MBA programme in the Middle East countries. But IGNOU has yet to go a long way in terms of its reach to other western countries as they already have made an entry.
4. **Student Support Services:** Timely delivery of print materials, counselling schedule at study centers, informing teleconferencing schedule to students and providing the audio and video support at study and regional centres etc. are a daunting task in distance education. Doing everything just-in-time is the real challenge. Because of dispersed location, these services need improvement. The school develops 4/5 new courses every year. Finding expert counsellors for all these in all parts of the country is very difficult. Continuous orientation of counsellors is a desirable process but has not been followed with regularity.
5. **Lack of application of Technology:** Today Internet-based education has emerged as a superb media for the delivery of 'course' materials and has enhanced communication than ever before. Tutors and students located at two extreme ends of a globe can communicate effectively with each other. The IGNOU MBA programme has yet to pick up this trend.

(iii) Opportunities

1. **Global market:** There is still a global market to be explored and new markets to be developed for providing management education along with other programmes. Like other foreign countries getting into India, why can't IGNOU MBA programme be launched abroad. Of course, the present course materials have to be adapted to their requirement.

2. **Domestic Demand:** The real growth of any education comes through high domestic demand and acceptance. IGNOU MBA programme needs to be augmented in terms of its reach beyond the jurisdiction of metros and other important cities. Technology application can help enhancing the reach to disadvantaged remote students.
3. **Enabled management education:** In India PC market is growing at about 40-45% annually. However, the total population of PCs in India at the end of 1998 was 2.8 million (2/5th of the population of PCs in New York) (NASSCOM, 1999). In the coming years, the growing population of PCs in India will definitely help the MBA students to integrate it with education. As such education needs to be coupled with the increasing trend of networking.
4. **Strong information systems:** Present information systems consist of audio/videos, national level TV telecast and interactive radio counselling, web sites on Internet for information access, e-mail etc. TDCC is a one-way video and two-way audio counselling for the purpose of Tele-teaching, Tele-counselling, Tele-training and extended contact programmes, and academic seminars etc. The existing information system can be further improved to reach out to the learners and providing optimum support to them with the application of available technology.
5. **LAN/WAN:** Networking covering all the nodes at regional and study centers with schools and divisions of university through WAN connectivity can increase the information sharing. This can be done by connecting LAN at regional centres and study centres to the LAN at schools and divisions of university using VSAT. This needs an urgent attention of the university.
6. **Value Added service:** IGNOU can step in to provide value adding services like availability of course, materials on CD-ROM, on-line admission, FA services through e-mail/internet, access to electronic library, toll free telephonic facilities to all students, and activating cable operators at different cities to facilitate teleconferencing etc. To keep pace with advancement in technology, IGNOU's attention needs to be drawn to the same at the earliest.

(iv) Threats

1. **Cost:** Rising cost of infrastructure and basic amenities, non-implementation of the computers and networking systems and MIS in the university level can pose a threat in the near future.
2. **Innovation in distance education:** Innovation in terms of cost-effective and cost-efficient course development, launching new courses to suit the industry needs, strengthening the existing courses, efficient delivery mechanism, etc. are the need of the day. This helps inviting the corporate world for knowledge updating.
3. **Faculty development programmes:** Growing trend of business and technological advancement need the faculty updation programme from time to time. On one hand,

the IGNOU MBA programme is targeted for international students and on the other hand various related faculties are not updated with their knowledge meaning thereby simply failure of the system. If the faculties never update themselves, they would be taken over by their counterparts in the traditional system.

4. **Entry foreign providers:** The Universities of Australia and UK have started entering into Indian soil for awarding MBA degree to Indian executives. IGNOU therefore may need to position its MBA programme to the needs of multinational students as well as to the needs of domestic students desiring international level MBA programme.

Strategy for IGNOU

After the SWOT analysis, understanding the areas of weakness and identifying the opportunities ahead, the main concern is to develop an operational strategy and to safeguard IGNOU from external threats. Fig. 1 is an operational matrix that clearly explains the strategy for IGNOU in terms of its students' segments and technological strength. The student segment is categorised as existing whereas the technological strength as low or high. After the SWOT analysis, it is wise to position IGNOU in one of the segments of the operational matrix. Obviously, IGNOU falls in the 1st quadrant of the matrix as it has low technological strength for the existing student base.

The following strategies may give some alternatives for future action:

(i) Moving into new student segment with existing low technology (Quadrant 2)

IGNOU may broaden its management programme to any geographical spread to facilitate the disadvantaged rural community with the help of the existing network of regional centres and study centres. The targeted students may be supplied with print materials, facilitated with face-to-face counselling and teleconferencing facilities and so on.

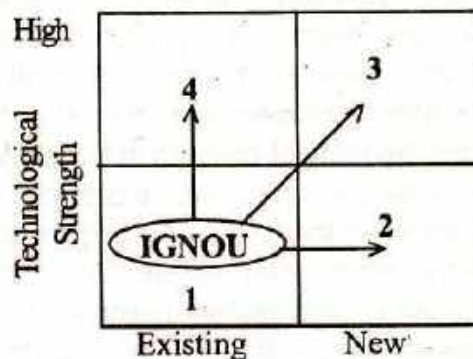


Fig. 1

(ii) Shifting towards high technological base for the existing students segment (Quadrant 4)

The second alternative approach is to augment the existing technological base. The students are to be supplied with CD-ROMs as an alternative to the print material, have access to the electronic library, and extend the facilities of teleconferencing through cable operators, and respond to the student queries through fax, e-mail etc. These are a few issues to be addressed with the new technological base. Both ways video may make the teleconferencing system more meaningful.

**(iii) Adopting new technology for the existing and the future students
(Quardrant 3)**

This requires a complete revamp of the existing procedure. The re-engineering may include the issues like development of complete MIS at the university level, activating the LAN/WAN facilities, getting connected to VSNL with high speed leased lines (2 Mbps) for fast access and data transfer, upgrading the existing one-way video and the two-way audio to two-way video and two-way audio system.

On-line admission facility, providing course material via Internet and CD-ROM, on-line submission of assignment and evaluation, meeting the queries through e-mail and bulletin board of Internet, making flow of information faster to students and vice-versa, and solving student's problem on-line etc. shall be the key issues in this newly adopted technology. The whole idea is to automise the operations and to make the transaction a paperless one.

INTERNET BASED MANAGEMENT EDUCATION

The impact of technology on management education is particularly not worthy because of its overriding characteristics. One of the latest trends is the use of Internet as a learning and a teaching tool. The Internet-based education has revolutionized distance education (Syrett, 1997). In this system of distance education, much of the focus of the course lies in the information available directly from the server installed in the university campus. A student can read the course material, contact tutors, and attend tutorials by logging on to the Internet. One does not have to attend the regular routine classes and no classroom attendance is required. What all is needed for a distant student are desktop/laptop computer, a modem and Internet connectivity when they enroll. As a result one can have the flexibility of carrying out one's MBA course without sacrificing one's job and promotion. One can simply post a problem via an e-mail or the bulletin boards and look for the response of the tutors. An accountant with a modem and a mouse can go for a post-graduate degree (Nacinovich, 1997). The program as such has flexibility to the extent possible. It can allow a student maximise his/her study time. One can listen to the tapes at one's leisure time, watch videos at lunch and can type homework in a train with the help of the lap-top. One can have the luxury of going on line during break at the office and spend time reading at night. It helps an executive to get rid of two years pressure cooker environment in a regular MBA classroom.

To judge from the traditional business schools, whether their programs are bachelor degree for four years on campus, MBA for two years, or an executive education program that runs from three days to three weeks, management education has been set up as a discrete and a confinable package. And yet, it is known that today most managers will change careers at least four times during their lives. Each time managers move, their knowledge deficits become a challenge as they approach new markets and competitors. They also use job rotation challenge assignment, cross business project teams, just-in-

METHODOLOGY

As per the specific objective of the study, *Indian Farming* - a monthly farm magazine basically for farmer-readers published by Indian Council of Agricultural Research, New Delhi was purposively selected for this study on account of its comparatively larger leadership spread throughout India. For the selection of the respondents, a list of the regular subscribers to this magazine was obtained from the concerned office. Of the 952 individual subscribers sorted out from the list, fifty percent were selected by following a systematic sampling technique i.e. taking every alternative individual from the list. So finally 476 readers constituted the sample of the study. For collection of data, a pre-tested schedule was mailed to all the selected respondents out of which 224 questionnaires filled completely were received back. The data so collected were tabulated and analysed. Interpretation of the data was done with the help of frequencies and percentages and the major findings are presented as under:

FINDINGS AND DISCUSSION

The findings of the study as given in Table 1 revealed that majority of the readers (82.15%) considered the existing volume size of the farm magazine as appropriate while 17.85 percent wanted it to be increased. Regarding the periodicity of magazine, majority of the respondents (73.22%) showed their satisfaction with the existing pattern. Regarding the cover page of the magazine majority of the readers (94.65%) were of the opinion that it was very easily readable as well as understandable with an appealing design and attractive colour combinations used. Thus it could be concluded that maximum number of readers had high opinion about the general aspects of the farm magazine which they were reading as a source of farm information. As far as the utility of the information published in the magazine in terms of their immediate needs, the contents of the magazine were found to be more need based in the opinion of majority of the readers. Regarding timeliness of the contents, most of the information appeared in the magazine was timely in accordance with the farm operation in the opinion of majority of the readers (69.64%). It may be due to the reason that the content of the magazine might be tailored to the information needs of readers at different points of time. The opinion regarding comprehension of the contents appeared in the magazine revealed that these were fully comprehended by majority of the readers (48.22%). It might be due to the reason that the language used in the magazine was simple and presentation of the contents was also in accordance with the readers' comprehension.

Regarding practicability of the contents appeared in the magazine, majority of the readers (69.64%) considered the information as fully practical. This could be ascribed to the fact that the main aim of the magazine is to provide information of practical use to the farming community. Concerning length of articles appearing in the magazine, the majority of the readers (80.36%) were of the opinion that length of the articles was moderate in size. Further, it was found that information carried by the magazine enjoyed highest degree of trustworthiness among majority of the respondents (57.15%). The opinion regarding the method of content presentation showed that majority of the readers stated that it was interesting. The opinion regarding the use of technical terms in the articles, revealed that these were very frequently used as reported by majority of the readers (56.36%). It may be

suggested that writers should be careful in using technical terms while writing articles and should try to minimize these terms as far as possible. As for the understandability of the illustrations used with the contents published in the magazine is concerned, a majority of the readers (83.92%) were of the opinion that these were very easily understood. It might be due to the reason that the magazine carried a large number of illustrations with the articles. The opinion concerning advertisements appearing in the magazine under study, the majority of the readers reported that advertisements contained useful messages, were sufficiently attractive and were appropriate in number. It may be due to the fact that information given in the advertisements must have appealed to the readers and had benefited them. Further majority of the readers (89.28%) also indicated that they liked the magazine, whereas 10.72 percent showed their disliking.

The various reasons given by those who liked it included (i) very informative (ii) carried need based contents (iii) imparted latest knowledge regarding crops, animals and farm machinery (iv) Printing was very good (v) cost was low (vi) carried research-based information. Those respondents who did not like it observed that it was not serving the region they belonged to. As far as the feed back behaviour of the respondents is concerned, it was found that the majority of the readers interacted with the editor of the magazine to make suggestions for its improvement. This showed their concern for the magazine they were using as a source of farm information.

Thus it could be concluded that the majority of the readers had highly positive opinion about the farm magazine they were utilizing as a source of farm information for their day to day needs in the field.

TABLE 1.

OPINIONS OF THE READERS REGARDING DIFFERENT ASPECTS OF INDIAN FARMING
FARM PERIODICAL AS A SOURCE OF FARM INFORMATION

	Frequency	Percentage
1. General Out look		
a) Volume size:		
Appropriate	184	82.15
Not appropriate	40	17.85
b) Periodicity:		
Satisfied	164	73.22
Not satisfied	60	26.78
c) Readability of the cover page		
Very easy	212	94.65
Easy	12	5.35
Not Easy	00	00
d) Understandability of the cover page		
Very easy	196	87.50
Easy	24	10.72
Not easy	4	1.78

	Frequency	Percentage
e) Design of the cover page		
Very appealing	68	30.36
Appealing	148	60.07
Not appealing	8	3.57
f) Colour combination of the cover page		
Very attractive	104	46.44
Somewhat	116	51.28
Not attractive	4	1.78
g) Liking for the magazine:		
Liked	200	89.28
Disliked	24	10.72
2. Information Utility		
a) Need-based content		
Fully need based	144	64.98
Partially need based	76	33.94
Not need based	4	1.78
b) Timeliness of contents		
Very timely	16	7.14
Timely	156	69.64
Not timely	52	23.22
c) Practicability of contents		
Fully practicable	156	69.64
Partially practicable	44	19.64
A little practicable	24	10.72
d) Trustworthiness of information		
Very much trustworthy	128	57.15
Some what trustworthy	92	41.07
A little trustworthy	4	1.78
3. Information comprehension		
a) Length of articles		
Lengthy	28	12.50
Medium	180	80.36
Short	16	7.14
b) Method of content presentation		
Very interesting	80	35.72
Interesting	128	57.14
Not interesting	16	7.14

		Frequency	Percentage
c)	Technical terms used		
	Very frequently	124	56.36
	Frequently	100	44.64
	Rarely	00	00
d)	Understandability of illustration		
	Very easy	188	82.92
	Easy	72	14.29
	Not easy	4	1.79
e)	Usefulness of message in the advertisement		
	Very useful	76	33.93
	Useful	108	48.22
	Not useful	40	17.85
f)	Attractiveness of advertisements		
	Very attractive	56	25.00
	Attractive	128	57.15
	Not attractive	40	17.85
g)	Proportionate number of advertisements		
	Excess in number	32	14.28
	Appropriate in number	124	55.36
	Less in number	68	30.36

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