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Editorial

The year 2012 is a landmark year for the open and distance education in India. It was in 1962 that the open and distance education was formally launched in India as a pilot project 'Education Through Correspondence' by the University of Delhi. The success of the experiment at the University of Delhi unleashed an era of 'open and distance education' (ODE) in India. Today in India, there are over 12 open universities and more than 175 institutes which provide instructions through distance mode. Ironically, after 50 years of open and distanced education in India, one wonders why it is that, still a large segment of our society looks upon the students of distance education and the system of distance education with suspicion.

Nonetheless, for those who have spent over three decades in the system, witnessing its growing through 'five generations' has been quite an exciting experience. Ironically, despite the tremendous growth in its literature in terms of theoretical ramifications and empirical studies, open and distance education is struggling hard for an equitable recognition as a discipline.

Nevertheless, the exponents of open and distance education continue to contribute to the growth of the system by taking every opportunity to share their experiences and experiments with others on this non-contiguous mode of education through every possible forum.

The Indian Journal of Distance Education provides one such forum to the proponent of open and distance education to share their research papers and articles. This issue carries about a dozen research papers and articles addressing various dimensions of open and distance education. For instance, Madhu Gupta and Rachna Jain in the paper titled "Attitudes towards Teaching Profession of Male and Female Teachers Trained through Formal and Distance Mode" have found that the teachers trained through formal mode have more favourable attitudes towards teaching profession as compared to distance mode teachers, where female teachers have more favourable attitudes towards teaching profession as compared to male teachers.

While, Bakhteyar Ahmad in his paper titled "Distance Education at School Level: A Theoretical Paradox" has highlighted the paradox that exists between the ideal notion of education and schooling as enshrined in various commissions, committees, and curriculum frameworks from time to time, to that of what actually is being provided by the distance mode of schooling system, T.Nirmala Jyothi through her paper "Distance Education an Alternative Approach to Higher Education" has made a strong

case for distance education by stressing that due to the limitations of the formal system of higher education, the conventional campus based university and college education does not fully respond to the needs of the potential student population.

The issue carries two papers on ICT. While Harsh Gandhar has attempted to visualize the impact of introducing ICT in the open and distance learning mode on the cost functions (i.e. total fixed and total variable cost) and Gurpreet Kaur has discussed the "Role of ICT in Open and Distance Education" in the light of NMeICT which stresses on abridge the digital divide, Jatinder Grover and Kanwalpreet Kaur have focused on the issues of sociability, social concerns, ethics and skills of digital natives; and the role of parents and teachers to foster social skills in the adolescents belonging to the digital age in the paper "Digital Natives and Sociability". In this regard, paper of Ravneet Kaur and Devendra Singh invites a special attention for suggesting "Initiatives to Make Distance Learners Information Literate".

Scaling of teachers' trainees continues to invite the attenuation of the researchers. In this regards reference could be made to the paper of Parvinder Kumar who has studied "Attitudes Toward Moral Accountability Between Regular And Distance Mode Teacher Trainees" and that of Mamta Garg's paper "Learning and Thinking Styles of Secondary Teacher Trainees in Distance and Face-to-face Education: A Comparative Study". In this context paper "Q-Study of Desirable Teaching Behaviours for a Teacher Educator in Distance Mode as Perceived by Teacher Trainees" by Vijay K Grover also deserves a special acknowledgement

The issue also carries a paper titled "Distance Educators on Distance Education: A Study in the Perception of IDEA Members" by Ravi K Mahajan who puts forth some policy initiatives to improve upon the scenario for pen and distance education.

In the overall context this issue of Indian Journals of Distance Education unfolds lot many mini and micro areas to researchers for exploration.

Editor

Dr. Ravi K. Mahajan
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Attitudes Towards Teaching Profession of Male and Female Teachers Trained Through Formal and Distance Mode

Madhu Gupta & Rachna Jain

Abstract

The paper compares the attitudes towards teaching profession of male and female teachers trained through formal and distance mode. Teacher Attitude Scale developed by Goyal was administered to 150 teachers (75 teachers trained through formal mode & 75 teachers trained through formal mode) teaching in secondary classes of Delhi schools to collect the data. It was found that teachers trained through formal mode have more favourable attitudes towards teaching profession as compared to distance mode teachers. Female teachers have more favourable attitudes towards teaching profession as compared to male teachers.

1.0 Introduction

Teacher education has acquired recognition as an integral part of our education system. During the past five decades, the role of teacher has continually evolved, making it necessary for incumbents to be much more than a mere pedagogues. With increased specialization within the educational system, the need for differentiation in teacher education has surfaced in order to cater to the variety of professional needs of more specific groups.

Teachers themselves also need to be a lifelong learner; to able to articulate their teaching with the new paradigm of learning; be adaptive and flexible in dealing with a new brand of students comprising different age groups of diverse ethnicity, and with a wide range of prior knowledge and background; and be conversant with the new technologies which are developing rapidly at an ever increasing speed (Elliott & Morris, 2001; Pang, 2001; Tsui & Cheng, 2000). There are many activities that the teacher has to perform in the classroom and outside the classroom in order to provide the required learning experiences to the students. The focus of teacher should be on what we here call the pedagogical i.e. the complexity of rational, personal, moral, emotional aspects of teachers' everyday acting with children or young people they teach (Van Manen, 2002).

In teacher education, the systems of curriculum transaction have essentially been of two categories, viz., the formal (face to face) system

and distance system. The formal system of education refers to the instructional interactions in which teachers and learners transact a curriculum in a face-to-face situation. The distance system of education, as the term indicates, pertains to all kinds of interactions between the teacher and the learners in which they are not in direct contact with one another and require a third channel or medium for contact. These include the print, audio, video or any other mode.

The formal system is the oldest and the most widely accepted mode of teacher preparation in India. The distance mode emerged as an alternative to the formal system mainly because of the demographic problems of a large number of people desiring education and shortage of trained teachers after independence. Perraton (1991), Kulundaiswamy (1993) observed that distance education is neither a supplement nor a mere alternative to the conventional system, but a new stage in the evolution of education which recognizes the fact that in many situations it is easier to transport knowledge to people than transport people to the place of knowledge. Very few studies have been conducted in the area of comparison of two systems which has been a debatable topic with regard to the fundamental function of education and teaching training. A comparison of the two systems of education is essential for formulating future plans and taking decisions regarding the crucial aspects of teacher education programmes in the country.

One of the objectives of teacher education programme is to develop in prospective teachers a positive attitude or favourable attitude towards teaching. This is the reason why attitude has been identified as an important variable for the present study. Social psychologists believe that attitude measurements serve as a guide to the understanding and prediction of human behaviour (Murphy and others, 1960). An attitude is a tendency of an individual to favour or not to favour same type of object or situation. Kaul (1977) found that the favourable attitudes of student teachers towards teaching and do not increase significantly in magnitude with the existing patterns of teacher training. Singh and Sharma (1977) found significant positive relationship between teaching attitude and verbal interaction of teachers. Khatoon (1988) revealed that there exists no correlation between teacher classroom behaviour and attitude towards teaching. Naik and Pathy (1997) concluded that the female science teachers had significantly positive attitude towards teaching of science than male counterparts. Shakuntala and Sabapathy (1999) found that there was a significant and positive correlation between adjustment of secondary school teachers and their interest in and attitude towards teaching profession.

With a view to understand the attitudes of teachers towards teaching profession, an investigator was attempted to examine and compare the attitudes towards teaching profession of male and female teachers trained through formal and distance mode.

2.0 Objectives

The study purports to meet the following objectives:

- (i) To compare the attitudes towards teaching profession of teachers trained through formal and distance mode.
- (ii) To compare the attitudes towards teaching profession of male and female teachers trained through formal mode.
- (iii) To compare the attitudes towards teaching profession of male and female teachers trained through distance mode.
- (iv) To compare the attitudes towards teaching profession of male teachers trained through formal and distance mode.
- (v) To compare the attitudes towards teaching profession of female teachers trained through formal and distance mode.

3.0 Design of the Study

Method

As per requirement of the problem and keeping the objectives of the study in mind, survey method was employed to collect the data. In the present study, attitudes of teachers constituted dependent variables while mode of training (formal & distance mode) and sex (male & female) constituted independent variables.

Sample

The sample for the study consisted of one hundred fifty (150) teachers (75 formal trained and 75 distance trained teachers) working in Delhi. All the 150 teachers were categorized on the basis of gender: 32 formal trained and 27 distance trained male teachers and 43 formal trained and 48 distance trained female teachers.

Tools Used

Personal data sheet was used for getting information specifying whether teacher is trained through formal or distance mode and about the sex of the teachers. A standardized Teacher Attitude Scale developed by Goyal (1984) is used for measuring attitudes in profession towards teaching of teachers. The scale consists of 22 items. Ten items are favourable, ten items are unfavourable and the remaining two are neutral towards teaching. The mean attitude score of a teacher is the average score value of the statements endorsed by each teacher. The teacher with lower mean scores indicates a favourable attitude and the higher mean scores indicates unfavourable attitude of a teacher towards teaching profession.

Procedure of the Study

At the beginning of the study, teachers were categorized with respect to mode of training and gender on the basis of information given in personal data sheet. Teacher Attitude Scale towards teaching profession was individually filled up by the teachers. They were assured that all the information given by them will be kept strictly confidential and used only for research purpose. While tabulating the data, the scores of attitudes received for 'most unfavourable' were negligible and therefore attitude scores of 'unfavourable' & 'most unfavourable' were clubbed together to work out the results statistically.

4.0 Results and Discussions

The obtained results, which are statistically analyzed, have been presented in the following tables.

1. Comparison of Attitudes of Teachers towards Teaching Profession trained through Formal and Distance Mode

Following Table 1 gives information on scores on Attitudes of Teachers towards Teaching Profession trained through Formal and Distance Mode. The chi-square analysis suggests significant relation (at 0.05 level) between the attitudes of teachers trained through formal and distance mode teaching in secondary classes.

TABLE - 1

χ^2 Value for Attitudes towards Teaching Profession of Teachers trained through Formal and Distance Mode

| Category | Formal Trained Teachers | Distance Trained Teachers | Total | Value of Chi-square |
|------------------------------------|-------------------------|---------------------------|-------|---------------------|
| Most favourable | 8 | 9 | 17 | 8.6* |
| Favourable | 43 | 37 | 80 | |
| Neutral | 18 | 20 | 38 | |
| Unfavourable/ Most Unfavourable | 6 | 9 | 15 | |
| Total | 75 | 75 | 150 | |

* Indicates Significant at 0.05 level

Higher frequency scores of the formal trained teachers show that they have favourable attitudes towards teaching profession than their counterparts. It may be due to the fact that in most of the formal teachers training institutions, one of the criteria for the selection of the students are based on teaching attitude test and therefore this may be the reason

that formal trained teachers had better attitudes towards teaching profession as compared to teachers who did their training through distance mode. Bush (1979), Verma (1968) and Singh R.S (1987) also indicated that training has a favourable effect on the attitudes of teachers towards their jobs.

2. Attitudes of Male and Female Teachers towards Teaching Profession trained through Formal Mode

Following Table 2 suggests that with chi-square value (9.55), a significant relation exists between male and female teachers trained through formal mode and their attitudes towards teaching profession.

TABLE - 2
c² Value For Attitudes towards Teaching Profession of Male and Female Teachers trained through Formal Mode

| Category | Formal Trained Teachers | | Total | Value of Chi-square |
|------------------------------------|-------------------------|--------|-------|---------------------|
| | Male | Female | | |
| Most favourable | 1 | 9 | 10 | 9.55* |
| Favourable | 12 | 22 | 34 | |
| Neutral | 12 | 7 | 19 | |
| Unfavourable/ Most Unfavourable | 7 | 5 | 12 | |
| Total | 32 | 43 | | 75 |

* Indicates Significant at 0.05 level

It may also be inferred that the female teachers trained through formal mode have favourable attitudes towards teaching profession as compared to their counterparts. Studies by Naidu (1975), Som (1984), Topadhan (1991), Shah (1991), Naik and Pathy (1997) have shown that female teachers have more favourable attitudes towards their profession. The data also suggest that the male teachers are more neutral in their attitudes towards teaching. This may be due to the fact that male teachers desirous of entering into the teaching profession may have entered this profession by chance or last choice in the job market and hence have not formed any concrete opinions towards teaching profession.

3. Attitudes towards Teaching Profession of Male and Female Teachers trained through Distance Mode

Following Table 3 suggests that with chi-square value (8.92), a significant relation exists between male and female teachers trained through distance mode and their attitudes towards teaching profession.

TABLE - 3

c² Value for Attitudes towards Teaching Profession of Male and Female Teachers trained through Distance Mode

| Category | Distance Trained Teachers | | Total | Value of Chi-square |
|------------------------------------|---------------------------|--------|-------|---------------------|
| | Male | Female | | |
| Most favourable | 7 | 14 | 21 | 8.92* |
| Favourable | 9 | 26 | 35 | |
| Neutral | 7 | 2 | 9 | |
| Unfavourable/ Most Unfavourable | 4 | 6 | 10 | |
| Total | 27 | 48 | 75 | |

* Indicates Significant at 0.05 level

The data also suggest that the female teachers exhibit most favourable attitudes. The high attitudes scores of the female teachers may be due to their devotion towards teaching profession. The above result is supported by the finding of Mehrotra (1973), Reddy and Jyothi (2002) who reported that female teachers are having positive attitudes whereas male teachers were having comparatively neutral attitude.

4. Attitudes towards Teaching Profession of Male Teachers trained through Formal and Distance Mode

Following Table 4 suggests that with chi-square value (6.89), an insignificant relation exists between male teachers trained through formal and distance mode, and their attitude towards teaching profession.

TABLE - 4

c² Value for Attitudes towards Teaching Profession of Male Teachers trained through Formal and Distance Mode

| Category | Female Teachers | | Total | Value of Chi-square |
|------------------------------------|-----------------|------------------|-------|---------------------|
| | Formal Trained | Distance Trained | | |
| Most favourable | 7 | 1 | 8 | 6.89 (NS) |
| Favourable | 9 | 12 | 21 | |
| Neutral | 7 | 12 | 19 | |
| Unfavourable/ Most Unfavourable | 4 | 7 | 11 | |
| Total | 27 | 32 | 59 | |

NS - Not Significant

However it data suggest that more number of distance trained male teachers have favourable attitudes towards teaching profession. This may be due to the fact that male teachers assumed teaching as a challenging

job and at the same time could not take up formal training out of various circumstances.

5. Attitudes towards Teaching Profession of Female Teachers trained through Formal and Distance Mode

Following Table 5 suggests that with chi-square value (3.53), an insignificant relation exists between female teachers trained through formal and distance mode, and their attitude towards teaching profession.

TABLE - 5
c² Value for Attitudes towards Teaching Profession of Female Teachers trained through Formal and Distance Mode

| Category | Female Teachers | | Total | Value of Chi-square 3.53 (NS) |
|------------------------------------|-----------------|------------------|-------|--------------------------------------|
| | Formal Trained | Distance Trained | | |
| Most favourable | 9 | 14 | 23 | |
| Favourable | 22 | 26 | 48 | |
| Neutral | 7 | 2 | 9 | |
| Unfavourable/ Most Unfavourable | 5 | 6 | 11 | |
| Total | 43 | 48 | 91 | |

NS - Not Significant

However, the data suggest that the number of distance trained female teachers is more at the most favourable level as compared to their counterparts. This difference may be due to the fact that female teachers though did not undertake their training practice through formal training but at the same time preferred teaching as their career and hence opted for this profession.

5.0 Conclusions

On the basis of the above study, the important conclusions could be listed as follows:

1. There was significant difference in the attitudes of teachers towards teaching profession trained through formal and distance mode. Teachers trained through formal mode have favourable attitudes towards teaching profession as compared to distance mode teachers.

2. There was significant difference in the attitudes towards teaching profession of male and female teachers trained through formal mode. Female teachers have favourable attitudes towards teaching profession as compared to male teachers.
3. There was significant difference in the attitudes towards teaching profession of male and female teachers trained through distance mode. Though both the groups were trained through distance mode but the female teachers have more favourable attitudes towards teaching profession as compared to male teachers.
4. There was no significant difference in the attitudes towards teaching profession of male teachers trained through formal and distance mode.
5. There was no significant difference in the attitudes towards teaching profession of female teachers trained through formal and distance mode.

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Distance Education at School Level: A Theoretical Paradox

Bakhteyar Ahmad

Abstract

A holistic definition of education is considered as a process for the achievement of all-round development of the child. Imparting such education should be the prime objective of our schooling system. This paper tries to highlight the paradox that exists between the ideal notion of education and schooling as enshrined in various commissions, committees, and curriculum frameworks from time to time, to that of what actually is being provided by the distance mode of schooling system. Ideally NIOS and other State Open Schools are primarily meant for the students who are deprived, marginalized and excluded from the formal schooling system. But the common features that one can observe at open school centres is making the child feel further isolated, deprived, marginalised and excluded. The paper concludes with some suggestions to resolve this paradox, as also towards increasing the expenditure on education upto 6 percent of GDP.

1.0 Education and Schooling: Theoretical Perspective

Philosophers, thinkers, educationists and policymakers have defined and understood education in varied ways at different times taking into account the different context and perspectives in mind. According to Rig Veda, "Education is something which makes a man self-reliant and self-less." In Kautilya it has been written that Education means training for the country and love for the nation. Ancient philosopher Aristotle writes, "Education is the creation of a sound mind in a sound body. It develops man's faculty especially his mind, so that he may be able to enjoy the contemplation of supreme truth, goodness and beauty of which perfect happiness essentially consists." Gandhiji says, "By Education I mean an all round drawing out of the best in child and man- body, mind and spirit." Redden defines education in a very comprehensive manner, "Education is the deliberate and systematic influence, exerted by the mature person upon the immature through instruction, discipline and harmonious development of physical, intellectual, aesthetic, social and spiritual powers of human being, according to individual and social needs and directed towards the union of the educant with his creator as the final end (Safaya, 1997; 3-6).

Education Commission (Kothari Commission) 1964-66 in its report titled 'Education and National Development' writes that the most important and urgent reform needed in education is to relate it to the life, needs and aspirations of the people and thereby make it a powerful instrument of social, economic and cultural transformation necessary for realization of the national goal. For this purpose the following five fold programme has been suggested:

- (a) Relating education to productivity;
- (b) Strengthening social and national integration through educational programmes;
- (c) Consolidation of democracy through education;
- (d) Development of social, moral and spiritual values; and
- (e) Modernization of society through awakening of curiosity, development of attitudes and values and building up certain essential skills.

National Policy on Education 1986 reiterates similar point of views when it says; in our national perception education is essentially for all. This is fundamental to our all-round development, material and spiritual. Education has an acculturating role. It refines sensitivities and perceptions that contribute to national cohesion, a scientific temper and independence of mind and spirit— thus furthering the goals of socialism, secularism and democracy enshrined in our Constitution.

Imparting such education that encompasses most of the elements that are embedded in the above mentioned definitions should be the prime objective of any schooling system. J.S. Ross said, "Schools are institutions devised by civilized man for the purpose of aiding in the preparation of the young for well-adjusted and efficient members of the society." A school, like a nation, is a complex system existing in discursive rather than physical geographical space (other than as a set of buildings). The meaning of 'school' is therefore depended on actors' perceptions, and these are dependent on factors apparently beyond the school (Stables, 2002).

A child's school experience exerts a potent influence on his developing personality patterns. The school shares with the home the responsibility of helping a young person to achieve those behaviour characteristics that can ensure for him the making of satisfactory adjustment to the demands on him of the various areas of his present and future life activities. No matter how well the school is organized, personal problems will arise as individual student attempts to adjust to the school life.

Schools provide an important social context to adolescents, as it is here that they spend a greater part of their waking time on learning about the curriculum components. It is also the social laboratory for making and developing the overall personality of a child. Thomas Arnold said, "What we must look for here is, firstly, religious and moral principles; secondly, gentlemanly conduct; thirdly, intellectual ability."

In this context it is interesting to see how far open schooling is fulfilling its role as an agency imparting education at school level.

2.0 Brief Introduction to Open Schooling

Schooling through open and distance mode is not a very new concept. For children it has a long and respectable history, starting with the schools of the air-radio and correspondence for children in the Australian outback and the other countries that have large rural terrain and isolated farming families. Such schools continue today, providing models for partnership between parents and children at home and a remote school. More recently open and distance learning has grown in popularity as an alternative route to formal education for children otherwise excluded from school, frequently because of pressure of numbers on national education systems. Examples can be cited from countries as different as Namibia and Brazil, Malawi and Indonesia, as well as India with its National Open School (Jenkins, 1997, P-483).

In open schooling, new approaches to delivery of learning are increasingly used, such as 'multichannel learning' or technology assisted approaches for isolated children. Flexibility, accessibility, openness are words we often hear associated with open and distance learning. The major objective of open schooling is to provide access to sustainable and learner-centric quality education, skill upgradation and training through open and distance learning, ensuring convergence of open schooling, organization resulting in an inclusive learning society, human resource development, national integration and global understanding.

In India schooling through distance mode using modern tools and technique is a new concept that is spreading at a very fast pace. Looking at the statistics, the targets of universal elementary education along with the inevitable necessity of universal secondary education, open schooling seems to be the need of the hour. About a decade back Marmar Mukhopadhyaya in one of his articles, 'Secondary Education: The Unrecognized Lintel' (1999, P-52) very rightly predicted, "there is very little concern and efforts to assess the upcoming problems and thrusts in secondary education though, in all probability, the next two decades will belong to secondary education. Greater the success in universalization of elementary education, the greater will be the pressure on secondary

education. About four million school age children and youth are still outside the school system. Besides their own ambition to be qualified, they cannot be left without schooling for the development of the country as a whole. They will need continuing education that is relevant to them, and at the same time fits into their aspirations of being educated and qualified. Open and distance education holds the greatest promise for such people.

The National Institute of Open Schooling (NIOS) was set up as National Open School in 1989 by the Ministry of Human Resource Development, Government of India, as an autonomous organisation. It provides educational opportunities to persons like you who wish to study further and qualify for a better tomorrow. The Mission of NIOS is to provide education to all with special concern for girls and women, rural youth, working men and women, SC and ST, differently abled persons and other disadvantaged persons who because of one or other reason could not continue their education with the formal system. NIOS operates through a network of Eleven Regional Centres, three Sub-Regional Centres and about three thousand five hundred Accredited Institutions (AIs) and Accredited Vocational Institutions (AVIs) commonly known as Study Centres in India, Nepal and Middle East Countries. For academic courses, admission is made through these AIs of NIOS as well as through On-line(Ni-On) Project (Prospectus NIOS, 2009-10, P-1).

NIOS is the largest open schooling system in the World. At present more than 1.5 million students are on its roll. A vast majority (about 90%) of these students are either enrolled at secondary or senior secondary level. On an average more than 2,50,000 students take admission every year. About 15,00,000 students have been certified at secondary and senior secondary level since 1990. It imparts education through distance mode using media mix of self instructional print materials, audio, video and CD-ROM supported by personal contact programmes and further supplemented by Radio broadcasts and TV programmes. The instructional process comprises of studying self-instructional print materials, listening and viewing audio and video programmes, attending personal contact programmes at the Study Centre, and doing tutor marked assignments. The contact classes are not meant for covering the curriculum. One should not expect full time classroom teaching as in formal education system. The teachers are there to help and guide with regard to one's difficulties.

3.0 The Issue of Quality and Equity

In a world of increasing competitiveness and rapid globalization, our future system of education must prove its worth on the anvil of quality. Quality control in any organization is no longer a desirable goal but a necessity for its existence. The effectiveness of the distance mode

education has been suspected by the academic community itself who regard it as an inferior option for an inferior lot of students who are unable to get admission or attend regular courses (Satsangi, Lajwanti, 1997, P-532).

"The naïve belief that all education is necessarily good, both for the individual and for society, and that it will necessarily lead to progress, can be as harmful as it is misplaced. Quantitatively, education can be organised to promote social justice or to retard it. History shows numerous instances where small social groups and elites have used education as a prerogative of their rule and as a tool for maintaining their hegemony and perpetuating the values upon which it has rested. On the other hand, there are cases in which a social and cultural revolution has been brought about in a system where equality of educational opportunity is provided and education is deliberately used to develop more and more potential talent and to harness it to the solution of national problems. The same is even more true of the quality of education." - Report of Education Commission (1964-66), Section 1.16

Even as the system attempts to reach every child the issue of quality presents a new range of challenges. The belief that quality goes with privileged is clearly irreconcilable with the vision of participatory democracy India upholds and practices in the political sphere. Its practice in the sphere of education demands that the education available to all children in different regions and sections of society has a comparable quality. The late J P Naik had described equality, quality and quantity as the 'elusive triangle' of Indian education. Dealing with this metaphorical triangle requires deeper theoretical understanding of quality than has been available.

Education Commission (1964-66) under heading Equalisation of Educational Opportunity writes that every attempt should be made to equalise educational opportunities or at least to reduce some of the most glaring inequalities which now exist the Commission has stressed the need for the following programmes: (i) The development of a common school system of public education in which no fees would be charged, where access to good schools will be open to all children on the basis of merit, and where the standard maintained would be high enough to make the average parent feel no need to send his child to an independent institution; (ii) The development of adequate programmes of student- Service at all stages which will include free supply of books and writing materials at the primary stage. the provision of book banks and text-books libraries in all institutions of secondary and higher education, the provision of transport. day-study centres or hostels, and the institution of guidance facilities and health services;

National Curriculum Framework 2005 writes schools that emphasize intense competitiveness must not be treated as examples by others, including state-run schools. The ideal of common schooling advocated by the Kothari Commission four decades ago continues to be valid as it reflects the values enshrined in our Constitution. Schools will succeed in inculcating these values only if they create an ethos in which every child feels happy and relaxed. This ideal is even more relevant now because education has become a fundamental right, which implies that millions of first-generation learners are being enrolled in schools. To retain them, the system — including its private sector — must recognise that there are many children that no single norm of capacity, personality or aspiration can serve in the emerging scenario. School administrators and teachers should also realise that when boys and girls from different socio-economic and cultural backgrounds and different levels of ability study together, the classroom ethos is enriched and becomes more inspiring.

A policy of inclusion needs to be implemented in all schools and throughout our education system. The participation of all children needs to be ensured in all spheres of their life in and outside the school. Schools need to become centres that prepare children for life and ensure that all children, especially the differently abled, children from marginalised sections, and children in difficult circumstances get the maximum benefit of this critical area of education. Opportunities to display talents and share these with peers are powerful tools in nurturing motivation and involvement among children. In our schools we tend to select some children over and over again. While this small group benefits from these opportunities, becoming more self - confident and visible in the school, other children experience repeated disappointment and progress through school with a constant longing for recognition and peer approval. Excellence and ability may be singled out for appreciation, but at the same time opportunities need to be given to all children and their specific abilities need to be recognised and appreciated (National Curriculum Framework 2005).

4.0 The Paradox

The chairman of NIOS welcoming the students in the prospectus 2011-12 says, "I congratulate and welcome you for choosing NIOS as your preferred option for continuing your studies. You will find that NIOS is an institution with a difference. It is an open school which encourages flexibility and freedom to learn. About 16 lakh learners are on roll of NIOS pursuing their Secondary, Senior Secondary and Vocational Education courses. By joining NIOS You too will become a part of the largest Open

Schooling System in the World. He further says, in NIOS, you have to learn on your own i.e., you are a selflearner. You can learn at your own pace and convenience."

Imparting education through distance mode at school level (up to class 10th or 12th) has a different perspective when compared to providing it at a higher (college) level. Learners at school level are in different stage not only chronologically but also psychologically, physically, mentally and emotionally as compared to the learners at higher and tertiary level. While the learners at school level need continuous guidance and support, learners at higher level are comparatively more matured and self motivated.

CABE in its report on universalization of secondary education (2005, P-48) under heading 'The Open Learning System' writes that "The existing open schools depend largely upon the print material and personal contact programs through the formal schools. A large majority of the open school students are unable to take advantage of personal contact programs and counseling services; they primarily depend upon the print material which often varies in quality. It will be necessary to enhance quality of open schooling through a variety of measures, particularly the counseling and tutorial services".

Ideally NIOS and other State Open Schools are primarily meant for the students who are deprived, marginalized and excluded from the formal schooling system. But the common features that one can observe at open school centres (AIs) are (i) focused mostly on registration, examination and certification (ii) poor infrastructure (iii) very few interaction classes (on weekends only) (v) focused on books and SLMs (vi) very little peer interaction (vii) no provision for social interaction, sports and games, which is making the child feel further isolated deprived, marginalised and excluded. Following Table gives a brief outline of the important elements that the students of open school are deprived of;

Table 1.1- Comparing ideal school with open school

| Ideal notion of School | Open School (NIOS) |
|--|---|
| ■ Acts as an agency for all round development of the child | ■ Acts as an agency, providing knowledge and information only |
| ■ Learning through books, Teacher and Peer interaction | ■ Learning through books/SLM only |
| ■ Highly dynamic, involving and interacting environment, culture | ■ No such environment, problem of isolation |
| ■ Full scope for Parent Teacher Association | ■ Very little scope for Parent Teacher Association |

| | |
|--|---|
| ■ Ample of space for co-curricular activities, social and moral development- National celebrations, morning prayers, tours and excursion | ■ Very little space for co-social curricular activities, social and moral development |
| ■ Organisation of literary events- debate, discussion, essays, quizzes and other competitions | ■ No such organization |
| ■ Due weight age to physical development- provision of sports and games | ■ No such provision |
| ■ Provision of permanent counselor to deal with psycho-emotional and social problems | ■ No such provision, the child feels isolation, deprivation etc. |
| ■ Provision of both summative and formative evaluation, continuous guidance and feedback | ■ Provision of summative evaluation only |

5.0 The Middle Path

Open and Distance learning though is playing very important role in the present century, but it should not be considered as a panacea for all the educational problems. Using this approach at school level needs certain policy shift, taking into consideration the students age and their all-round development. While the open learning system requires learner that are self motivated, self guided, self directed and self confident, the teenagers that constitute about 80% of open school learners, are less motivated, less confident, and need continuous guidance and support. Imparting education at school level should be seen in a broader perspective. It should not be confined as, merely information providing agency. Registration, examination and certification are not the primary work that the schools are supposed to function.

Limited use with specific target- No doubt schooling through distance mode using modern tools and techniques should be promoted but with utmost care. It should be used focusing specific targets (not as a tool for universalization of primary or secondary education) such as out of school adults, extremely remote habitants, on job learners. At present about 80% of open school learners are teenagers, who need a regular classroom that can ensure there all-round development.

Best utilized as a supplementary system instead of complementary one- Instead of developing open schooling as a complementary system parallel to formal/regular schooling, it should play a supplementary role by enhancing the quality of formal schools using ICT and modern tools and techniques.

Problem of underinvestment in education sector- CABE committee on universalization of secondary education (USE) 2005 writes under heading 'financial requirement for quality improvement', that Kothari Commission recommended for 6 per cent of GDP as an investment on

education to begin with and should have reached by this level by the end of 1986-87 based on the projected growth of population and projected growth of the economy. But Government of India has not yet reached this share even after four decades. This has resulted in under investment in the access, enrolment, class rooms, teachers, and other infrastructure facilities. Hence, this cumulative under investment would require a huge amount of investment on education at all levels. Given the current allocation of expenditure on education as per cent of GDP as 3.95 per cent, secondary education has been allocated with a share of 0.94 per cent in 2000-01. However, if the investment on education as 6 % of GDP as recommended by Kothari Commission is allocated, the additional requirement for universalizing elementary and secondary education could be easily met out with the increased allocations. Further, if the investment on education could be increased to 8 percent of the GDP with the expansion in the education system as well as to meet the requirements of the human capital in the globalised world, the allocation towards all levels of education could be enhanced.

6.0 The Final Word

At last it is better to conclude by putting two quotations, one from famous philosopher and educationist John Dewey and another from NCF 2005. According to John Dewey, Education is not a preparation for life, but life itself. School is a miniature society, facing problems, similar to those faced in life. The basic purpose of the school is to train pupils in co-operative and mutually helpful living. The child is to share the resources of a good society and make his own contribution, to the maintenance and development of the society. Thus by give and take process, the growth of the individual as well as that of the group is achieved. This should not be done by giving information alone but by providing opportunities to children for getting varied experiences. The more varied the experiences, the better the society; In this way, each member can develop more fully as an individual and can give back more to his society.

"Globalization and the spread of market relations in every sphere of society have important implications for education. On one hand, we are witnessing the increasing commercialization of education, and on the other, inadequate public funding for education and the official thrust towards 'alternative' schools indicate a shifting of responsibility for education from the state to families and communities. We need to be vigilant about the pressures to commodify schools and the application of market related concepts to schools and school quality (NCF 2005, P-7, 8)".

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ICT in Open & Distance Learning in India and its Cost- Effectiveness

Harsh Gandhar

Abstract

The need for recurrent and continuous updating of knowledge and skills is recognised as a fundamental demand in society today and open and distance learning, backed by the wonders of www has the potential to meet this need.. One of the major reasons for the fast growth of Distance Education has been its cost- effectiveness. This paper is an attempt to visualize the impact of introducing ICT in the open and distance learning mode on the cost functions (i.e. total fixed and total variable costs). It also studies the problems associated with the introduction of ICT in ODL vis-à-vis its cost effectiveness.

1.0 Introduction

Open and distance learning offers significant opportunities for increasing access and equity. The need to extend learning opportunity over the whole life span and the changing demands concerning mass education and the need for new skills represent challenges that are not easily met by conventional structures and institutions. The impact of the Internet and related networks such as the World Wide Web has already been experienced in all the developed countries, and majority of developing countries. The use of new technologies has changed the cost structure and funding requirements of higher education in general and distance learning in particular. Hence comes into focus the issue of cost efficiency. And this paper is an attempt to study the impact of introducing the ICT on the cost functions of ODL institutions and its consequences on cost-effectiveness.

2.0 Cost Function and Distance Education

The costs and finance aspects of ODL system indicate a healthy sign for meeting the huge social demand for education at the least costs. The financial health of ODL institutions reflects a low level of financial dependence on Government support due to efficient management of the system, effective revenue generation and economies of scale in ODL activities. Cost functions are simple in principle and useful if we want to look at the effects of expanding or contracting a distance-learning programme. Distance teaching is often acclaimed because it can produce economies of scale so that, as enrolments go up, the cost per enrolment goes down (Perraton, 2004). And cost functions or units costs are important in any programme evaluation either related to a particular

academic programme or for all the programmes and related activities of an institution or for system evaluation.

In costing of educational systems, costs can be classified broadly into two types- fixed costs and variable costs. Fixed costs are usually one-time investments incurred by educational institutions for all those involved in the system, often known as non-recurring costs. These costs cannot be assigned to any group of clients or users part by part, though they can be apportioned for various categories of people or activities for calculation of unit cost. The variable costs depend on the volume, i.e., number and size of classrooms, labs, library, hostels and the like. Further variable costs depend on the scale or volume of particular activities.

As regards distance teaching institution, four systems are important and common; and almost all activities can be categorised under these heads:

Production system (TFP, TVP)

Instructional system (TFI, TVI)

Evaluation system (TFE, TVE)

Administrative system (TFA, TVA)

In order to determine cost efficiencies, fixed costs must be distinguished from variable costs. As the total cost is the summation of the total fixed (TFC) and total variable costs (TVC), the Total Cost Function, inclusive of all the four components, would be:

$$TC = TFC (= TFP + TFI + TFE + TFA) + TVC (= TVP + TVI + TVE + TVA)$$

Average cost or cost per student can be calculated by dividing Total Cost by number of students, i.e.

$$AC = TFC/N + TVC/N = TC/N$$

Most of the studies conducted on unit costs of correspondence courses and face-to-face courses have found that the unit costs of the former were lower; in some cases they were as low as 10 percent of those in face-to-face courses (Biswal, 1979; Pandey, 1980; Gupta, 1985). A large number of studies conducted both in developed and developing countries have found that distance learning is cost-effective, provided enrolment is large enough to reduce the unit cost per student (Laird and Layard, 1974; Perraton, 1982; Rumble, 1981; 1982; 1987; 1997). Ruddar Datt (1988) argues that the distance education system has tremendous economies of scale, especially when enrolment exceeds 10,000 students. There exists an inverse relationship between cost per student and enrolment (Dutt, 1994).

In case of GNOU, Pillai and Naidu (1991) conclude that economies of scale could be achieved with an enrolment of 46,000 students, and could be maintained up to an enrolment of 3,00,000 students. Kishore (1997) found that the unit cost of Institute of Correspondence Education of the University of Madras was only 1/35 of the conventional system.

However, Aggarwal (1986) found that in the case of professional training courses, the unit cost of correspondence course was higher by 39 percent than that of face-to-face courses.

Pandey (1980) examined the effectiveness of correspondence education in seven Indian universities on the basis of cost-benefit analysis, items of costs, and academic programmes and found that correspondence courses supported themselves without Government subsidy and depended mostly on students' contribution.

Moreover Kaye and Rumble (1981) refer to few studies conducted in the academic programmes for higher education level in distance teaching institutions which suggest the following:

Restricting academic programmes, through distance learning mode, to areas where there is known to be significant level of demand (e.g. teacher training).

The development of courses in a wider number of subject areas with restricted course choices in each discipline.

In certain cases, embarking upon a programme for social or political reasons, or because it is the only way of fulfilling specific goals and needs.

3.0 Impact of Introducing ICT on the Cost Function of ODL

With the introduction of ICT in open and distance learning, the Total Cost function undergoes change. With the introduction of ICT, new constituents of total fixed and total

variable costs need to be added, which are mentioned below :

Fixed Costs of ICT comprises retrofitting of physical facilities, hardware and networking, software and upgrades and replacement (in about five years).

Variable or Recurrent Costs of ICT consist of professional development, connectivity, including Internet access and telephone time and maintenance and support, including utilities and supplies.

If the fixed costs of a technology project are high and its variable costs are low, then there will be cost advantages. This was the case with general educational radio and television broadcasting. Larger their

audience more the cost-efficiency, here the high cost of production is distributed over a larger viewer base while no staff expenditures were made for learner support.

On the other hand, the impact of higher variable costs related to learner support may be offset if the scale of the project is sufficiently large to the point where per student costs compare favorably with those of traditional schools, for example the case of Telesecundaria in Mexico. In addition, with the Interactive Radio Instruction project annual cost per student was estimated to fall from US\$8.25 with 100,000 students to US\$3.12 with 1,000,000 students. Open and distance learning institutions have also achieved cost-effectiveness through economies of scale. The per-student-costs of the eleven mega-universities (Open) in the world range from only 5% to 50% of the average of the traditional universities in their respective countries.

Perraton (1982) studied the cost of multimedia courses using the radio in a few countries of Africa. He found that generally the unit cost per graduate is lower in distance education (offered through radio) than in face - to - face education of a corresponding level. Otsuka (1984) reported that the direct current expenditure at the Radio and Television Universities in the People's Republic of China was two thirds that of the full- time students and one third that of the part- time students at other universities.

With the introduction of ICT in the ODL system, two issues emerge as the most prominent ones from the costing point of view - technological and economic sustainability. Technological sustainability involves choosing technology that will be effective over the long term. In a rapidly changing technology environment, this becomes a particularly tricky issue as planners must contend with the threat of technological obsolescence. At the same time, there is the tendency to acquire only the latest technologies as the vendors are likely to push these models aggressively. Economic sustainability refers to the ability of a school and community to finance an ICT-enabled programme over the long term.

Cost-effectiveness is important, as technology investments typically run high and in many cases divert funds from other equally pressing needs. In Japan, only 10% of higher institutions fully utilize ICTs for delivery of open and distance learning (with the use of correspondence, audio and video still dominant), despite the fact that 99% of higher institutions in Japan are wired.

Barriers to the widespread use of ICTs include high installation and maintenance costs, the lack of organizational support & experience and human resource issues (UNESCO, 2002) leading to serious cost implications, discussed in the next section.

4.0 ICT Usage and Cost Considerations

The introduction of computer related technology or internet in ODL institution would come out to be cost effective if it operates at a large scale. There are certain impediments in the widespread usage of newer technologies including ICTs, mentioned here :

Universal access to more traditional forms of ODL equipment, including radios, televisions, and audio and videocassette players still continue to be a problem in most countries, especially in rural regions. Whatever limited access there may be to computers and the Internet is usually concentrated in the urban centers, and most often found at the workplace rather than in people's homes. The Asia reports also mention similar lack of equipment for ODL in case of Bangladesh Open University. Moreover, the women students found equipment-deficiency as the major barrier in the South Pacific.

Internet access has expanded rapidly, more than quadrupling worldwide between 2000 and 2005, with the most rapid growth in the Middle East, North Africa, and East Asia. However, broadband is not widely available in most developing countries and does not exist at all in most rural areas, where over half of the population lives and a significant proportion of schools are located (World Bank, 2006).

On the one hand, the Internet and e-learning are enabling higher education to reach out, on a hitherto unprecedented scale, both to geographical areas and to sections of the population previously unreached. These technological developments have brought the vision of a global knowledge society appreciably closer to attainment. On the other hand, this vision will remain unattained as long as there is a gap between the technological haves and have-nots. This digital divide will continue to widen unless urgent steps are taken to close it (ICDE, 2009).

Even now radio and television remain the more prevalent options. It is not out of context to mention here that the UNESCO Report, 2002 highlighted the fact that convincing cost-effectiveness studies were not available about the utilization of technologies in which computers are a key input (Orivel, 2002). Traditional approaches to higher education are highly labour intensive; distance education is capital-intensive but possibly permitting low flexible costs; and e-learning offers complex patterns. The planning of programs for lifelong learning and distance education must take into account short- and long-range variables such as principal objectives or mission, technological and media alternatives, financial sustainability, and who will have to pay which part or parts of the costs? (Rumble and Litto, 2005). The UNESCO Global Forum (2007) reported that the various forms of distance learning have already dramatically

reduced the cost and increased the availability of quality higher education. Two technological developments, the Internet and Open Educational Resources (OERs), could allow new providers to reach a much lower price point and open up higher education to the billions in the developing world.

With regard to the Internet, the significant increase in connectivity around the globe offers promise. The Internet and mobile telephony have tremendous potential for improving the student experience, both as a channel for distributing learning materials and as a vehicle for useful interaction. (ibid.)

Open Educational Resources, a term coined by UNESCO in 2002, refers to the "open provision of educational resources enabled by information and communication technologies, for consultation, use, and adaptation by a community of users for non-commercial purposes" (OECD, 2007).

5.0 ICT and Open & Distance Learning in India

Current distance education literature supports the thesis that modern digital and telecommunication technologies can deliver information and impart even better than traditional means, if used efficiently (Mahajan & Sonone, 2002). The opportunities created by the use of the ICT are enormous and are creeping in all types of education. All countries America, Canada, Europe, Australia and a few in Africa and Latin America have embraced the computer based technologies (Wells, 2002).

In India, approximately 25 per cent of all higher education students are enrolled in distance education institutions and would increase to around 30p.c. by the end of Eleventh plan (Eleventh Plan Document). Few ODL institutions have developed infrastructure in India, while some "others are in the process of creating requisite facilities for on-line and web-based learning. IGNOU, as a trendsetter, has already shown the way (UNESCO, 2007).

Information and Communication Technologies (ICTs) are thus playing a critical role in reaching large number of students. A majority of institutions are yet to harness the potentiality of ICTs for improving access and effectiveness of their programmes.

The institutional capacities to access new technologies and to use them widely differ across the ODL institutions. The high cost of investment and the equally high rate of obsolescence, the lack of experience in its use and the resulting need for expensive training determine the policy choices on technological solutions to educational problems. In exercise of abundant precaution for technology management, some institutions rely

on low-tech and more effective solutions to education and training problems. The feasibility of making effective use of appropriate technologies has constantly been a subject of research for adoption by ODL institutions.

For instance, the National Law School of India University, Bangalore, has put the entire study materials of the courses offered through distance mode on the university's Website. YCMOU and IGNOU's experiences of offering on-line courses in information technologies augurs well for intensive and extensive use of ICTs, and DEC is not only committed to support their initiatives but also taking a pro-active role to entice and encourage the institutes for utilizing ICTs. The interactive multimedia of BRAOU for Science programmes is widely welcomed. MPBOU's Kiosks in rural areas for computer teaching are very popular. Many institutions are contemplating such measures to effectively extend their services for the benefit of people.

A large number of private institutions have, of late, begun to offer courses of short-term duration. Such courses are targeted to meet the requirements of those students who seek to qualify admission tests to pursue higher education programmes in technical and vocational disciplines or seek employment in business and industrial sectors. Such institutions have greatly benefited from the network of facilities and courses developed by ODL institutions. And at the same time they have contributed to the growth of knowledge.

In the wake of globalization of education, which is a recent phenomenon, many foreign universities have begun to offer programmes in India through both conventional and distance mode, particularly on-line courses utilizing Internet facilities. As the number of Internet users is rising fast, such institutions offer ample opportunities for learning to a large number of students. At the same time, it must also be noted that they also pose a challenge of competition to all the service providers especially those that are lagging behind in using technologies for effective teaching and learning. In the process quality of education is expected to improve.

Networking and sharing of resources is another issue of significance for making best utilization of resources. ODL institutions are geared to collaborate and share resources, which facilitate quality assurance without unduly raising the costs of development and distribution of programmes. A number of quality programmes designed and developed by IGNOU are shared across the institutions, for instance, under the auspices of DEC the establishment of a national resource center has been envisaged. It is proposed to establish an Inter-university Consortium for development and translation of study materials in Hindi for the use of a large body students' community. The correspondence Institutions in Andhra Pradesh are

working to form a consortium by A.P. State Council of Higher Education to work out the modalities for sharing of resources between ODL institutions in the State. The implementation of such measures augurs well for quality assurance and efficient use of resources. The National Mission on Education through ICT initiated by the Govt. of India will definitely contribute in this direction.

High growth has taken place in the diffusion of ICTs in all European countries, and the trend is expected to continue vigorously, especially in those countries that are less advanced. An aspect which should not be underestimated is the fact that while the diffusion of ICTs is involving a growing proportion of the European population, it is not involving all of it. They are taking shape through the setting up of financial support funds, and incentives to develop infrastructures and programmes, and through lowering the costs of equipment for schools. A potentially significant new fact is the emergence of multi-country projects directly supported by national Ministries of Education, which have among their objectives to involve private partnerships in a systematic way (UNESCO, 2002).

Last but not the least; the distant learner misses the socialization that campus education allows. The new forms of internet socialization, so common among today's youth, may be good substitute in many ways.

6.0 Suggestions

There is unanimous support for pursuing policies and programmes to develop ICTs to widen access to quality educational opportunities. For reducing costs resources can be shared, whether at the institutional level or at the local level through multi-use learning centres. Those institutions that have facilities could open access to wider groups and charge nominal rates. Telecentres can be established and that nominal fees can be charged or computer education can be free for the learners, though there is an urgent need for computer training to begin in the early school years, as it is happening in almost all the countries. Generally, however, planners should go with tried and tested systems; stability issues plague many of the latest technologies. Again, the rule of thumb is to let the learning objectives drive the technology choice and not vice versa—the latest technologies may not be the most appropriate tools for achieving the desired educational goals. While making technology decisions, planners should also factor in not just costs but also the maintenance costs for the ODL system. Regarding economic sustainability, planners should look to the total cost of ownership and build lucrative partnerships with the community to be able to defray all expenses over the long term. The need to develop multiple channels of financing through community participation ties economic sustainability closely to social and political sustainability.

For example, in case of Kenya proposal tax exemptions on modern technologies, including computers was provided. The providers of ODL themselves need to train their staff and to retain skilled people in the organisation, region or country. User experience needs to be fed into policy development.

6.0 Conclusion

There is no doubt that distance education institutions have an enormous opportunity in ICT as they are able to reach out locations and whole countries or world regions previously unthinkable. The entrance barrier to web-based provision is rather high as the production of good materials is very expensive but economies of scale are enormous and it allowed the access of millions of students that otherwise would be left out due to geographical or economical barriers. It has been recognized that good quality web-based provision is expensive to set up but may allow later for enormous economies of scale. It can reasonably be estimated that this means of provision will develop to allow large students of a new type to accede higher education and this may be of a very high quality.

Unfortunately, those with financial means have access to ICTs and have a clear advantage. The lack of ICTs in rural areas highlights the disadvantage that rural-dwelling people have when attempting to access information. History repeats itself in ICTs, as with books. Computers will only be purchased after basic needs are met, and computers cost considerably more than books. Radio remains the most-used ICT in the rural areas and its popularity may stem from the fact that a radio transmission can cater to more than one person, whereas reading and computers are essentially individual.

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Distance Education an Alternative Approach to Higher Education

T.Nirmala Jyothi

Abstract

After discussing the genesis of development of distance education in India under two historic periods – pre - independence and post- independence, the paper focuses on major challenges of higher education among which quantity Vs quality, equity Vs excellence, autonomy Vs accountability etc. were mentioned. The paper makes a strong case for distance education by stressing that due to the limitations of the formal system of higher education, the conventional campus based university and college education does not fully respond to the needs of the potential student population. The paper concludes with a note that the distance mode of delivery had made education accessible to the needy irrespective of caste, socio-economic status and gender differences.

1.0 Introduction

The history of development of higher education in India can be traced back with the establishment of Hindu College at Calcutta (1817) by Raja Rammohan Roy and his friend David Hare (Rao, 1991) which aimed to provide a channel by which 'real knowledge may be transferred from European sources to the intellect of Hindustan.' The British East India Company founded another Sanskrit College at Calcutta (1825), which was protested against by Raja Rammohan Roy on the ground that Hindus should have received education in European languages and science. By this time, the Christian missionaries had started establishing colleges at other places, with the objective of spreading Christianity through teaching of English and western science. Elphinstone College was founded at Bombay (1834), and Madras Christian College (1837) at Madras, to prepare natives for public employment. In the same succession, colleges were set up at Masulipatnam (1841), Nagpur (1844), and Agra (1853). Up to this time, the number of colleges had risen to 25 in all, in the whole country.

2.0 Birth of Modern Higher Education in India

One interesting fact about Indian higher education is that these colleges were established even before the birth of universities. Some of

these colleges were established and managed by the government while some others were private aided by the government. As mentioned earlier, on the recommendation of Wood's Education Despatch (1854), the first three modern universities were established at Calcutta, Bombay and Madras in 1857.

The function of these universities was to conduct examinations and award degrees, and teaching work was done in the approved and affiliated colleges. This was, in fact, an adoption of London University model. The only exception was that the pupils admissible to the matriculation examination were pupils from schools that had been recognized by the universities. This means that universities had their grip not only over the colleges affiliated to them, but also, over the secondary schools situated within the area of their jurisdiction. With the rapid rise in enrolment after the establishment of these three universities, the University of Punjab at Lahore (1882) and the University of Allahabad (1887), were also established. The University of Allahabad was given teaching powers but did not use them for many years. After this, no new university was set up in the Nineteenth Century. By 1902, there were 5 universities and 191 affiliated colleges with a total enrolment of 17,650 students.

The Indian Universities Commission (1902), appointed by Lord Curzon as Viceroy, resulted in the Universities Act of 1904, under which it was resolved that universities should also be teaching universities, and that stringent rules should be framed for affiliation and disaffiliation of colleges. This led to a rapid rise in the student enrollment during the next decade. The Government of India Resolution on Educational Policy (1913) stressed the need of separating teaching and examining functions of the universities and emphasized the need for having both teaching and examining universities. The Calcutta University was the first to set up its own teaching departments under the leadership of Sir Ashutosh Mukherji, following the Universities Act of 1904. With this development, universities became the primary organizations and colleges became secondary, through reverse was true before 1857.

During the National Freedom Movement some enlightened Indians took keen interest in education. Consequently, six new universities came into existence between 1913 and 1921. These included Banaras Hindu University (1916), Patna University (1917) split from Allahabad (1920), and Aligarh Muslim University (1920), which were established by Acts of Central Legislature.

With the establishment of Delhi (split from Punjab - 1922), Nagpur (split from Allahabad - 1923), Andhra (split from Madras - 1926), Agra (split from Allahabad - 1927), and Annamalai (1929) universities, the total number of universities was due to favourable recommendations of Calcutta

University Commission (1917-19). During the period of Non-Cooperation Movement, Gandhiji founded Gujarat Vidyapeeth and Jamia Millia Islamia to provide strength to the National Freedom Movement.

However, during 1929-47, the official effort to develop higher education was slow due to some political problems related to freedom struggle and breakout of the Second World War in 1939. Therefore, only there more universities could be set up during this period – Kerala (1937), Utkal (1943) and Sagar (1946). In this way, the number of universities established before independence was 19. Rajasthan University Jaipur and Panjab University Chandigarh were set up in 1947, because Panjab University Lahore was transferred to Pakistan during partition. Thus, the total number of universities set up by 1947-48 became 20 with about 500 affiliated colleges and 2.15 lakhs of students.

3.0 Post-Independence Efforts

After the achievement of freedom in 1947, the Department of Education created in 1945, was converted into full-fledged Ministry of Education. Higher education was the first sector of education to attract the attention of the Union Government. As the first step, University Education Commission (1948-49) was appointed, which recommended rapid expansion of higher education in India on a priority basis. The Commission also made several other recommendations having bearing on future development of the country. During a period of three years from 1947 to 1950, 7 new universities were created raising the total number to 27. The number of affiliated colleges also increased very fast. In 1950-51, there were 695 colleges. The total enrolled in higher education was 174,000 (excluding those enrolled in PUC). The total number of teachers working in these institutions was a little more than 21,000. After 1950-51, the growth of higher education has been phenomenal. But the expansion of higher education has received a great impact after Independence. However, it may be mentioned that the expansion of higher education has not taken place in accordance with the new needs and interests of the country. Generally, the policy of the Government has been to increase the number of institutions of higher education rather than to aim at qualitative progress of higher education. Besides this there are multilateral problems of higher education, which have not attracted the proper attention of the Government and hence special efforts have not been made to remove the defects of higher education.

The main problems of higher and university education in India could be listed as:

- Aimlessness
- Wastage

- Unsuitable Curriculum
- Specialization in Education
- Lack of guidance and counseling
- Low standard of teaching
- English as a medium of instruction
- Defective system of examinations
- Indiscipline, and
- Student Societies.

4.0 Problems and Issues in Higher Education

Despite visibly impressive achievement, there is a widespread dissatisfaction among the public in general and youth in particular. Some of the obvious problems being: poor quality of education, large scale unemployment, limited coverage, and in-built mal-practices coupled with heavy demand for higher education at low cost. This shows that there is something fundamentally wrong, and the entire system of higher education needs to be re-engineered. In this context, certain burning issues have to be examined and resolved. The discussion to follow concentrates on these issues (Chauhan, 2000).

4.1 Quantity Vs. Quality

Other things being equal, the quantity of a product is negatively correlated with its quality. When quantity of production is increased without corresponding increase or improvement in the input, the quality of the product is bound to deteriorate. This is exactly what has happened with our higher education system. The huge quantitative expansion has taken place at the cost of quality, especially, during the post-independence period. As stated by J.P.Naik (1982), the post-independence period might be described literally as the "Era of Higher Education" in the history of independent India.

During the five decades since 1947, there has been a phenomenal quantitative growth of higher education system. The disproportionate increase in the number of institutions and the enrollment has caused serious problems in maintaining classroom discipline. An unplanned expansion and establishment of substandard institutions has led to deterioration in the quality of teaching and research. Despite such an unplanned and rapid expansion of higher education, only about 6% of the relevant age-group 18-23 years participate in it, whereas in USA, the corresponding figure is 50%. Even in some of the developing countries, the participation in higher education is as high as 30% of the relevant age group.

4.2 Equity Vs Excellence:

In India, 75% of the people live in villages, most of them being under poverty line. The children of rural people remain at disadvantage,

as they are obliged to study in schools and colleges having poor facilities. Therefore, they are unable to compete with their urban counterparts. Reservation policy would have been a little justified had it been based on socio-economic considerations. It is doubtful whether the existing approaches to achieve equity would promote excellence. Equity and excellence seem to be enemies of each other. There has to be some compromise between the twin objectives of achieving 'equity' and promoting 'excellence'. Higher education has to be reconstructed to take care of these issues. Can we sacrifice excellence over equity, which is a distant dream in Indian conditions? The concepts of equity and social justice need to be redefined so as to avoid wastage of talent and save higher education from the fatal attack of mediocrity.

4.3 Autonomy Vs Accountability

The term 'autonomy' has proved to be a misnomer in Indian conditions. It has been both misinterpreted and misused. Everybody is asking for autonomy, be it an institution or an individual teacher. To them autonomy, means "freedom for not accepting inconvenient or stringent norms". Under the umbrella of autonomy, the universities frequently dilute the UGC norms so as to make them suitable to their local and often non-academic requirements. Sometimes, various pressure groups inside the university force the university bodies to dilute these standards.

These situations arise because the UGC does not have mandatory powers, and hence, cannot force the universities to follow its guidelines.

Autonomy should be taken to mean "freedom to grow in academic quality". It is freedom "to choose right ways and means" to achieve the objective of academic excellence, not to dilute the objective itself. The universities should be made to understand this point. Moreover, the UGC must exercise its powers to withhold grants to defaulter institutions in the case of delay in following its guidelines or diluting them. Accountability should be ensured at all costs.

Some kind of performance-based funding system should be evolved. The establishment of National Assessment and Accreditation Council (NAAC), an autonomous organization, by the UGC is an excellent step. The main function of this organization is to evaluate the performance of universities to encourage self-evaluation and accountability in higher education. Unfortunately, the idea is not being digested by the vested interests. There is some opposition to this process from some quarters. As assessment and accreditation is on voluntary basis, only a fraction of higher education system has come forward (Gautam, 1999) to be assessed and accredited. Consequently, the UGC is seriously considering making

it compulsory for aided institutions to undergo the assessment and accreditation process conduct by the NAAC. Such an assessment will be linked with additional grants and awards. All the universities in the country will have to get assessed and ranked by December 31, 2000 and all colleges by December 31, 2003. The NAAC will grade the universities and colleges on a five-point scale on the basis of teaching, research, and infrastructure in addition to other parameters. The grading will range from 'outstanding' to 'disqualified'.

4.4 Public Vs. Private Funding

As the system of higher grew in size, its maintenance required more and more funds. At the same time, the proportion of non-governmental financial resources successively reduced. Consequently, the contribution of the government to educational finance increased from 57% in 1950-51 to about 92% at present, and that student fees decreased from over 20% to mere 7.5% during the same period.

The expenditure on education as a proportion of GNP has marginally increased from 1.2% in 1950-51 to about 4% at present. Those who are benefited by the subsidy in higher education do not bother about its quality because they are getting it free.

When beneficiary of education has to pay (as in the case of public schools), he expresses concern about its quality. But, in the case of higher education, the amount of fees has been kept frozen for decades and there has been no upward revision. As higher education has been monopolized by the well to do, the major part of the subsidy is going to those who do not need it. Another paradox is that the more expensive the course (such as medicine, engineering and management), the larger the subsidy (Balachander, 1993). A graduate in general education pays about 14% of the cost of his education while a graduate in more expensive professional courses pays only 9%. Is it not contrary to all norms of equity and social justice? Here is a case for increasing fees so as to cover at least 50% of the cost in general education. In professional education, the fee may be even higher because these courses lead to higher personal economic returns. But, how to accommodate those who cannot pay, is a million-dollar question. This is an important issue requiring an intensive national debate till a workable solution is found. Besides these the issues like, open book examination, book bank facility, examination reforms. Democratizing higher education can be considered as the ancillary issues in higher education.

4.5 English Vs. Regional Languages

One of the important recommendations of the Education Commission (1964-66) was that regional languages be used as media of

instruction in universities and colleges instead of English. But, this recommendation could not be implemented so far because of certain controversies involved in it.

Believes are writ large that English is not working well as a medium of instruction for an average student, students read books in English but do not comprehend the substance given in them. Thinking is that with phenomenal growth in the number of English medium schools after independence, the literacy in English might have increased, but quality of knowledge of English as a language has been decaying.

The situation is so bad that a graduate, sometimes, cannot write an application in English. Whatever may be the arguments, it is true that we cannot pull on with English as a medium of instruction indefinitely as standard of English language is deteriorating very fast in India. Not to talk of students, even teachers fail to speak/write correct English. It is, sometimes, argued that good literature, in all subjects and fields, is available only in English. Hence, English should continue as a medium till good books are produced in Hindi or in other regional languages. Some universities, especially in Hindi speaking areas, have already started using Hindi as a medium of instruction in Arts, Commerce, and Social Sciences. This shows that there has been some progress in the direction of 'Indianization' of medium of instruction, but still it continues to be a burning issue.

4.6 Open-door Vs. Restricted Entry

Due to certain sociopolitical reasons, the Government of India has been following an open-door policy in college admissions, thus providing admission to all those who desire higher education even if many of them do not deserve. Consequently, three kinds of students are enrolled in colleges and universities (Chauhan, 1997).

- (i) Those who, both desire and deserve i.e. those who are genuine learners interested in and capable of receiving higher education;
- (ii) Those who desire but do not deserve i.e. those who attach a social status to a university degree and higher education but lack basic capabilities to benefit from it;
- (iii) Those who neither desire nor deserve i.e. those who are not genuine learners but seek admission to colleges/universities for passing their leisure time.

The first of these categories constitutes a small minority of students enrolled in colleges and universities. It is this group that keeps the system going and passes out as a quality product followed by second group of second graders who fill up ministerial positions in the government and private sector. The third group consists of trouble-makers coming from middle

class families busy in status making and sending their children to schools and colleges to keep them free. It is this group that creates and organizes campus problems, mostly at the instance of outsiders, anti-social elements, and political parties. The college/university authorities are, most of the times, busy in managing the conflicts created by them. Dr. Amrik Singh called this phenomenon 'babysitting'. The main business of this group is to organize strikes, dharnas, lock-ups, and gheraos, mostly on non-academic issues. A handful of these trouble-makers emerge as student leaders, teacher politicians, and then as national leaders. This explains the rampant corruption, not only in public life, but also in the government. Therefore, open-door policy of admissions at higher education stage has proved to be counter-productive. Can we risk the future of higher education by continuing with this approach indefinitely? The following statement of the Education Commission (1964-66) should have acted as warning for our policy makers :

A system of university education, which produces a high proportion of competent manpower, is of great assistance in increasing productivity and promoting economic growth. Another system of higher education with the same total output but producing a large proportion of indifferently educated graduates of arts, many of whom remain unemployed or are even unemployable, could create social tensions and retard economic growth. It is only the right type of education, provided on an adequate scale that can lead to national development; when these conditions are not satisfied, the opposite effect may result rigidities of the conventional system like full-time attendance, rigid time-table, rigid curriculum, and compulsory listening to the face-to-face lectures delivered by the regular and full-time paid staff. Instead, it provides for a cost-effective, flexible, democratic and efficient system of learning.

4.7 Limitations of the Formal System

As a result of unplanned expansion and scarcity of funds, the quality of education imparted in the institutions of higher education successively deteriorated. The frustrated lot of students resorted to aggressive behaviour. The lopsided and unbalance expansion of education diverted the efforts and resources of the government towards mass education through higher education to elite education at the cost of vocational training. This process produced an enormous number of unskilled and unemployable graduates with devalued degrees. This also led to the deterioration in the quality of education due to overcrowding of the educational institutions, curriculum constraints and lack of time. As a result there is a wide gap between what is needed by the society and what is produced by education system. This situation provided a golden opportunity to political parties to exploit the sentiments of the younger generation to their advantage, and campus unrest became the order of

the day. Sometimes, the students' aggression took very ugly turn resulting in loss of public property, causing damage to educational institutions, railways, and other essential social services. This gave a glaring evidence of a complete failure of the conventional system to absorb, sustain and manage the growing numbers.

Although, the quantitative development of higher education, during the post-independence period, has been apparently very impressive, yet, it is inadequate to meet the growing demand of the people for higher education. Now, unlike the pre-independence period, the benefits of higher education are reaped by a sizeable number of youth even from underprivileged sections of the society.

Therefore, the first and foremost task that India should undertake is to expand higher education system further in a planned way so as to cover as large a portion of the eligible age group as possible. But, it will not be possible through the conventional campus based university and college system. This makes it necessary for us to ensure that higher education is accessible to all, at least to all those who desire and deserve it. If we fail to do so, the existing gap between the rich and the poor will further widen. Even if we satisfy ourselves with a target of 20% enrollment ratio to be achieved as early as possible, the existing institutional facilities are severely inadequate. For achieving this target within shortest possible time, we must look for alternative modes of imparting education so as to cover larger number of learners with the limited available resources.

5.0 Open and Distance Learning

The socio, political and economic conditions of India made the government and the policy planners think of alternatives based on part-time and own-time approaches to education, because the limitations of the campus based higher education system had become obvious. The non-conventional modes of education providing for non-residential studies like correspondence courses, which had been fruitfully adopted in developed countries, attracted the attention of the policy makers. Presently there are one National Open University and 12 State open Universities in India. The long-term plan is to have an Open University in each state. It is being proposed that the correspondence education institutions attached to the conventional universities should be upgraded to level of open learning institutions or some of them may be merged into the State open universities. The 8th Five Year Plan (1992-97) had proposed that in view of the increasing demand for higher education, 50% of the admission seekers should be encouraged to join the distance education mode.

These open universities have had a tremendous impact on Indian education in respect for access, quality and equity. All the open

universities together are offering about 300 programmes and over 1900 courses of conventional and non-conventional type at different levels. Earlier it was believed that through distance education only education in social sciences and arts could be imparted, but now this belief is over, and the distance education mode has proved equally effective in imparting education of science subjects including medicine engineering and technology also. Also the quality of education imparted through distance education mode is comparable to the one imparted through the conventional face-to-face mode. The student enrollment in these institutions has increased very fast.

These universities have established a large network of Regional Offices and Study Centers all over the country in order to ensure effective delivery of instructional material and increase efficiency of student support services.

As a part of its mandate for training of distance education personnel, Staff Training and Research Institute in Distance Education (STRIDE) has been set up at the IGNOU head quarters at New Delhi. This institute organizes national and international seminars and workshops to achieve its objectives. A proper mechanism has been evolved to coordinate the activities of the institutions of distance education. A coordinating council, known as Distance Education Council (DEC) has also been constituted for development of correspondence programmes offered by the traditional universities and for taking policy decisions so as to avoid duplication of efforts and ensure exchange of ideas and resources. This council has created network of open universities for joint programme development, sharing of material and delivery of programmes/courses. For example, the APOU is using the "Food and Nutrition" course evolved by the IGNOU, while the Nalanda University (Bihar) has decided to use the "Public Accountancy" programme developed by Kota Open University (Rajasthan). In order to promote cooperation among the Open Universities of Asian countries, the Asian Association of Open Universities has been formed. It is expected that by exchanging course materials among the member countries of the Association, both time and money can be saved.

6.0 Conclusion

One essential feature of distance education system is that the teacher and the student are at a distance apart. There is hardly any possibility of face-to face interaction between the two. Obviously, the communication between teacher and the taught is essential for learning to take place. This communication is made possible through media. As discussed earlier, correspondence education system largely depended on the print media through which learning material was sent to the learners.

The usual procedure of transportation of the material involved the mailing of the material in packets through postal services. But, these days, conditions have completely changed. The system is now well-organized having a large network of Study Centers and Regional centers along with other components of Students Support Services. These are the three major components of the methodology of Distance Education.

Distance education has emerged as an alternative to the conventional system of education. Even since the development of Distance Education Mode the system of higher education is made available for the needy irrespective of caste, socio-economic status and so. It merges as a boon to the socially and economically backward, women and working people. It has reduced the cost of education also.

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Distance Educators on Distance Education: A Study in the Perception of IDEA Members

Ravi K Mahajan

Abstract

Despite its horizontal and vehicle expansions, distance education has almost since its inception been looked upon with suspicion. The paper is based on perception of members of IDEA on various counts. While suggesting the prevalence of a horrid status of distance educators, distance learners and in general for the distance education, the paper puts forth some policy initiatives in the recruitment and evaluative schemes which could go a long way in improving upon the scenario.

1.0 Introduction

Despite its established features of making education flexible and accessible, and its expanding dramatically at colleges and universities, distance education has almost since its inception been looked upon with suspicion. It is not only in India that many people think that distance education offers programs which have either low standards or even no standards, but also globally blemishes are cast on it. For instance, Marlborough (2008) says "By the 1950s, distance education had acquired a bad reputation. Many were increasingly suspicious of correspondence schools' promise that a college education could be had with much convenience and little cost." The expression by Bower (2001) that "Who could doubt that distance learning, in the multiple forms it takes today, is the hottest, sexiest, most controversial issue in American higher education?", also speak in volume about disreputable thinking on distance education. As such, there are a reasonable number of educators who remain skeptical of distance learning. Still beliefs are writ large that teaching and learning are inherently social processes which require human contact. There are those who question the essential nature and content of an educational experience and the resources required to support it (Spencer, 2001). Doubts are also raised about institutional support for faculty involvement in distance education which is essential and should take a variety of forms to recognize the range of motivations and needs of faculty (Spencer, 2001). Unfortunately, the distance education got the tag of 'hack business' which milled degree based on the tuition one paid. Many employers assume that the degrees

obtained by students in distance education are bought, not earned. Many employers also assume that aspirants to the jobs with degrees from distance education programs are the ones who would have been unsuccessful in regular colleges and universities (Marlborough, 2008). Instances of newspapers flashing advertisements debarring degree holders from correspondence even from applying for a position are not uncommon. Despite the academic strength which students of DE have, they are more often than not looked with suspicion. For example, distance education programs were barred from advertising in the same places as employers. In other words, after the bad practices of correspondence schools were exposed in the 1920s, these programs could no longer take ads out in the help wanted sections of newspapers. Similarly, legislation was passed that restricted which educational institutions could broadcast both advertisements and course materials on radio and television. Semantics notwithstanding, not many empirical studies have been undertaken to ascertain the view point of distance educators on the status of distance education (Marlborough, 2008). The present paper is an attempt in this direction.

In the Indian context, a comprehensive study into the reviews the current education scenario in India and then critically examines the role of Distance Education Council (DEC) and University Grants Commission (UGC) suggests that UGC and DEC have paid scant attention on promoting distance educators and distance education (Mahajan, 2010). The recent "Ugc Regulationss On Minimum Qualifications For Appointment Of Teachers And Other Academic Staff In Universities And Colleges And Measures For The Maintenance Of Standards In Higher Education" (No.F.3-1/2009 (PS), dated Sept, 2009) reaffirms lack of sensitivity on the part of UGC for the cause of Distance Education. In its 60-page document, it has provided for faculty appointment norms/Regulations which have been adopted as per the guidelines from sources such as ICAR, NCTE and AICTE. The silence of UGC and DEC in showing special concern to DE or according status to the teachers/researchers engaged in DE is simply manifested in the simmering strewed social acceptability.

2.0 Study & Scope

The scope of the study has been confined to exploring the view point of the members of IDEA (Indian Distance Education Association) who attended the 2009 Annual Conference of IDEA. About one fourth of the participants were approached through emails

in June-July 2011 for exploring their view point on a set of following Questions :

1. Do you feel that in general, the selection of faculty for ODE system is undertaken by the 'experts' from the formal system?
2. Do you feel that the Government's policies are conducive to the growth of Open and Distance Education (ODE)?

3. Do you feel that in the Government services students from ODE are discriminated against those from the conventional formal system?
4. Do you feel that in the 'private sector' services students from ODE are discriminated against those from the conventional formal system?
5. Do you feel that in the context of 'academic standards' faculty engaged in ODE system is rated at lower pedestal than those in the conventional formal system?
6. Should there be some 'extra pre-requisite qualifications in ODE', for the selections to faculty position in the ODE system?
7. Should there be some 'monetary incentive' for the faculty in the ODE system as they have to be an expert in 'parent discipline/ subject' as also possess extra skills for writing lessons, assignments evaluation, developing and handling ICT?

The respondents were requested to select one of the given options to share their view point. For the first five questions the respondents were given to choose between, Yes, Largely Yes, No, Largely No, and No Trend/No Policies/ Can't Say. For the question number 6 and 7, respondents were given to choose between, Yes, No and Can't Say.

Of the 70 distance educators who were approached, in all 52 distance educators response to the questionnaire.

3.0 Results & Discussion

The following table gives information (along with percentages in parenthesis) on the question-wise response of the 52 distance educators.

| Qn No. | Yes | Largely Yes | No | Largely No | No Trend/No Policies/ Can't Say | Total |
|--------|---------|-------------|--------|------------|-------------------------------------|-------------|
| 1 | 28 (54) | 19(36) | 1(2) | 1(2) | 3(6) for No Trend | 52 (100) |
| 2 | 3 (6) | 3(6) | 13(25) | 19(36) | 14 (27) for Not very clear policies | 52 (100) |
| 3 | 23 (44) | 21 (40) | 5 (10) | 2 (4) | 1 (2) for No trend | 52 (100) |
| 4 | 6 (12) | 35 (67) | 7 (13) | 1 (2) | 3 (6) for No Trend | 52 (100) |
| 5 | 11 (21) | 27 (52) | 5 (10) | 1 (2) | 8 (15) for Can't Say | 52 (100) |
| 6 | 50 (96) | 2 (4) | | | | 52 (100) |
| 7 | 46 (88) | 4 (8) | 2 (4) | | | 52 (100) |

In the overall context, the data reflects a horrid status for the distance educators, distance learners and in general for the distance education. For instance, as many as 90 per cent of the respondents felt that by and large 'the selection of faculty ODE system is undertaken by the 'experts' from the formal system',

84 per cent of the respondents felt that by and large 'private sector' services students from ODE are discriminated against those from the conventional formal system', 79 per cent of the respondents felt that by and large 'for Government services students from ODE are discriminated against those from the conventional formal system', and 79 per cent of the respondents felt that by and large 'in the context of 'academic standards' faculty engaged in ODE system is rated at lower pedestal than those in the conventional formal system'. On government policies, only 6 per cent of the respondents felt that 'the Government's policies are conducive to the growth of Open and Distance Education' and a vast majority (90 per cent) of the respondents expressed in favor of some 'extra pre-requisite qualifications in ODE, for the selections to faculty position in the ODE system'. Implicitly conceding that distance education has fast emerged as a specialized stream and as such distance educators' efforts need to be reciprocated with some 'monetary incentive' for the faculty in the ODE system as they have to be an expert in 'parent discipline/subject' as also possess extra skills for writing lessons, assignments evaluation, developing and handling ICT.

4.0 Conclusion

Despite an array of limitations of the study, as such the paper empirically substantiates various conjectures (Bower, 2001; Spencer, 2001; Marlborough, 2008; Mahajan, 2010) about distasteful status for the distance educators, distance learners and in general for the distance education. Eventually the paper makes a case for a serious thinking for some policy initiatives in the recruitment and evaluative schemes adopted by the UGC and DEC to ensure quality enhancement for distance education so as to make educational endeavor more fruitful and effective for the society.

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A Study of Attitudes Toward Moral Accountability Between Regular and Distance Mode Teacher Trainees

Parvinder Kumar

Abstract

Moral accountability is one of the important aspects of teaching profession. The paper deals with a comparative analysis of regular and distance mode teacher trainees on the issue of moral accountability in terms of their attitudes. The paper is based on investigator's prepared an attitude scale on the subject and used the same in the study. The scale consisted of three sub scales namely: absolute moral accountability, utilitarian moral accountability and stakeholder moral accountability. The paper suggest no significant difference on any of the 'sub scales' as well as total scale of attitudes. Notably, in case of distance mode teacher trainees the difference was found to be significant only in the case of locality variable, i.e., the rural were found to possess significantly positive attitudes compared to their urban counterparts.

1.0 Introduction

Morality is one of the biggest issues in the teaching profession in almost all the societies without any exception. Although not easy to define and measure but very immoral behaviors can very easily be identified. Fernandez (2008) explains that we usually apply accountability for present action and consequences but rarely for future consequences. He points out there are universal 'rights' and 'wrongs' in the most ideal form of moral accountability. These rights and wrongs are not 'created' rather discovered. If one believes this theory then it does not even ignore the mistakes due to ignorance. Finally one can understand that a person must be held morally accountability for ones expected behavior due to the designation held by him/her. One has to be morally accountability to ones customer on student in case of teaching. Accountable has to be on two fronts (i) for ones own behavior as a teacher – even the imagining of harming or abusing the student amounts to immoral practice (ii) for moral development of the learner. Students' not only should grow physically or mentally, they should learn to behave morally. In case the learner does

something immoral, teachers are to be held responsible. A good measure for this freewill is to assess the attitude of the individual towards the concept. This has led to the conceptualization of the present study.

2.0 Limitations of the study

Due to paucity of time and resources the study has been delimited in respect of -

- (i) B.Ed. regular teacher trainees of D.A.V. College of Education, Abohar.
- (ii) Distance mode teacher training center University School of Open Learning, Panjab University Chandigarh at Abohar only.

3.0 Objectives of the study

1. To Construct and standardize the multidimensional scale measuring attitudes towards moral accountability.
2. To Compare the regular and distance mode teacher trainees on attitudes towards moral accountability.
3. To compare the attitudes within the groups in respect of variables: gender, locality and religiosity.

4.0 Hypotheses

1. There exist no significant difference between regular and distance mode teacher trainees as far as their attitudes toward moral accountability are concerned.
2. There exists no significant difference in attitudes toward moral accountability between regular teacher trainees with respect to gender variation.
3. There exists no significant difference in attitudes toward moral accountability between regular teacher trainees with respect to religiosity status.
4. There exists no significant difference in attitudes toward moral accountability between distance mode teacher trainees with respect to gender variation.
5. There exists no significant difference in attitudes toward moral accountability between distance mode teacher trainees with respect to gender variation.
6. There exists no significant difference in attitudes toward moral accountability between distance mode teacher trainees with respect to gender variation.

5.0 Construction of Likert Type Attitude Scale

For the scale 42 items under three heads were framed with both positive and negative items in equal numbers. The three sub scales were: Absolute Accountability, Utilitarian Accountability, and Stakeholder Accountability. Absolute Accountability refers to accountability on the basis of values in which even ignorance is not an excuse. Utilitarian Accountability can be considered as accountability by virtue of ones duty. Stakeholder Accountability means accountability with respect to the remuneration paid to the teacher by the school or actually by the learner.

- **Standardization of the Attitudes Scale**

The scale was tried out on the target population to find the ambiguity, language problems, time needed and context fitness and accordingly the feedback was incorporated.

- **Item Analysis of Attitudes Scale**

The preliminary scale was administered on the target population. The item analysis was calculated by calculating internal consistency using item total correlation. The items with correlation values > 0.34 were selected. Out of 42 items 36 items ($14+12+10=36$) could be selected. To verify the selection the selected items were again put to item total correlation, and it was found that the correlation values improved. This ensured that item selection was appropriate.

- **Reliability of Attitude Scale**

The raw data after item selection was restructured to retain only the selected items. This data was put to split half reliability test. The values for total scale found were $r = 0.67$ & $R = 0.80$.

- **Validity of Attitude Scale**

Validity was calculated by the Contrast Group Method ($t=3.04$) and it was found to distinguish contrast groups, establishing reasonable validity.

6.0 Methodology Of The Study

The design of the present study was based on survey of quantitative type and research methodology taken up was as follows:-

- (i) **Sample** -The present study consist of 103 students of regular stream and distance mode of teacher trainees of D.A.V. College of Education, Abohar. The 54 students consisting from regular and 49 students from distance mode of current academic session constituted the sample for study. The sample was taken using purposive sample technique.

- (ii) **Tools-** Only one self-developed questionnaire has been used. In standardization limited criterion has been used to standardize the scale.
- (iii) **Statistical technique used-** The statistical technique such as mean, SD, percentage and t-test was used in the study.

7.0 Analysis

The following table give information on the Regular and Distance Mode Teacher Trainees with respect to Attitudes Scores for Subscales and Total Scale.

Table 1: Comparative Analysis of Regular and Distance Mode Teacher Trainees with respect to Attitudes Scores for Subscales and Total Scale

| Sub scale | Teacher Trainees | Mean | σ | SE _D | t-ratio |
|----------------|------------------|--------|----------|-----------------|---------|
| Absolute | Regular(N=54) | 61.25 | 8.32 | 1.82 | 1.20 |
| Accountability | Distance(N=49) | 59.06 | 9.98 | | |
| Utilitarian | Regular(N=54) | 52.57 | 9.09 | 1.77 | 1.72 |
| Accountability | Distance(N=49) | 49.52 | 8.87 | | |
| Stakeholder | Regular(N=54) | 39.85 | 7.39 | 1.73 | 1.26 |
| Accountability | Distance(N=49) | 37.67 | 9.88 | | |
| Total | Regular(N=54) | 152.89 | 18.37 | 2.85 | 2.11* |
| | Distance(N=49) | 145.34 | 17.89 | | |

**Significant at the 0.05 level

Table 1 clearly indicates that none of the values have been found to be significant indicating that the difference found are not real and should be attributed to matter of chance.

Table 2: Analysis of Regular Teacher Trainees Group with respect to Independent Variables

| Variable. | Group | Mean | S.D | SE _D | t-ratio |
|-------------|-------------|--------|-------|-----------------|---------|
| Gender | Male(27) | 151.45 | 14.26 | 4.30 | 0.67 |
| | Female(27) | 154.33 | 16.67 | | |
| Locality | Urban(25) | 148.80 | 18.75 | 4.98 | 1.64 |
| | Rural(29) | 156.98 | 16.84 | | |
| Religiosity | Theist (26) | 159.69 | 17.56 | 4.70 | 2.89** |
| | Atheist(28) | 146.09 | 16.27 | | |

**Significant at the 0.01 level

Table 2 indicates that only the religiosity variable is significant where the theist group is found to have significantly more positive attitude toward moral accountability as compared to the atheist group between the regular teacher trainees.

Table 3: Analysis of Distance Mode Teacher Trainees Group with respect to Independent Variables

| Variable. | Group | Mean | S.D | SE _D | t-ratio |
|-------------|-------------|--------|-------|-----------------|---------|
| Gender | Male(27) | 143.78 | 14.77 | 4.38 | 0.71 |
| | Female(27) | 146.90 | 16.74 | | |
| Locality | Urban(25) | 138.90 | 18.62 | 4.78 | 2.69** |
| | Rural(29) | 151.78 | 15.35 | | |
| Religiosity | Theist (26) | 142.54 | 16.45 | 4.36 | 1.28 |
| | Atheist(28) | 148.14 | 14.84 | | |

**Significant at the 0.01 level

Table 3 indicates that none of the values are found to be significant except the locality variable, where rural group is found to have significantly positive attitude towards moral accountability as compared to the urban group among the distance mode teacher trainees.

8.0 Results

- (i) Regular and distance mode teacher trainees do not differ significantly in their attitudes toward moral accountability in any of its dimension and as a whole.
- (ii) Regular teacher trainees do not differ significantly in attitudes towards moral accountability with respect to gender and locality variables. However, difference has been found to be significant with respect to religiosity variable. Theist teacher trainees have been found to have significantly more positive attitude towards the concept of moral accountability as compared to their atheist counterparts. Although the sample was small to impress the result but it supports our popular assumption that morality springs from religion, at least at a younger age.
- (iii) Distance mode teacher trainees do not differ significantly in their attitude towards moral accountability with respect to gender and religiosity variables. However, difference has been found to be significant with respect to locality variable. Rural teacher trainees have been found to have significantly more positive attitude towards the concept of moral accountability as compared to their urban

counterparts. It is also one of the popular beliefs that villagers are more God fearing compared to urban population, and this might be affecting their attitude towards moral accountability. No effect of religiosity variable may be attributed to the fact that distance mode teacher trainees are mature enough to understand that one can be moral even without being religious.

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Learning and Thinking Styles of Secondary Teacher Trainees in Distance and Face-to-face Education: A Comparative Study

Mamta Garg

Abstract

The primary objective of the paper was to identify and compare the Styles of 'learning and thinking of the secondary teacher trainees in distance and face-to-face mode of education. The paper is based on samples of 200 each from 'distance trainees' enrolled in B.Ed. at USOL, Panjab University, Chandigarh and their counterparts from three Colleges of Education affiliated to the Panjab University. The analysis revealed some very interesting results. Notably, the two groups of trainees differed significantly in their verbal/ non-verbal, open-ended/structured, convergent, improvisation styles of learning and fractional, deductive/inductive, creative, optimistic/pessimistic and analytic thinking.

1.0 Introduction

According to Beaumont, Young and McManus (1984), whenever hemisphericity was used in studies it implied that individuals tended to rely on a preferred mode of cognitive processing in which the predominant activity was either in the left or right cerebral hemisphere. Left hemisphere is verbal and analytic, understands symbols and representations, and is identified with practicality and rationality. While that of the right is nonverbal and global, and is precise, emotional and originative. The left-brain strategies are most often used in classrooms, where right brain students sometimes feel inadequate.

Thinking style is one's characteristic way of processing information. It's the way one acquires knowledge, organize thoughts, form views and opinions, apply values, solve problems, make decisions, plan, and express oneself to others. Scientific research identified two distinct groups of people whose thinking styles, and therefore also learning needs, are antipodal; analytics and holistics. Strong analytics (left brain processors) are people who enjoy logic, details, and follow sequential steps. Strong holistics (right-brain processors), on the other hand, need to have an overall picture before they can assimilate facts. These students need to understand why something is important before learning it.

Many instructors are aware that different learning and thinking styles exist, but the application of this knowledge is often inconsequential.

Some faculty members simply opt to utilize a wide variety of teaching activities, hoping that they will cover most student learning preferences along the way. This method, though expedient, may not be the most effective or systematic way to address student learning preferences in the classroom. Many instructors think that the same teaching methods that are effective in their traditional classes will also work in distance learning settings. The underlying assumption is that students who enroll into distance education classes will have the same learning preferences as students enrolled in traditional classes. Also, faculty are assuming that teaching styles, and accompanying classroom processes, are like a "master key" and thus appropriate for any setting (Diaz and Cartnal, 1999).

But learning at a distance is different from learning in the conventional classrooms. In a Distance education setting, the process of student learning may be even more complex than the conventional 'face to face' setting because perceived obstacles encountered by the learners may be different from one distance learner to another with varying degrees of complexity (Dazarkia, Razak, Mohammed, 2004). To make the distance learning a success and a powerful alternative to face-to-face mode, the learning characteristics of the distance learners need to be studied and compared with those in the regular mode.

The knowledge of specific learning styles which are preferred by the distance teacher trainees in comparison to their counterparts in face-to-face mode holds important strategic information for everyone interested in student success. If there are no differences in learning styles, the faculty can transfer the same types of teaching/learning activities that have been successful for them in the traditional environment, into the distance setting with similar success. But if there are differences in learning styles between groups of students, faculty must use learning style information for planning and preparation for instructional strategies.

Moreover, learning and thinking styles aid teachers in the planning of small-group and individualized instruction. If optimal student learning is dependent on learning styles, and these styles vary between distance and equivalent on-campus students, then faculty should be aware of these differences and alter their preparation and instructional methods accordingly. Sarasin (1998) noted that instructors should be willing to change their teaching strategies and techniques based on an appreciation of the variety of student learning styles. Teachers should try to ensure that their methods, materials, and resources fit the ways in which their students learn maximally. In order to do so, there is a need to examine the learning styles of distance trainees through vigorous researches.

2.0 Objective

The objective of the investigation was to identify the Styles of Learning and Thinking of secondary teacher trainees in distance and face-to-face education and to compare these styles between the two groups.

3.0 Methodology

A sample of 200 distance teacher trainees was extracted from those enrolled in B.Ed. at University School of Open Learning, Panjab University (PU), Chandigarh and 200 on-campus trainees were selected from the three colleges of education affiliated to PU, Chandigarh. Random sampling technique was adopted for selection of the sample. Selected candidates were given a SOLAT tool -Styles of Learning and Thinking (Venkataraman, 1993) through which ten styles of learning as well as thinking (five pertaining to right hemisphere and another five to left hemisphere for both learning and thinking styles) were identified.

4.0 Results

Styles of Learning and Thinking

The styles of learning as well as styles of thinking of the secondary teacher trainees in distance and face-to-face education were studied with regards dominance of right and left-hemispheres. There are five dimensions and ten styles of learning as well as of thinking in the SOLAT. t-ratios examining the significance of difference in hemispheric preferences between secondary teacher trainees in distance and face-to-face education on each of five dimensions of learning styles as well as of thinking styles are depicted in table 1 and table 2 respectively.

Learning Styles

Table 1: Inter-group difference on Learning Styles between Secondary Teacher Trainees in Distance and Face-to-Face mode

| Dimensions of Learning Styles | Learning styles | Teacher Trainees in Distance Education | | On-Campus Trainees | | S.E. _d | t-value |
|-------------------------------|------------------------|--|------|--------------------|------|-------------------|---------|
| | | Mean | S.D. | Mean | S.D. | | |
| Verbal Learning | Non Verbal (R) | 1.61 | .99 | 1.92 | .87 | .092 | 3.37** |
| | Verbal (L) | 2.53 | .89 | 1.96 | .78 | .083 | 6.87** |
| Content Preference | Open-ended (R) | 1.65 | .76 | 1.95 | .88 | .082 | 3.66** |
| | Structured (L) | 2.69 | .69 | 2.16 | .98 | .084 | 6.31** |
| Class Preference | Concrete (R) | 2.39 | .95 | 2.30 | .991 | .097 | .928 |
| | Abstract (L) | 2.25 | .972 | 2.13 | .881 | .118 | .99 |
| LearningPreference | Divergent (R) | 3.06 | 1.02 | 3.23 | 1.03 | .131 | 1.29 |
| | Convergent (L) | 1.7 | .91 | 1.42 | .94 | .118 | 2.41** |
| Interest | Artistic (R) | 2.73 | 1.22 | 2.99 | 1.76 | .152 | 1.71 |
| | Temporal Interests (L) | 1.38 | 1.20 | 1.04 | 1.00 | .139 | 2.42* |
| Overall Learning Styles | Right Hemispheric | 11.39 | 2.89 | 12.36 | 3.42 | .405 | 2.39* |
| | Left Hemispheric | 10.49 | 2.78 | 8.71 | 2.76 | .353 | 5.04** |

The Mean values in Table 1 depicts that distance teacher trainees exhibit right hemispheric domination ($M=11.39$) over left hemisphere ($M=10.49$) in respect to overall learning styles and also for two dimensions of learning styles, namely, learning preference and interest, whereas left-hemispheric dominance has been exhibited by these trainees in its verbal and content preference dimensions of learning styles. Thus they prefer verbal and structured content for learning, like concrete learning, employ divergent learning styles and favor inventing new things.

Among face-to-face trainees also right hemispheric domination ($M=12.36$) surpasses the left-hemisphere ($M=8.71$) in overall learning styles, and also exhibit right-hemispheric dominance over left-hemisphere in three dimensions of learning styles, namely, learning preference, class preference and interest, that is they have more preference for divergent and inventive learning styles rather than convergent and improvisation styles of learning (as per Mean values in table 1). In dimensions of verbal learning, usage of left hemisphere ($M=1.96$) and right hemisphere ($M=1.92$) is more or less equal i.e. they are equally inclined towards learning of verbal and non-verbal content. For content preference, on-campus trainees have more preference for structured content ($M=2.16$) than open-ended lessons ($M=1.95$). These trainees may be profiled as divergent learners having artistic interests and preference for inventing new things.

The comparison between the two groups of trainees on ten styles of learning was made by employing t-tests and results have been summarized below:

The t-values in Table 1, elucidate that on the dimension of verbal learning distance teacher trainees differ significantly from face-to-face teacher trainees in non-verbal ($t=3.37$, $p<.01$) as well as verbal styles (6.87 , $p<.01$). In other words, distance trainees favor verbal instructions more than on-campus trainees and the trainees in latter group have more preference for learning by actions and visual presentation than trainees in former group. On Content Preference dimension, significant differences exist between distance teacher trainees and face-to-face teacher trainees on their preference for open-ended ($t= 3.66$, $p<.01$) and structured content ($t=6.31$, $p<.01$). The on-campus trainees have significantly higher preference for open-ended content than their counterparts in distance education but significantly lesser preference for structured content than distance trainees. Thus on-campus teacher learn better with open-ended lessons, focusing on main idea of the concept and exploring the knowledge than the distance teacher trainees, who on the other hand, have more liking to use structured lessons, and are better in learning by examining the specific details than their counterparts in face-to-face mode. For Class preference, non-significant differences exist between distance teacher trainees and face-to-face trainees which shows that both the groups are equal in their preference for concrete as well as abstract learning styles.

On the dimension of Learning Preference, t-values for divergent thinking indicate that trainees in distance and face-to-face education do not differ significantly, thus are more or less equal in their divergent thinking, ability to concentrate on several things simultaneously, competitiveness and adjustment. But the trainees in two groups do differ significantly in their convergent thinking ($t=2.41$, $p<.05$). The values of mean demonstrate that the trainees in distance education have more preference to learn individually by concentrating on one thing at a time, have more social ability and lesser tolerance than on-campus trainees. The values on the dimension of Interest depict that trainee in distance education do not differ significantly from on-campus trainees in their artistic interest i.e. their imagination, solving complex problems, artistic activities etc ($t=1.71$, $p>.05$). But in the temporal interests, distance teacher trainees differ significantly from trainees in face-to-face mode, as the former group has greater interest than latter group for improvisation i.e. to improve the things and for simple problem solving.

When the dominance levels of two hemispheres with respect to their overall learning styles between two groups of secondary teacher trainees were compared, significant t- values equal to 2.39 and 5.04 respectively for right and left hemispheric functioning were observed. The trainees in face-to-face education ($M= 12.36$) have significantly higher overall right hemispheric dominance in learning styles than their counterparts in distance education ($M=11.39$), who exhibit significantly greater dominance of left hemisphere ($M=10.49$) in their learning styles as compared to face-to-face trainees ($M=8.71$).

Thinking Styles

Table 2: Inter-group difference on Thinking Styles between Secondary Teacher Trainees in Distance and Face-to-Face mode

| Dimensions of | Thinking styles | Distance Teacher Trainees | | Face-to-Face Teacher Trainees | | S.E. _D | t-values |
|-------------------------------|-----------------------|---------------------------|------|-------------------------------|------|-------------------|----------|
| | | Mean | S.D. | Mean | S.D. | | |
| Logical/ Fractional | Holistic (R) | 2.95 | 1.15 | 2.91 | 1.17 | .148 | .27 |
| | Fractional (L) | 1.42 | 1.05 | 1.1 | .994 | .094 | 3.40** |
| Divergent/ Convergent | Deductive (R) | 2.61 | 1.24 | 3.01 | 1.27 | .161 | 2.48 * |
| | Inductive (L) | 1.85 | 1.16 | 1.39 | 1.13 | .148 | 3.11** |
| Creativity | Creative Thinking (R) | 3.04 | 1.15 | 2.68 | 1.18 | .151 | 2.38 * |
| | Intellectuality (L) | 1.59 | 1.05 | 1.46 | 1.15 | .142 | .92 |
| Problem Solving | Optimistic (R) | 2.91 | 1.17 | 3.31 | .945 | .135 | 2.96** |
| | Pessimistic (L) | 1.7 | 1.07 | 1.37 | .844 | .122 | 2.68** |
| Imagination | Imaginary (R) | 2.49 | 1.18 | 2.55 | 1.19 | .153 | .39 |
| | Analytic (L) | 1.96 | 1.15 | 1.57 | 1.09 | .141 | 2.76** |
| Overall Thinking Styles | Right-hemispheric | 14.01 | 3.38 | 14.46 | 3.64 | .453 | .99 |
| | Left-hemispheric | 8.52 | 2.84 | 6.9 | 2.95 | 2.89 | 5.60** |

On examining the values of mean on each of the ten thinking styles, it is clear that distance teacher trainees exhibit right hemispheric domination over left hemisphere with regards to overall thinking styles and also the five dimensions of thinking styles, namely, logical/fractional, divergent/convergent, creativity, problem solving and imagination. These trainees predominantly employ right-hemispheric thinking styles and thus have more preference for holistic, divergent, creative, optimistic and imaginative thinking styles (Table 2)

The on-campus teacher trainees are also predominantly right hemispheric in their overall thinking styles and also in its five dimensions as right-brain dominance surpasses the left-hemisphere on thinking styles (as per Mean values in table 2). Thus these trainees may be characterized as holistic, divergent, creative, optimistic and imaginative in their thinking styles.

On comparing the level of hemispheric dominance between distance trainees and face-to-face trainees, following results have been obtained:

In Logical thinking, trainees in distance and face-to-face education do not differ significantly ($t=.27$, $p>.05$), thus are equally inclined towards holistic thinking styles. In fractional thinking, distance trainees have significantly higher dominance than on-campus trainees ($t=3.4$, $p<.01$), i.e. they have more power of retaining and recalling names and numerical figures and sequence of ideas analogical relationship than on-campus trainees. On the dimension of Divergent/Convergent thinking styles, face-to-face trainees have significantly higher dominance of deductive thinking than the distance trainees ($t=2.48$, $p<.05$). In other words, the former group has significantly more preference for deductive learning and independent thinking than the latter group. Whereas trainees in distance education displayed significantly higher dominance of inductive thinking than on-campus trainees ($t=3.11$, $p<.01$). It implies that inductive learning, responsiveness to what hear and say and finding directions in familiar surroundings are significantly more among trainees in distance education than their counterparts in face-to-face mode. In Creative thinking, the t -value (2.38 , $p<.05$) reveals that distance trainees exhibit creative thinking, intuitiveness, pre-planning, judgment through experience is significantly more than on-campus trainees. As to the Problem Solving, on-campus trainees have significantly higher optimistic thinking ($t=2.96$) i.e. they have more submissive temperament and determination than distance trainees, whereas distance trainees have more pessimistic thinking ($t=2.68$) as they have more attentiveness, repression, short temperedness than the on-campus trainees. For Imagination, non-significant difference exist between distance trainees and on-campus trainees in their imaginary thinking ($t=.39$, $p>.05$) but

Distance teacher trainees possess significantly higher analytical thinking than on-campus trainees ($t=2.76$, $p<.05$), indicating that rational and analytical learning, remembering languages and pictures and outlining are significantly more in distance trainees than on-campus trainees.

On the overall thinking styles, the t -value ($.99$, $p>.05$) reveal there exist no significant difference between distance trainees and on-campus trainees in their dominance of right-hemisphere. But two groups of trainees differ significantly in their left hemispheric thinking styles ($t=5.60$).

Distance trainees have significantly more preference for left-hemisphere as compared to on-campus trainees for showing that fractional, convergent, intellectual, pessimistic and analytic thinking is significantly higher among trainees in distance education as compared to their counterparts in face-to-face education.

5.0 Discussion

The findings of the present study are in line with the some of the earlier studies on comparison of learning styles of distance and traditional face-to-face learners conducted by Harper & Kemper, 1986; Diaz & Cartnal, 1999; Aragon et al., 2001, Halsane & Gatta, 2002; and Thang 2005 as they have also found the significant differences in learning/ cognitive styles of distance and face-to-face learners. Jansen and Bruinsma (2005) reported that older students use deep information processing strategies (left-brain attribute) more than the younger students. Deep information processing strategies can also be seen as something that goes together with maturation.

The distance students also displayed collaborative qualities in their styles as learners that were related to their need for structure (dependence), and their willingness to participate as good class citizens (Participant dimension). This correlation demonstrated that, though online students prefer independent learning situations, they are willing and able to participate in collaborative work if they have structure from the teacher to initiate it. In his online class, the lead author has used "list serves" and "threaded discussion" areas to promote collaboration among distance students. However, in the past, the author designed collaborative activities among students that required students to initiate peer contact, and to conduct the collaboration with a minimum of teacher-provided structure and support. Based on the findings of the current study, it is apparent why this strategy failed: Online students will apparently respond well to collaborative activities, but only if sufficient structure and guidance is provided by the instructor. The mistake made by the author was that he assumed that online students would be self-directed, and autonomous, regardless of the type of learning activity. In contrast, the traditional class students had collaborative tendencies that were related to their needs to

be competitive, and to be good classroom citizens. In other words, they were interested in collaboration to the extent that it helped them to compete favorably in the class, and to meet the expectations of their teachers. Thus, collaboration was tied to obtaining the rewards of the class, not to an interest in being collaborative per se.

Students in the equivalent on-campus class were significantly more Dependent learners than the distance group. Since Dependent learners prefer structure and guidance in the learning setting, it is not difficult to understand why dependent learners might view the isolation and need for self-reliance in a distance education environment with some apprehension. The low level of independence displayed by on-campus students was not related to any other aspects of their styles as learners. Thus, independence was clearly a weaker learning preference for traditional class students.

6.0 Conclusion

Learning styles research can give instructors new directions for making changes in their classrooms. It is imperative that learning materials be designed for maximum flexibility and diversity by developing tasks and activities which integrate the various learning styles. Different social groupings, alternative activities, more complex projects can all be introduced as efforts to create opportunities for teacher trainees in distance education to use their various strengths in dealing with course materials. Learning styles provides a stable-enough characterization to plan pedagogical strategies. These strategies appear more responsive to the needs of the teacher trainees in distance education. They seem to provide better learning opportunities. Distance teacher educators or instructors can design a systematic set of activities that utilize all learning styles before completing an assignment. They give fresh direction to alternative teaching (Dzakiria et al, 2004). Moreover, strengthening lesser-preferred learning styles help students to expand the scope of their learning, become more versatile learners, and adapt to the requisites of the "real world" (Sarasin, 1998, p. 38).

Designing collaborative assignments for independent learners, or independent assignments for dependent or collaborative learners, is appropriate and even necessary. The adaptation of the design of distance education to students' cognitive styles should allow diversified learning styles to meet all students' characteristics. Specifically, the teacher should selectively provide theory-based learning to the assimilators and application-based learning to the accommodators; provide individualized learning to field independent students and cooperative learning to field dependent ones (Liu and Ginther, 1999).

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Distance Education as a Pathway in the Creation of Knowledge Society

Supreet Kaur

Abstract

The success of any knowledge based society and economy depends on promoting the acquisition of key competencies and broadening opportunities for innovative and flexible forms of learning for every citizen of the country. The concept of knowledge society includes dimension of social, cultural, economical, political and institutional transformation, and a more pluralistic and developmental perspective. The aim of this paper is to discuss the contribution of distance education in enhancing access to knowledge and promoting applications of knowledge for sustained and inclusive

1.0 Introduction

Knowledge and education especially higher education are the integral parts of wisdom and socio-economic structure. Education supplies the economy with human resources with requisite knowledge training and qualification to meet the demand for economic development.

For India to thrive in the global knowledge economy it is going to be important to change the educational system. To become knowledge driven, it will also be important to recognize change in information and communication technology. Knowledge Revolution leads to Knowledge Society.

The digital revolution has opened up new opportunities for mankind to generate new kinds of wealth and prosperity by ushering in the knowledge economy. The new millennium has unfolded a vital sense of interconnectedness all over the globe emerging the knowledge revolution, which has increased the extensity, intensity, velocity and impact of global power.

So far as the concept of knowledge is concerned, according to Bezborah, "Knowledge is the accumulated store or information and data we carry around in our minds, together with our own interpretation of them based on reason instinct and prior experience. It can include know what (knowledge about facts), 'know why' (scientific knowledge of the principles and laws of nature), 'know how' (skill capacity to do something), 'know who' (information about who knows what and how to do what).

These days there is much talk about the transformation of the Indian economy in to a Knowledge Society.

2.0 Understanding the Knowledge Society

It is commonly thought that knowledge has replaced industrial organization and production as the major source of productivity. The term 'Knowledge Society' generally refers to a society where knowledge is the primary production resource instead of capital and labour. A knowledge society creates shares and uses knowledge for the prosperity and well-being of its people.

Globalization and the changing world economy are driving transition to knowledge-based economies. In particular, developing countries need knowledge-based economies not only to build more efficient domestic economies, but to take advantage of economic opportunities outside their own borders. In the social sphere, the knowledge society brings greater access to information and new forms of social interaction and cultural expression. Individuals therefore have more opportunities to participate in and influence the development of their societies.

According to Evers (2000), characteristic of a knowledge society are:

- Its members have attained a higher average standard of education in comparison to other societies and a growing proportion of its labour force are employed as knowledge workers i.e. researchers, scientists, information specialists, knowledge managers and related workers;
- Its industry produces products with integrated artificial intelligence;
- Its organizations – private, government and civil society – are transformed into intelligent, learning organizations;
- There is increased organized knowledge in the form of digitized expertise, stored in data banks, experts systems, organizational plans, and other media;
- There are multiple centres of expertise and poly-centric production of knowledge; and
- There is a distinct epistemic culture of knowledge production and knowledge utilization.

The concept of a 'Knowledge Society' is often confused with that of an 'Information Society'. The latter is, however, considered more limited, as the application of knowledge to data creates information, and information has to be activated or generated by knowledge. Information is

codified result of observation, but knowledge entails the capacity to act. (www.gesci.org/.../ICT,%20Education,%20Development,...)

The concept of 'knowledge society' includes a dimension of social, cultural, economical, political and institutional transformation and a more pluralistic and developmental perspective. It is regarded as a human process.

3.0 Role of Distance Education in the Creation of Knowledge Society

Augmentation of human resource has become the need of the day when our country is moving toward faster economic growth and development. Universalisation of education has therefore been recognized as a priority in our national policy initiatives targeted at human resource development. The extant institutional infrastructure for both general and technical education has assumed structure and styles that precludes universal accessibility and therefore, it often lags behind when it comes to inclusiveness in educational opportunities.

For India to be globally competitive in the 21st century, a critical factor would be our ability to harness our knowledge potential. With 550 million people below the age of 25, our human capital is our greatest asset. To best utilize this burgeoning potential the country needs a knowledge oriented paradigm and focused capacity and quality building in the field of education. The potential is tremendous, but the task of realizing it is daunting too.

Distance education is a promising tool that can support the conversion of the "information society" to a widespread "knowledge society", and, in fact, to a knowledge society without geographic limits : local to international education possibilities, limited at this point in time only by language and by the pace of the spread of technology. Technology supporting learning include radio, television mobile phone, and computer. Whether through an exclusively virtual classroom or individual tutorial, or a technology-supported educational setting that includes "face" time with instructors, the field is expanding at all age levels and in both traditional education and training settings.

4.0 Distance Education Helps to Meet the Societal Needs

Several of the societal needs created by the knowledge society relate to the core competencies of adult and continuing educators. Most will agree that the Knowledge Society will require more individuals to have some level of postsecondary education. It will also require that a higher percentage produce high school students graduate with the skills needed to move onto higher education. Around the country, continuing and distance education units have been at the forefront of innovation in this arena. They have dramatically increased the number and diversity of college degrees available to working adults through online learning, evening

programs, and blended programs. They have also pioneered the use of 'dual enrollment' courses that allow students too simultaneously earn high school and college credit. The importance of these innovations to the national education and economic development strategy will move continuing and distance education closer to the mainstream of higher education.

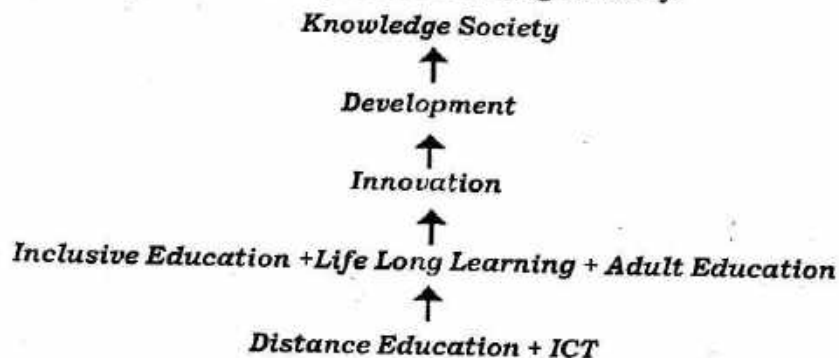
The Knowledge Society will also stimulate new collaborations between institutions, as technology eliminates geography as a defining factor in the relationship between the institution and its students and between institutions and faculty in a discipline. Increasingly, online learning allows location-bound students to study anywhere in the world. Institutions no longer are restricted to programs that can be taught by local, in-residence faculty members, but can collaborate with other institutions to offer the degrees most relevant to their students, wherever they are located.

5.0 Distance Education for Life Long Learning Needs

The changing landscape of learning is helping India to emerge as a technology driven knowledge based society and economy. The success of any knowledge based society and economy depends on promoting the acquisition of key competences and broadening opportunities for innovative and more flexible forms of learning for every citizen of the country. The necessity to adjust to the prerequisites of the knowledge based society and economy brought about the need for lifelong learning in India.

Ensuring lifelong learning opportunities is becoming critical as individuals need to continually update their skills in an increasingly globalized knowledge society. Furthermore, in developing countries the growing demand for enrolments means that governments have to turn to innovative options to meet these challenges. The quality of distance education becomes a priority as new lifelong learners opt for distance education so that they can study while still meeting their social and professional responsibilities. New challenges to quality higher education arising from the impact of globalization include the proliferation of new providers, cross-border provision and increased electronic delivery of higher education.

Distance education coupled with ICT as an enable of innovation and education required for creation of knowledge society.



Distance Education is changing the access to knowledge, the process of learning, and the delivery of education and training all over the world. The condition of conventional methods of delivering education had limited success. Innovative open, distance and technology-mediated learning offer a more realistic alternative as it allows for open access to quality education and increases the capacity of the university to respond to growing demands for quality undergraduate and graduate education.

Since learning in the knowledge-based society is considered to be holistic, as it is a lifelong activity and cuts across different learning generations and life spheres (private, public and work). The focus should not be confined to traditional formal learning institutions such as schools and universities; and existing training organizations and training practices, but also embraces adult education, informal learning, and workplace-based learning which are efficiently provided with the help of Distance Education. The potential impact of ICT on learning is the vision that it enables learning 'anywhere, anytime, and anyhow'. With ICT, knowledge is not constrained by geographic proximity, and offers more possibilities for sharing, archiving, and retrieving knowledge. In addition, the knowledge society and widespread use of ICT generates a need for new digital skills and competences for employment, education and training, self-development, and participation in society. Distance Education Coupled with ICT has potential to widen access to educational resources, improve the quality of learning and improve management efficiencies of the education system.

It is important to note that ICT use in Distance education and development to build a knowledge society is not simple about teaching 'ICT literacy' – i.e. learning to operate the technology – but also about building higher-order skills such as knowing and understanding what it means to live in a digitized and networked society and use digital technology in everyday life. This includes understanding how ICT applications and services function, as well as knowing where to search for certain information, how to process and evaluate information, and how to assess the reliability and trustworthiness of multiple sources of information (online and offline). It is especially important, when dealing with educational content, to be able to assess the quality and reliability of knowledge and to contextualize it effectively.

Distance education coupled with ICT is particularly important for developing countries in the areas of higher education teacher training, schooling and non formal learning.

6.0 Conclusion

Distance Education helps in the development of knowledge society attributes in employers, employees, citizens and the public service,

including higher order thinking skills, lifelong learning habits, and the ability to think critically, communicate and collaborate, as well as to access, evaluate, and synthesize information. It also helps in the development of ICT skills and competencies in the public and private sector, as a requirement for operating in an ICT-rich workplace and society. Distance education coupled with ICT helps in the resolution of structural problems and deficits in social and commercial systems. This can include using ICT to enhance administrative and knowledge transfer.

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Role of Information and Communication Technology in Open and Distance Education

Gurpreet Kaur

Abstract

Universalization of education is the top priority of the developing Nations. But the extension of quality education to remote and rural regions has become a hard task for a country like India ; with multilingual population and geographical separation of one region from another. With a view to make education 'Available, Accessible, Acceptable and Adaptable' efforts have to be made to resort to latest technological advancements. The paper discusses the related issue in the light of National Mission on education through Information and Communication Technology (NMEICT) which stresses on abridge the digital divide.

1.0 Introduction

The world of education is currently undergoing a massive transformation as a result of the digital revolution. All around us people are learning with the aid of new technologies: children are playing complex video games, students are taking courses at online high schools and colleges, and adults are consulting Wikipaedia, onlineencyclopaedia. New technologies create learning opportunities that challenge traditional schools and colleges. These new learning niches enable people of all ages to pursue learning on their own terms. People around the world are taking their education out of school into homes, libraries, Internet cafes, and workplaces, where they can decide what they want to learn, when they want to learn, and how they want to learn. Internet cafes are springing up all over the world, where people can go and log on to the web for a small fee. These are perhaps the libraries of the future. They particularly attract young people who spend hours on the web, engaging in conversations and games, reading about what is happening in the world, or exploring different sites that relate to their interests. Rajiv Gandhi's doctrines backed by his technical advisor Sam Pitroda has paved the way for mass-scale arrival of 'personal computers' in the Indian scenario in the late 80s', and the 90s' was marked by spurt of new age of curriculum, the 'computer classes' for specialized training for animation, graphics, game development, etc. Later in when cable television arrived in the 1990s, dedicated channels for distance learning virtually got unprecedented boost, more so with the

emergence of VSAT. Now it is digital television with service providers beaming educational programs for school children into homes and schools stamping the role of ICT (Information and Communications Technology) in Indian education. In recent years we witnessed many radical changes and rapid growth in the education sector. This is due to several factors, and the one factor that needs to be mentioned first is India's telecom success story, extensive telecom coverage and affordable rates, bandwidth and Internet access is available across India. The Internet offers many free tools for audio-visual instruction.

2.0 Role off ICT in Open and Distance Education

With the introduction of new education policies and the opening of the Indian education sector, an increased participation from overseas universities are all set for operations in India. It's only a matter of time before Yale, Harvard, Oxford, etc. through their network will ancash on the growing demand for business degrees or skills-oriented courses. Already, Simon Fraser University of Canada is running courses in S.D. College Chandigarh. Distance education and on-line courses are popular once again, thanks to the Internet. ; As busy people realize they need more education, they increasingly opt to take distance education courses. Distance education over the Internet is exploding at the college and university level. For example Indira Gandhi National Open University, IGNOU. Open and distance learning is closely linked to innovation in information and communication technologies, to the identification of new learning needs and new ideas about how information may be accessed and applied in the information society. In particular open and distance learning has the potential to enhance a more student-centred and consumer-oriented approach to education, leading in turn to more extensive contact between educational institutions on the one hand and community-based organizations on the other. Wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching. Thus, ICT enabled education will ultimately lead to the democratization of education. Especially in developing countries like India, effective use of ICT for the purpose of education has the potential to bridge the digital divide. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs etc have been used in education for different purposes. While the future of education in India looks promising, ICT can certainly help in disseminating educational content, and facilitate remote learning, especially in the Indian context. It can overcome challenges like teacher shortage and student dropout and bridge the digital divide. The

new century and millennium have opened with the world experiencing serious divides – demographic, economic, gender, genetic and digital. During the last 12 months, reports on the ever widening rich-poor divide have been published by the World Bank, the United Nations Development Programme and the International Fund for Agricultural Development. While the rich countries, and the rich in all nations, are benefiting economically and socially from the 'new economy' based on technology, knowledge, information and innovation, the poor nations and the poor in all countries are being further marginalized in their economic status and standard of life.

3.0 A Growing Gap

The 1972 Stockholm Conference highlighted the relationship between poverty and environmental degradation. Despite increased awareness, the rich-poor divide in economic well-being is growing. Since Europe's industrial revolution, technology has been an important factor in this economic divide. The challenge now lies in enlisting technology as an ally in the movement for gender and social equity and for fostering harmony within humankind and between it and nature. The digital revolution provides an opportunity to do this. The focus of the paper is on how ICT integration in education can provide, right from breaking time and distance barriers to facilitate collaboration and knowledge sharing among geographically distributed students. ICT increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. It can influence the way students are taught and how they learn as now the processes are learner driven and not by teachers. This in turn would better prepare the learners for lifelong learning as well as to contribute to the industry. It can improve the quality of learning and thus contribute to the economy.

4.0 Effective ways For Reaching the Unreached

For the students/learners, open and distance learning means increased access and flexibility as well as the combination of work and education. It also means a more learner-centric approach, which promises more enrichment, higher quality and better ways of interaction. For employers, it offers high quality and usually cost-effective professional development in the workplace. It allows upgrading of skills, increased productivity and development of a new learning culture. In addition, it means sharing of costs, of training time, and increased portability of training. The emergence of the Internet and related networks such as the World Wide Web has had and will increasingly have radical effect on the transformation of education and training in all sectors. The impact is already significant in all developed countries, and the great majority of developing countries are despite difficulties and fears seeking to take part in the emerging global educational community.

India is making extensive use of ICTs by harnessing open source software, satellite technology; EDUSAT, SAKSHAT, e-GYANCOSH, local language interfaces, easy to use human-computer interfaces, digital libraries, etc. with a long-term plan to reach the remotest of the villages. Community service centres have been started to promote e-learning throughout the country. Notable initiatives of use of ICT in education in India include: Indira Gandhi National Open University (IGNOU) uses radio, television, and Internet technologies for

- Increased access,
- Flexibility of content and delivery,
- High quality, cost effective professional development in the workplace, Upgrading of employee skills, increased productivity,
- Increase the capacity and cost effectiveness of education and training systems,
- To reach target groups with limited access to conventional education and training,
- To support and enhance the quality and relevance of existing educational structures,
- To ensure the connection of educational institutions and curricula to the emerging networks and information resources,
- To promote innovation and opportunities for lifelong learning.
- Eklavya initiative: Uses Internet and television to promote distance learning (EKLAVYA Technology Channel, India, 2007).
- IIT-Kanpur has developed Brihaspati, an open source e-learning platform (Bhattacharya and Sharma, 2007).

The telecentre movement in India can be traced back to 1998 when the M S Swaminathan Research Foundation started three Village KnowledgeCentres in Pondicherry with the support from International Development Research Centre (IDRC) and Canadian International Development Agency (CIDA). The number of telecentres in India are growing over the years making India home to one of the largest number of telecentre related initiatives based on public access to technology approach.

With a vision to create a knowledge society in rural India through the use of telecentres, Prof. MS Swaminathan, the man behind Green Revolution and one of the architects of resurgent India, conceived 'Mission 2007: Every Village a Knowledge Centre', a multi-stakeholder partnership to empower the rural communities with the power of ICTs. The aim of the 'Mission 2007: Every Village a Knowledge Centre' is to bridge the urban rural digital divide and to harness ICTs for addressing the major problems

of rural India like poverty, illiteracy, ill-health, and low farm productivity. A National Alliance for Mission 2007 was formed in 2003 in order to strengthen the movement bringing together various stakeholders. Started with just 80 partners in 2003, today the movement has more than 412 partners. Since early August 2007 this network is referred to as "Grameen Gyan Abhiyan (Rural Knowledge Movement)" as suggested by several partners. They suggested that from now onwards the concept should become movement. Some of the GGA partners are testing different technologies and developing applications for ICT-based rural centres. Academicians, Corporate Sectors and Policy Makers could use this platform for knowledge and technological empowerment. The Mission turned into a Movement and the efforts intensified further. With the Government of India's National e-Governance Plan and Honorable President of India's announcement to setup 240,000 Bharat Nirman Common Services Centres in India has brought much hope to the GrameenGyanAbhiyan (Rural Knowledge Movement). The increasing number of partners from different domain is the best example to support this argument. In the area of capacity building, it is proposed to train at least one woman and one man from each village in computer literacy, under the auspices of the Jamsetji Tata National Virtual Academy for Rural Prosperity (NVA).

At the World Summit on the Information Society (WSIS) held recently in Tunis, a programme titled "Connect the World by 2015" was launched. The aim is to ensure the benefits of the digital revolution reach every country and every part of each country by the year 2015, which is also a benchmark year for achieving the UN Millennium Development Goals. At a function held in Tunis on November 15, 2005, the International Telecommunication Union recognised India's Mission 2007: Every Village a Knowledge Centre, as the flagship of the "Connect the World" movement. The National Alliance currently includes 22 government organisations including the Department of Information Technology, the Ministry of Panchayati Raj, the Telecom Regulatory Authority of India, and Bharat Sanchar Nigam Limited; 94 civil society organisations; and 34 private sector information and communication technology (ICT) leaders such as NASSCOM, TCS, HCL, and Microsoft. Besides, 18 academic institutions such as the Indian Institutes of Technology, and the Indira Gandhi National Open University; and 10 financial institutions such as the National Bank for Agriculture and Rural Development (NABARD) and the State Bank of India are involved. In addition, an international support group has been formed to provide technical and financial support to Mission 2007. It has the active participation of the International Development Research Centre and the Canadian International Development Agency, the Swiss Agency for Development and Cooperation (SDC), the United Kingdom's Department for International Development, the World Bank, the International Crops Research Institute for the Semi-Arid Tropics, the United Nations

Educational, Scientific and Cultural Organisation, the World Health Organisation, the Food and Agriculture Organisation, the World Food Programme, the International Fund for Agricultural Development, the McArthur Foundation, the Jhai Foundation, and the Global Knowledge Partnership. Following the launching of Mission 2007 over two years ago as well as the recommendation of the National Commission on Farmers that village knowledge centres (VKCs) should be established as soon as possible for the knowledge and skill empowerment of rural families, some developments have taken place that give hope that the urban-rural digital divide can be substantially ended by August 15, 2007. These include: the decision to establish 100,000 ICT-based community service centres by August 15, 2007, by the Department of Information Technology, Government of India. Leveraging SWAN (State Wide Area Network) infrastructure, community service centres will provide reliable broad-based connectivity to remote villages. Setting up village resource centres at the block level by the Indian Space Research Organisation (ISRO) in collaboration with appropriate public and civil society institutions to provide a wide range of services including tele-conferencing facilities. The decision of the Ministry of Panchayati Raj to establish Internet connected ICT centres in all the 240,000 panchayats and local bodies in the country by August 15, 2007. This will help to provide a public space for VKCs, characterized by access for all sections of rural society. The rural information society initiative of BSNL which will aim to set up 100,000 VKCs each covering a population of 2,000 or more. (<http://hindu.com/2005/11/25/stories/2005112504941000.htm>) Support by NABARD through the Rural Infrastructure Development Fund to State Governments to organise ICT self-help groups to establish and manage VKCs. Promotion of e-governance as a key component of the National Common Minimum Programme and the proposal to include knowledge connectivity as an essential component of the Bharat Nirman Programme. Setting up of public tele-information centres (PTICs) through the Universal Service Obligation Fund. Inclusion of e-health facilities under the National Rural Health Mission by the Ministry of Health and Family Welfare. All this has generated a huge interest in education and private companies are rushing to tap market opportunities. A recent research study by Springboard Research says India's Education sector will step up its IT spending from an estimated USD 356 million in 2008 to USD 704 million in 2012.

5.0 Conclusion

The range of factors including; emerging ICTs, liberalization, privatization and globalization have amplified the demand for open and distance learning. The importance of the use of the resources and technologies of the Internet in education is obvious today. It has been

shown that the use of the Internet in the sphere of organization and management of education leads to the increase of education accessibility on a global scale, and may lead to the growth of economic efficiency of an educational institution's activity. All developed countries of the world have more or less extensive programmes of Internet development in the sphere of education. The overwhelming majority of developing countries, despite difficulties, problems and fears, seek as far as possible to take part in the formation of the global educational community. In doing so, the systematization and analysis of the experience of Internet usage in education becomes an urgent issue for each country and the global community as a whole.

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Q-Study of Desirable Teaching Behaviours for a Teacher Educator in Distance Mode as Perceived by Teacher Trainees

Vijay K Grover

Abstract

The study is about finding desirable teaching behaviours using Q-methodology. The data so obtained is put to interperson correlation to find groups of person. The data is decoded to find out the items preferred by the groups as desirable teaching behaviours within a group. These groups of items were dubbed according to the nature of items. This led to obtaining of behaviours under different categories: subject mastery, managing relations, inspiring acts, commitment evidence, and business oriented delivery and emotional exhibits.

1.0 Introduction

Measuring subjective variables objectively has been the biggest problem in social science research. One gets veritable responses to subjects like patriotism, values, love, personality and the like. One such subject can be the ideal behaviour of the teacher. A teacher's behaviour can be considered as the aggregate of small episodes of interaction, may it be in monologues or dialogues. Teaching behaviours amount to such episodes of behaviour which can be evaluated by the stakeholders on the scale of desirability. Due to wide variety of teaching learning contexts desirable teaching behaviours can only be best assessed by the clientele concerned i.e., learners. Distance mode learning has distinct features to its identity and requires unique qualities of a teacher. Hence an attempt has been made to investigate the desirable teaching behaviours for a teacher educator in the distance mode.

2.0 Introduction To Q-Methodology

Q-methodology was devised by Stephenson "to characterize a set of philosophical, psychological, statistical and psychometric ideas oriented

to research on the individual" (Stephenson, 1953). In this method a subject is required to rank order a set of stimuli according to a well defined rule, where a sorter is to place a defined number of cards in a defined number of piles using approval/disapproval (or some other) criterion, according to a defined distribution. The distribution is known as a Q-distribution which can be quasi-normal, normal or some other.. As per Brown (1993) Q-methodology provides a foundation for the systematic study of subjectivity, a person's view point, opinion, beliefs, attitude and the like. Exel and Graaf (1985) have reported that in a Q-methodological study people are presented with a sample of statements about some topic called Q-set. An unstructured Q-sort is a set of objects/items/behaviours assumed without specific regard to underlying factors i.e., no specified (pre-decided) factors are kept in mind while framing the objects/items/behaviours of the measure. Structured Q-sort consists of objects/items/behaviours framed or collected with specific regard to the underlying structure of factors (or variables). In the present study an Unstructured Q-sort has been used.

3.0 Present Investigation

The present investigation uses the approximation of the ideal procedure. The data is analyzed by interperson correlations of the responses given by the subjects. The groups of persons were formed on the basis of high correlations among the persons (instead of factor analysis). From the groups mean scores in respect of all the 39 items were found out (instead of calculating Q-array). The highest mean score items represent priority of the group for Desirable Teaching Behaviour for distance mode teacher educator. These items were rank ordered to ascertain the priority of behaviours assigned by the group. On the basis of the nature of high priority items (items with mean score in the range of 5 to 7), group of items was dubbed (named) to show their independent existence as a factor in factor analysis.

Table 1: A Sample of Data Collection of a Respondent (items distribution and scoring)

| | Most desirable | Slightly less than most desirable | Somewhat less than most desirable | Equidistant from most desirable and least desirable | Somewhat greater than least desirable | Slightly greater than least desirable | Least desirable |
|---------------------------|----------------|-----------------------------------|-----------------------------------|---|---------------------------------------|---------------------------------------|-----------------|
| No. of Cards to be placed | 1 | 3 | 8 | 15 | 8 | 3 | 1 |
| Score | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-------|----|-------|----|----|----|-------|
| 13 | 35 | 1 | 26 | 10 | 38 | 11 |
| 1 | 9 | 7 | 2 | 24 | 39 | 1 |
| Cards | 16 | 21 | 5 | 29 | 12 | Cards |
| 3 | 23 | 15 | 33 | 3 | | |
| Cards | 28 | 19 | 3 | | | |
| | 6 | 22 | 17 | | | |
| | 14 | 27 | 18 | | | |
| | 25 | 30 | 20 | | | |
| 8 | 31 | 8 | | | | |
| Cards | 32 | Cards | | | | |
| | 34 | | | | | |
| | 36 | | | | | |
| | 37 | | | | | |
| | 4 | | | | | |
| | 8 | | | | | |
| | 27 | | | | | |
| | 2 | | | | | |
| | 5 | | | | | |
| | 15 | | | | | |
| | 19 | | | | | |

15 Cards

The Table 1 describes the scheme of distribution of cards and the scoring scheme for data collected from a single subject. Thirty nine cards were used on which description of teaching behaviours is written and the respondent is instructed to place in the 7 piles of 1, 3, 8, 15, 8, 3 and one card using symmetric distribution on desirability scale. All the cards were numbered which are schematically shown in the distribution. Scoring is done from 7 to 1 in the decreasing order form the most approved to the least approved.

4.0 Findings

Thirty-nine cards were sorted by forty persons. Thirty six persons out of forty could be placed in one or other group on the basis of correlation analysis of reciprocation. The groups formed with identification numbers are shown in Table 2.

Table 2: Groups of Persons obtained on the basis of Interperson Correlation (N=40)

| Group | Identification numbers of Persons | Number of Persons |
|-------|-----------------------------------|-------------------|
| I | 1,7,18,20,26,28,30,33,35 | 9 |
| II | 4, 8,10,15,21,27,36,37 | 8 |
| III | 13,17,23,24,34,38 | 6 |
| IV | 2,9,11,25,32 | 5 |
| V | 5,16,22,29 | 4 |

It can be noticed from Table 2 that out of 40 persons three persons could not be placed in any of the group due to their insignificant correlation with any of the other person in the sample. Now with a simplified procedure of calculating mean values for each item assigned by the group members a priority index was developed. The items bearing a mean score between 5 to 7 were considered as approved behaviours by the group. On the basis of the nature of items the group of items was dubbed to give a common name. It should be noted that the item found in more than one group was retained only in the group where it received the higher rank order. Three items (item no. 6, 14 & 31) out of thirty-nine could not be placed in any of the group due to low correlation values. Due to paucity of space all the items could not be displayed, rather the titles (dubbed name) of these approved behaviours are shown in Table 3.

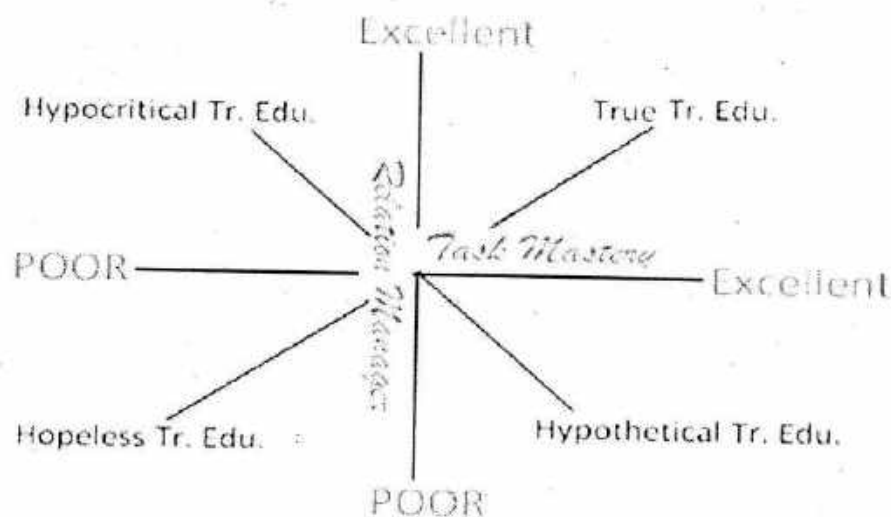
Table3: Description of Groups of items derived from Items Approved by the Groups

| Group | Number of items between mean score 5 to 7 (Desirable/approved behaviours) | Dubbed Title for the desirable behaviours |
|-------|---|---|
| II | 9 | Subject Mastery Display |
| III | 8 | Relation Management |
| VI | 6 | Emotional Exhibits |
| I | 5 | Inspiring Acts |
| V | 5 | Commitment evidence |
| IV | 4 | Business Oriented Delivery |

Table 3 indicates six groups of items corresponding to groups of persons placed in the decreasing order of items selected and hence the emphasis placed by the subjects on desirable teaching behaviours for a distance mode teacher educator.

5.0 Conclusion

On the basis of the present Q-study the desirable behaviours of a teacher educator operating in distance mode as perceived by the teacher trainees can be summarised as follows. The subject mastery (task) and relation managing are the most important teaching behaviours for a distance mode teacher educator. Along with these major dimensions the other important factors are ingredients of inspirational acts, business oriented delivery, commitment, evidence and emotional exhibits. Combining the task and relation dimensions we obtain different combinations as shown in the following figure.



The combination of dimensions leads to four kinds of teacher educators. True teacher educator has excellent subject mastery and is an excellent relation manager. Hypocritical teacher educator manages relation very well but is poor on task performance. A hypothetical teacher educator possesses adequate subject mastery but is a poor relation manager. Finally a teacher educator poor on both the dimensions is a hopeless teacher educator. So concludes, we can say that distance mode teacher trainees are looking for a "True teacher educator" for their contact program. Any other combination is unacceptable for quality teacher education in distance mode.

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An Initiative to Make Distance Learners Information Literate

Ravneet Kaur & Devendra Singh

Abstract

Information literacy is key to Lifelong Learning and Information Literacy Skills are at the apex of the information society. So programmes be initiated to integrate concept and standards of information literacy into the distance education for imparting these skills in the learners seeking education through distance and open learning institutions. The paper proposes some initiatives aimed at inculcating information literacy skills among the students of distance learning institutes so as to enable them to be self sufficient and independent learner.

1.0 Introduction

Even after more than sixty years of independence, India is far below the world average literacy rate because the opportunities for formal education are far too inadequate and the formal system of education is not sufficient enough to meet the demands of masses and bring equity in education. Distance education initiative indeed has contributed a lot to meet the inadequacy on various counts such as of human resources and finances, still it should be more learner oriented and precisely aimed at converting idealistic objective of reaching the unreachable into realistic achievable goals so as to ensure its affordability and accessibility both in time and financial terms.

As the population of learners opting for 'open and distance education' (ODE) is growing, so is the need to make them self-dependent in their studies by making them understand the application of information literacy skills. ODE has emerged as an effective tool to meet these challenges and is contributing towards creation of a Knowledge-based society. Information and Communication Technology (ICT) has helped in the propagation of distance learning through an effective mix of printed study material, multi-media packages, personal contact programme as well as virtual classroom concept. But at the same time, it has posed a serious threat by dividing the society on the basis of 'haves and have-nots' vis-à-vis boons of information technology. Hence, the need of the hour is to evolve and implement such means so as to enable the students of distance education to reap adequate benefits by making best usage of emerging ICT technologies.

At present, students in general and those in ODE system, in particular, cannot afford to purchase all the relevant books in a given subject, so they have to depend upon libraries for their specific needs but due to place and time constraints, they are unable to do so. Formal education system provides an opportunity to the students to delve deeply into the resources offered by the libraries, but most do not (Arms, 2000). In contrast, learners in ODE are not included in library orientation programmes offered by the academic institutions; while in turn, they need more information resources than their regular counterparts.

Online media is becoming the best tool to bridge the communication gap and internet has revolutionized the learning process but ODE Institutions are lagging behind in adapting the new technology. "Too often a distance learning course is launched with unwritten essential material with the expectation that students will be able to find their own library support. The home institution's library may not even know that the course has been launched until one of the students telephones to ask for books or for other services to be delivered (Brophy, 2000). It may be due to administrative reasons. But with the emergence of ICT, the less privileged lot can also be given quality education in the e-environment.

The physical library is a necessity for the academic institutions, but a digital/ virtual collection is important for ODE institutions. Students living in the far off and remote places cannot visit the library regularly, but if the digital collections are broad enough, perhaps more of these students will be heavy users of digital libraries (Arms, 2000). So, hybrid libraries are the gateway to impart distance education with more emphasis on e-resources in the present information era. To go with the changing times, learners receiving education through distance mode should be given the opportunity of e-learning together with traditional tools. And it is now widely accepted that people prefer to assimilate knowledge in different ways and distance education professionals, need to concentrate not only on providing the most effective delivery of learning material, but also on encouraging the students to be independent learners and assimilate knowledge for accomplishment of the purpose at hand.

Active learning implies that students do not limit themselves to resources supplied by their instructors, but also that they search for new materials themselves in order to solve problems at hand and to develop their competencies continuously (Roes, 2001).

In today's world, knowledge of e-media has become a necessity in relation to time and place management and through world wide web one has the whole world at one's fingertips (Collis and Meeuwssen, 1999). Though information is essential but information revolution with ICTs has

enhanced the burden of mis-information also. The information age requires its citizens to be able to evaluate the needed information because relying blindly on every piece of information can prove fatal, especially with internet where too much information is flowing without the barriers of space and time. Thus it becomes essential that learners, particularly in ODE who are almost not in touch with their teachers/guide, , should be made information literate by teaching them the application of information literacy skills as has been pointed out that " too many executives have become computer-literate...but not many executives are information literate" (Drucker, 1992, as cited in Eisenberg, 2008).

2.0 Concept of Information Literacy

The term 'Information Literacy' was coined by Paul Zurkowski in 1974. It has been defined by various authorities and individuals alike:

The Seven Pillars of Information Skills of the UK Standing Committee for National and University Libraries (SCONUL, 2011) has provided seven pillars in its model of information literacy, which are as follows:

Identify: Able to identify a personal need for information;

Scope: Can assess current knowledge and identify gaps;

Plan: Can construct strategies for locating information and data;

Gather: Can locate and access the information and data they need;

Evaluate: Can review the research process and compare and evaluate information and data;

Manage: Can organize information professionally and ethically;

Present: Can apply the knowledge gained: presenting the results of their research, synthesizing new and old information and data to create new knowledge and disseminating it in a variety of ways.

Moreover, Australian and New Zealand Institute for Information Literacy (ANZIIL, 2004) jointly prepared the Council of Australian University Librarians (CAUL) standards, which were revised in 2004. According to this model based on six core standards an information literate person should be able to:

- Recognize the need for information and determine the nature and extent of the information needed
- Find needed information effectively and efficiently
- Critically evaluate information and the information seeking process
- Manage information collected or generated

- Apply prior and new information to construct new concepts or create new understandings
- Use information with understanding and acknowledge cultural, ethical, economic, legal, and social issues surrounding the use of information

Similarly, Empowering 8TM Model by National Institute of Library & Information Sciences (NILIS), Sri Lanka (Wijetunge and Alahakoon 2005) contains eight components viz. *Identify; Explore; Select; Organise; Create; Present; Assess; and Apply*. An information literate person needs to emphasize upon these components.

But the definition of the Presidential Committee on Information Literacy, American Library Association (ALA) and Association of College and Research Libraries (ACRL) is considered to be a basic one, "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information (ALA 1989, as cited in ACRL, 2005). In 2005 some more aspects were added by the Association of College and Research Libraries, USA (ACRL, 2005) which are as follows:

- To be able to determine the extent of information needed
- To access the needed information effectively and efficiently
- To be able to evaluate information and its sources critically
- To be able to incorporate selected information into one's knowledge base
- To be able to use information effectively to accomplish a specific purpose
- To be able to understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally

3.0 Need & Standards for Information Literacy in Distance Education

Distance education is a path for Lifelong Learning. And information literacy skills are at the apex of the information society. As Jesús Lau, Chair, Information Literacy Section/ IFLA in the *Final Draft, Guidelines on Information Literacy for Lifelong Learning* advocated that "Information literacy and lifelong learning have a strategic, mutually reinforcing relationship with each other that is critical to the success of every individual, organization, institution, and nation-state in the global information society. These two modern paradigms should ideally be harnessed to work symbiotically and synergistically with one another if people and institutions are to successfully survive and compete in the 21st century and beyond" (Lau, 2006). Hence, it is imperative that

information literacy skills should be inculcated in distance learners also. It is very likely that information literacy would become one of the core subjects in the future but presently many ODE Institutions are showing reluctance to introduce it even as a credit-free paper. So initiatives must be taken to impart information literacy skills to the students receiving education through distance mode in a comprehensive manner.

Such a herculean task can be performed by proper planning and implementation at the institutional/departmental level. But it demands cautious approach as the same model may not be suitable for all the Institutions alike. It must be based upon thorough understanding and analysis of the local needs as well as the level of the target group to develop a suitable model. Various definitions of information literacy skills can act as guiding force in order to sort out these problems. *For students not on traditional campuses, information resources are often available through networks and other channels, and distributed learning technologies permit teaching and learning to occur when the teacher and the student are not in the same place at the same time. The challenge for those promoting information literacy in distance education courses is to develop a comparable range of experiences in learning about information resources as are offered on traditional campuses. Information literacy competencies for distance learning students should be comparable to those for "on campus" students (ACRL, 2005).*

This can be done by understanding the basic implications of the various standards as given in the definition of information literacy by ACRL (2005) in the context of distance learning. It may be noted that there are five standards and twenty-two performance indicators (for details, please refer to the *Information Literacy Competency Standards for Higher Education* by ACRL, 2005). An attempt has been made at developing an appropriate model based on these five standards in which some of the implications applicable in the context of distance learning have been discussed.

3.1 Standard – 1: Aims at enabling the student to determine the nature and extent of the information needed

Information literacy makes the student seeking education through distance medium capable of recognizing not only the requirement that he/she needs information but also the extent up to which it is needed. Students of distance and open learning institutes are at a disadvantage of being away from the institution of learning and are also unable to visit and hold discussions with the teachers on the regular basis. These problems can be minimized by conducting induction programmes aiming at familiarizing them with the topics of the syllabus and help them identify the sources from where the required information can be gathered. List of text books and related books and journals be provided and they should be guided while selecting supplementary study material. For example, B.A.

Economics first year student is not required to study advanced research papers (except for curiosity) available in various journals to meet his/ her present academic needs even if the student has encountered such journals in the library or on the internet. Such a learner can identify various formats in which such needed information can be found economically and timely, viz. text books, reference books, journals, web sites etc. Opening of study centres with library facilities to the nearby places of the majority of the students and extending them the books loan facility will save their time and energy and will also motivate them to read more number of books to broaden their knowledge base.

3.2 Standard - 2: The information literate student can access need based information effectively and efficiently

Locating information requires search strategies like - physical/ manual search in the library for locating relevant information; and making online search. Searching a document within a library requires that the information can be found in different but inter-related subjects also. A basic knowledge of using a library catalogue and awareness of the classification scheme of the library is also essential. Like in a card catalogue, author search can be done by surname initially and then comes the middle or first name of the author. Most libraries use Dewey Decimal Classification (DDC) scheme for organizing various documents. It becomes necessary to have the workable knowledge of this scheme (or any other used in a particular library) in order to retrieve the needed information effectively and efficiently. In DDC scheme there are ten main classes from 000 to 900 and each class is further sub-divided into various subjects, like Philosophy and Psychology has 100 as the main class; Social Sciences has the main class of 300, but with further sub-divisions viz. 320 for Political Science, 330 for Economics, etc. and these are further sub-divided also like 327 for International Relations with further sub-divisions as 327.1, 327.2 and so on.

And in the case of internet, though search engines have become very powerful but these give millions of links to a single query. In order to further refine the search, various search strategies can be adopted like, putting the keyword in "inverted commas"; using 'Boolean Logic' etc. Various techniques for data storage and retrieval like photocopying, scanning, CDs & DVDs, copy/paste etc. are available. He should be taught to select the appropriate technique as per his requirements. Affordability factor should also be kept in mind.

Hence, the information literate distance learner should have a basic understanding of the various information search and retrieval techniques so that need based information can be accessed effectively and efficiently.

3.3 Standard - 3: The information literate student can evaluate information and its sources critically and can also incorporate selected information into his or her knowledge base and value system.

Reliability and authenticity are the major problems associated with the information collected through internet and other means of electronic or print media. Many times sensational news item appears which may be a rumour, false or incomplete information lacking evidence or facts and aiming at playing with the emotions of the people. Thus, crosschecking and evaluation of such information is very important before putting it to use for propagation of knowledge or research.

As Barack Obama (2009), President of the United States of America reflected in the Proclamation on the *National Information Literacy Month* in October 2009, that "Rather than merely possessing data, we must also learn the skills necessary to acquire, collate, and evaluate information for any situation...[because] though we may know how to find the information we need, [but] we must also know how to evaluate it."

Hence, critical evaluation of the information and its source is equally important in case of a student getting education through distance medium as he is not having a constant guidance of experienced teachers but has to rely upon his own judgements. But it is possible only for an information literate learner to draw comparisons between various sources from which the information has come from. Though, for library documents we can rely on the librarians, but in the case of internet, evaluation of web contents must be done before applying/ implementing advise or information extended by the unknown sources, especially which is freely available. Web contents can be evaluated by checking author credentials, updateness of the websites, owner/ organization to which the website belongs etc. It may be noted that there are many more criteria to evaluate web contents which must be taught to the distance learners so as to make them information literate persons on the path of lifelong learning.

The information literate distance learner should be able to add the new information in his/ her knowledge base but this may require time to understand and digest the information. And from many angles the information has to be reviewed also like encountering different viewpoints of various authors or authorities. They should also be advised to make a list of their problems and visit their teachers/peers at some convenient time or can sort out minor queries telephonically or through e-mail. So the learner can supplement and broaden his knowledge base through threadbare and open discussions on various issues with his seniors, teachers etc. Sending back thoroughly evaluated assignments by the teachers will serve as a guiding force in weeding out the irrelevant and

unauthentic information. Phone – in – counseling Programmes (general or subject based) on Air or by means of television can play a very meaningful role in this direction.

3.4 Standard – 4: The information literate student, individually or as a member of a group, can use information effectively to accomplish a specific purpose.

The information literate distance learner does not accept any piece of information blindly but thoroughly evaluates it keeping in view the specific purpose for which it is sought and found. It becomes imperative to have clarity of the specific purpose for which it is located and retrieved, but its proper application is equally important. This may involve organizing the information in an orderly manner like recording in a dairy or notepad on desktop of the computer etc. so that it is used effectively to accomplish a specific purpose. Students must be asked to answer and send the assignments/ response sheets given at the end of each unit/ lesson for evaluation. Lessons should be written clearly and in a comprehensive manner that students understand and do not indulge in cramming the study material. They should be asked to write in their own words and not to copy from the material supplied. Facility of Online Submission of Computer typed assignments be provided. It will not only ensure optimum utilization of the time but also reduces costs and saves the space and labour involved for receiving and sending back these assignments through postal method. Moreover, this will enable the students to maintain data bank of notes which will facilitate hassle free preparation for the examination.

3.5 Standard – 5: The information literate student is capable of understanding many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

The distance learner is supposed to understand the economic implications regarding the use of information like what costs would be incurred to implement the decisions or what would be the rate of return if a certain decision is implemented. The learner should be able to understand the social and legal implications involved while making use of a certain piece of information. Legal problems like violation of some laws or question of its legality in case of the sought information may arise sometimes. One practice may be accepted in a particular society and it may be banned in some other society. The information literate distance learner is considered capable of assessing the impact and acceptability by gauging the sentiments of various segments of the society before applying the knowledge so as to avoid controversial social implications while making use of a certain information.

While accessing the information, it must be ensured that ethical and legal norms have been duly observed. For example, in case of internet many free books can be downloaded but it should not be a pirated copy or entail plagiarism. Not only its access but usage should also be ethical i.e. it should not violate the privacy of any other individual or hurt his/ her sentiments. Another example can be of the fair use of information i.e. if a person is quoting other author's works or even paraphrasing, including borrowing ideas, in such cases author whose work is being quoted must be duly acknowledged in a proper way by citing resources with some standard style manual like that of the APA (American Psychological Association) or MLA (Modern Language Association) etc. but the author (s) must be acknowledged in all cases. Moreover, the learner should also know and observe the fair use limit and should seek prior permission from copyright holders i.e. a model net-etiquettes be evolved and inculcated among the students

4.0 Suggestions

The model should be developed keeping in view the mission and goals of the institution and should also aim at bringing qualitative changes in the learning process. Change in the mindset of the faculty and those at the helm of affairs is essential to undertake such initiatives. Conducting Training Programmes aimed at enhancing the knowledge and capability of the faculty and the staff are a prerequisite to ensure the successful implementation of such models.

A departmental (distance education) committee can be formed comprising of senior faculty members and librarians to plan, implement, and monitor the progress of an information literacy skills programme for the distance learners. The background of the target group and their access and exposure to internet and other ICT tools must be kept in mind while developing such a model. For wider circulation of the information, departmental/ institutional websites should be maintained and regularly updated. Admission forms, fees and important dates, contact numbers and e-mail addresses of the teachers, staff, schedules of PCPs and syllabus etc. should be made available through internet.

Choice of media/format

Print: Newsletters; Brochures/ Pamphlets; Departmental Notes etc.

Electronic: Institutional/ Departmental website with: e-tutorials; presentation slides; video lessons; e-newsletters to students; blogs; discussion forums; providing links to other authentic websites having information literacy e-tutorials/ lessons etc.

Other: Special Lectures during Personal Contact Programmes (PCPs); Organizing Workshops; Tutorials; Seminars etc.

Many people are ignorant of the concept of Information literacy, and it may also be ignored by highly experienced persons on the pretext that it's just a common sense, but it may be remembered that common sense cannot be common among all individuals, so information literacy skills must be taught.

In India, many institutes of higher learning, especially the science, technology and agriculture universities are teaching information literacy skills either as a credit-free paper or even as a core subject also, to their regular students. It is suggested that efforts must be made to impart information literacy skills to the distance learners also.

5.0 Conclusion

Information literacy has a special role to play in the distance education as it envisages to make the students to be independent learners. The Distance Education Students do not remain under the direct guidance and supervision of the teachers. They need to exploit other available sources along with the lessons supplied to them. It is only with the application of information literacy skills that they can make rightful use of available resources and be independent learners. It should be introduced in the distance education right from the beginning so as to reap the benefits in the true sense.

In the present paper various standards for making a learner (especially seeking education through distance mode) an information literate have been discussed along with their merits and limitations. The suggestions can serve as guidelines in the context of developing and applying the relevant model by the respective institution/department while initiating a programme for inculcating information literacy skills among the distance learners.

Though initiating such skills may be a difficult task but with the help of the latest information and communication technologies (ICTs), it has become feasible and economically viable to some extent. And using latest media would enhance the information technology skills of the distance learners also. Majority of the students getting education through distance medium are quite familiar with the internet usage, hence, it is only by imparting information literacy skills, which include ICT literacy, that we can help the distance learners to fully exploit the infinite information available freely on the internet. The successful implementation of such programmes requires appropriate measures to overcome the practical difficulties with the application of information literacy skills.

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Proceedings of the 17 IDEA ANNUAL CONFERENCE (17-19 th April, 2012)

The 17th IDEA Annual Conference, with the Theme "Quality Assurance: Open Distance Education – Issues, Challenges and Developments", was held at YCMOU, from 17th to 19th April, 2012 at YCMOU, Nasik.

The conference was inaugurated by Prof. K.B Powar, the former Secretary General, AIU. Inaugurating the conference he said that quality in distance education is an essentiality.

Unique best practices of quality assurance are followed in different institutions across the world. Indian distance education needs to find out which of the best practices is to be taken up for providing healthy quality open distance education.

Welcoming the dignitaries and delegates Vice-Chancellor, YCMOU, Dr. R. Krishnakumar expressed that quality distance education play an important role for national development by creating opportunities for education to the marginalized groups. Highlighting the need to improve quality in open distance education he stressed the need to maximize the reach of ODL system, develop effective mechanisms of team work among Open Universities and Distance Education Institutions staff on one side and special financial support from DEC for the purpose on the other, which is mandatory for the formation of the good framework. He also highlighted upon the farsightedness of the founders of YCMOU where the mode of self financing at and the Development grant from the State Government coexist at YCMOU. He also called the challenge to meet quality while reaching to quantity an important reality to be met by Distance Education Institutions.

Addressing the conference delegates and participants, Prof. K. Murali Manohar, President, IDEA, stated that with the emergence of new forms of education (electronic/virtual) have changed the nature of distance learning, consequently its quality assessment mechanisms. The new form of distance education deviates markedly from what has been practiced in traditional setting for long time, poses challenges to the conventional way of quality assurance. In particular, the distance education provisions existing cross/trans-national borders cause concerns to the quality assurance agencies the world over. The implication is that along with

"how to assess" the new forms of distance education, the quality assurance agencies have to reflect on "how to coordinate the quality assurance activities" at national and international level. It seems unjustifiable if, the philosophy, principles and standards routinely applied to evaluate or accredit traditional units are used without significant adjustments/modifications to access the quality and effectiveness of open and distance education.

Speaking on the occasion, Secretary General, IDEA, Prof. Romesh Verma, pointed out that a quick glance on NAAC Web Page depicts that the NAAC does not cover distance education units of higher education institutions which reflect that the existing mechanism of quality assurance in respect of distance education is in-appropriate. As there are many gaps yet-to-be made clear by the quality assurance bodies. Besides, distance education institutions of higher education work in different conditions, structures and environment where faculty role is different, the course management is different, the library and learning resources requires more electronic access and electronic educational resources.

Assessing the quality of open distance education with the same yard stick (parameters) as applied in conventional teaching - learning environment seems unjustified which needs immediate attention at the national level. On behalf of IDEA, he requested all to join head, hearts and hand to think and act from this platform for the cause of quality assurance in open distance education.

During the inauguration of the 17th IDEA Conference, the selected papers of the 16th IDEA Conference held at Warangal, Andhra Pradesh compiled in the book form was released.

Conference Director, Prof. S. S. Chaugule, while describing the background of the conference expressed satisfaction over the participation of delegates from 16 states in the 17th IDEA Conference and extended thanks on behalf of YCMOU for their contribution and cooperation. He specifically conveyed that spot-registration is to encourage more participants and paper presenters.

Main highlights of the conference were that Prof. Ram Takwale, former Vice - Chancellor, IGNOU and founder Vice - Chancellor, YCMOU, delivered the key note address, "New Education: Facing Challenges Post Industrial Society"; Vivek Sawant, Managing Director, Maharashtra Knowledge Corporation Limited (MKCL) delivered lecture "Knowing the Learner-Andragogy"; and Prof. Ramanujam, Pro-Vice - Chancellor, IGNOU, delivered the Prof. G. Ram Reddy Memorial lecture. The vote of thanks for the 17th IDEA Conference was given by Dr. Rajendra Vadnere, YCMOU, Nasik.

Secretary General, IDEA, expressed thanks to the contributors for submitting papers for 17th IDEA During 17th Annual IDEA Conference the General Body Meeting (GB) of IDEA was held on 18-4-2012. The minutes and resolutions of the meeting are presented as under :

Minutes of the General Body Meeting of the IDEA held on 18.04.2012 (Wednesday) at the Yash-Inn in the YCMOU, Nasik.

The General Body Meeting of the IDEA was held at 3.30pm on 18.04.2012 at the Yash- in the YCMOU during the 17thIDEA Conference.

The Agenda of the General Body Meeting of the IDEA was to present the Annual Report and to propose the suggestions for the future plan of action.

The President of IDEA Prof. Murali Manohar welcomed the gathering and conveyed that in the move to democratise the activities, the General body meeting is open to both the IDEA and non-IDEA members.

Prof. Romesh Verma, the Secretary-General of IDEA presented the Annual Report for the year 2011 -2012 and the Statement of Accounts (April 2011 to March 2012). The Annual Report and the Statement of Accounts presented are enclosed as Enclosure 1 and 2 respectively.

During the meeting the following suggestions were put forth by the members present :

Prof. Chaugule, YCMOU expressed concern for the functioning of the 'IDEA WEBSITE' and requested that it needs to be updated regularly. He said the website should be able to provide total information including the list of the Members of IDEA, the Directors of the various DDEs across the country, Minutes of the meeting held so far, Review column after conduct of activities by the office bearers, so that the visitor of the website may have the complete information about IDEA. He also expressed the necessity for activity based/functionary based workshop by IDEA besides the Conference, which invites amalgam of the individuals from various spheres including administrative and other nonteaching staff associated with the distance education. He also opined that the decision making in the Open and Distance Education field should be influenced by IDEA for which rappo and eminence in the policy making level is necessary for the IDEA members/office bearers.

Prof. Kandarpa Das, Associate-President of IDEA and also the Director, Directorate of the Distance Education Gauhati University suggested that the membership drive should be undertaken along with the consolidation of the existing list of members. He further rationalised the need to decentralise the activities for enhancing the functioning of

IDEA, which may call for the division of labour among the Office bearers. He also shared to the gathering that the website could not be maintained due to financial constraints and in the process, the website domain has been frozen. He welcomed the publication of the Journal by IDEA and pleaded for the need for an Editorial board. He said that an e-journal should be preferred to the hardcopy journal. He called for the strengthening of the IDEA Secretariat with communication with the members at regular intervals and a prompt reply for every email received. He also proposed the institution of the Award of Excellence and the Best Paper Award with sponsors identified before the IDEA Conference.

Prof. Tejinder Kaur insisted upon the necessity of interaction of the Office bearers at frequent intervals to ensure personal touch and profession association leading to win-win situation for the individuals and IDEA. At this juncture, Prof. Alka Naik, Coordinator of YCMOU at Mumbai shared that Facebook Account be used for social networking of the IDEA members and Email resorted for official communication.

Prof. Ravi Mahajan, USOL, Panjab University suggested that the website of IDEA can be like that of ICDE which opens certain sections to all and at the same time earmarking specific 'page opening' only to the members. The e-journal can be linked to the website itself to minimise the expenditure in terms of printing and postage.

Interacting to the suggestions placed by Prof. Kandarpa Das, Associate-President of IDEA, Prof. Murali Manohar suggested that the IDEA functions cannot be undermined.

As is the case, as a Association in the inception days, IDEA was responsible for holding meeting for the Director of Directorate of the Distance Education four times; framing the Policy Statement of distance Education for India; Interaction with the Regulatory bodies like UGC/DEC/AICTE. He also accepted that the lack of funds has been the main reason for their inability to diversify the activities. He also conveyed the gathering that Dr. Mushtaq Patel, Associate Prof in Education, DDE (also a Executive member of IDEA), MANUU, Hyderabad and Mr. Atul Govind Gavade, Principal, Shree Samarth Primary English School, Maharashtra have volunteered to activate and maintain the Website of IDEA.

Prof. Kandarpa Das will supervise the activities relating to the revival of the website. Prof. Murali Manohar also conveyed to the gathering that proposals are underway to decentralise operations of IDEA by creating four Regional Councils of IDEA (in North, South, East and West) and a Vice-President and Secretary will look after each of the Regional Council acting as the Chairman and Convenor respectively. There will be an

executive Council to assist the Chairman and Convenor. Apart from this, the President also said that all the Office bearers would be given functional responsibilities as discussed in the Executive meeting and that the plan of action in detail will be chartered out in this regard for implementation and adherence.

All present in the meeting expressed their pleasure in knowing that the 18th IDEA Conference will be held in Osmania University.

The resolution is being circulated separately. The meeting came to an end with the vote of thanks by the President.

Resolution of the General Body Meeting of the IDEA

held on 18.04.2012

at the Yash-Inn in the YCMOU, Nasik

The following resolutions were made during the GB held on
18.04.2012

1. Dr. Mustaq Patel, Associate Prof in Education, DDE (also a Executive member of IDEA), MANUU, Hyderabad and Mr. Atul Govind Gavade, Principal, Shree Samarth Primary English School, Maharashtra will activate and maintain the Website of IDEA, under the Supervision of Dr. Kandarpa Das, Associate- President of IDEA. The website is likely to appear like that of ICDE which opens certain sections to all and at the same time earmarking specific page opening only to the members. The e-journal can be linked to the website itself to minimise the expenditure in terms of printing and postage.
2. Activity based/functionary based workshop will also be conducted by IDEA besides the Conference, which invites amalgam of the individuals from various spheres associated with the distance education.
3. Pressure groups involving the policy makers, Vice-chancellors of the State Open Universities will be motivated to influence the decision making in the Open and Distance Education field under the aegis of IDEA.
4. Consolidation of the existing list of members of IDEA will be initiated and web hosted for public viewing.
5. To constitute the Editorial Board for the Journal of IDEA.
6. Virtual meeting/e-mail will be ensured among the members for the strengthening of the IDEA with a Secretariat functioning on demand to the needs to ensure personal touch and profession association leading to win-win situation for the individuals and IDEA.
7. Institution of the Award of Excellence and the Best Paper Award (with sponsors) for the IDEA Conference.
8. To decentralise operations of IDEA by creating four Regional Councils of IDEA (in North, South, East and West) with

organisational provision for a Vice-President and Secretary to look after each of the Regional Council.

9. To conduct Regional meeting of IDEA (in North, South, East and West) besides the Conference of the Directors of DDEs and Vice-Chancellors of the Open Universities.
10. To hold the 18th IDEA Conference at Osmania University, Hyderabad, if no other University in the South is not coming forward to be the host for the conference.

Prof. Romesh Verma,
Secy. General, IDEA, Email:romeshvermajammu@gmail.com

Annual Report of the Indian Distance Education Association (IDEA 2011 – 2012)

Respected Members of IDEA,

- You are aware that 16th Annual IDEA Conference was held in March 2011 at Kakatiya University, Warangal. The conference was attended by large number of delegates. During the conference an document describing the history of development of IDEA was brought-out for circulation. The attempts to bring out the documents in published form were appreciated. It is being envisaged that these publications will help to build the resource pool in the field of the Open and Distance Education. Certain proceedings of the IDEA were also published in the University News, Journal of Higher Education
- New body of IDEA was constituted at Warangal conference
- For holding 17th IDEA Conference, the Secretary General, IDEA had submitted proposals to Tamil Nadu State Open University Madras; Delhi University; Mulana Azad National Urdu University Hyderabad; Kurukshetra University, Kurukshetra; University of Kashmir, Srinagar; Rajshree Tandon Open University Allahabad. Finally, a request proposal was made to Vice-Chancellor, YCMOU, Nasik which materialised the host for the 17th IDEA Conference
- The Secy. General, IDEA submitted number of memorandums to DEC, HRD, IGNOU and COL for their contribution, participation and help to strengthen IDEA
- Also suggesting measures to reform ODL in the country
Organisational Reforms
- This year IDEA has brought out IDEA News Letter
- Shortly, IDEA Journal-A Journal of Distance Education will be brought out within the period of two to three months
- Regional chapters will be established (North, South, East and West Zones). Each region / zone will be looked after by the respective Vice-President and respective secretary of the region

- Last year it was decided by the executive to collect institutional membership from Open Universities and other distance education units. In this regard all the members are requested to kindly expedite for IDEA institutional membership and individual membership Major Problems
- IDEA has problem of funds, please join hands to raise the funds
- DEC is not supporting the moves to promote IDEA. In this regard Executive of IDEA will meet the Chairman DEC to discuss the issue to evolve some mechanism to seek financial for the cause of distance education.

USOL Celebrates "Golden Jubilee of Distance Education In India"

*Organized by
University School of Open Learning
Panjab University, Chandigarh
On June 7-9, 2012*

Proceedings

To mark 50 years of Distance Education in India, the University School of Open Learning (USOL), Panjab University organized in June 2012 a National Conclave of Directors/CEOs of Open and Distance Education Institutes, and a National Conference on "Correspondence Education to Open & Distance Education : 50 years of Revolution and Challenges Ahead".

This historic event was inaugurated on June 7th, 2012 by the Hon'ble Minister of Education, Punjab, S. Sikander Singh Maluka. At the outset, the Chairperson of USOL Prof. Lalit K. Bansal deliberated upon the theme of the Conclave and the Conference and hoped that the CEOs/Directors and participants would identify the thrust areas in distance education and come out with workable solutions.

Sharing his view point on the radical changes being brought about in education, Hon'ble Minister oriented the distance educators on the emerging phenomenon of community colleges engaged in vocational education. He sought the help of the universities in opening community colleges in every district of India so that the unemployed youth could get work according to their skill.

The first session of the National Conclave of Directors/CEOs of Open and Distance Education Institutes began with a keynote address by veteran distance educationist, Prof. S. Bhatnagar, former Director, Directorate of Correspondence Courses. Dr. Bhatnagar recalled, how the early distance education institutes evolved as shadow institutes of host Universities to offer their conventional courses to the poor cousins of regular students. He termed distance education as a boon but wanted that today's open distance educators must make it the real back-bone of the modern education system.

Prof. Romesh Verma, General Secretary, IDEA, while thanking the hosts USOL, Panjab University, outlined the agenda before the CEOs/Directors of Distance Education Institutes. He made an eloquent presentation on the objectives of the 12th Five Years Plans and called upon the participants to raise their concerns and articulate a collective appeal to be handed over to the HRD Ministry.

Prof. Tajinder Kaur, Director, Punjabi University, Patiala raised the concerns of a biased mindset of people towards distance education and the discriminations faced by Distance students.

Prof. Rana, Prof. Khan Prof Vijay Dev, Prof.N.K. Aggarwal, Prof. R.K. Sharma and two former Chairpersons of USOL Prof. Devinder Singh and Prof. Ujagar Singh shared their concerns and rich experiences with the house and offered several suggestions to be incorporated in the concept note.

Prof. Lalit K. Bansal, Chairperson, USOL rightly observed that the financial constraints experienced by Distance Education Institutes can be well address if equitable budgetary allocations are worked out well in advance by Central Funding Agencies.

Prof. Ravi K Mahajan observed that distance education now after it enters into its next developmental phase must adopt a new futuristic vision to cater to the changed needs of the modern distance learner.

The Conclave was followed by National Conference on "Correspondence Education to Open and Distance Education: 50 Years of Revolution and Challenges Ahead". During the Conference over 50 papers were presented on themes like: Capacity Building, Empowerment through ICT.

Addressing the Valedictory session in the afternoon Prof. Y.K.Sharma, Department of Education, H.P. University, Shimla shared his experiences spanning over 40 years in 'Correspondence Education'. He recalled the tremendous response it received, although it carried the stigma of being a shadow system. Over the years this system has evolved into an independent system, comparable and inferior to none, he emphasized. He hailed the role ICT is playing is widenire the reach of Distance Education but over the young scholars that overdependence on ICT should not eclipse the human component is the distance system.

In the two days Conference many thrust areas and themes like: Capacity Building, Empowerment through ICT, were covered where young researchers from different parts of India presented their papers.

The Valedictory Session on June 8, 2012 was addressed by Prof. Y.K.Sharma, Department of Education, H.P. University, Shimla. Backed by his experience of over 4 decades in distance education, Prof. Sharma recalled how the response to the then correspondence closures picked up, although it carried a sort of the stigma of being a shadow system. Over the years this system has evolved into an independent system, comparable and inferior to none, he emphasized. He hailed the role of ICT in widening the reach of Distance Education but over the young scholars that overdependence on ICT should not eclipse the human component is the distance system.

The Conclave and the Conference concluded with a call for an equitable treatment for ODIs and IGNOU so that the Distance Education is enabled to play more vibrant role in meeting the societal obligations.

DIGITAL NATIVES AND SOCIABILITY

Jatinder Grover & Kanwalpreet Kaur

Abstract

In the last few years technology has changed the way of socialization, sociability and social values, ethics and culture. Recent studies highlight that our adolescents are becoming super skilled when it comes to finding their way around a computer, but less proficient at social skills such as making new friends, knowing what to say in certain social situations, and so on. The paper addresses the sociability, social concerns, ethics and skills of digital natives; and the role of parents and teachers to foster social skills in the adolescents belonging to the digital age.

1.1. Introduction

The 21st century society is a sharp contrast to the older societies; almost every teenager with a cell phone is constantly in touch with their friends through Facebook, MySpace, etc. The enabled and embedded technologies have revolutionized our lives to the extent that new ways to behave and interact socially and culturally have come up. While commenting on blogs and text messaging is quick and easy, but question arises 'is it as personal as it may seem?'. Face-to-face conversation is becoming rare and the youth at large are learning to share experiences through a screen and a keyboard instead of personal interaction. The Internet has been around for less than twenty years and we have already adapted to its presence. But the question is: are we living in a really well connected society in the age of communication technology and media? Research has shown (Affonso, 1999; Katherine, 2004 ; and Gamm, 2008) that despite the fact that we receive information faster and can be contacted constantly but a more connected society is simply an illusion in the era of information and communication technology.

Apparently technology has the potential to harm or enhance social skills and social life, but there is need to analyze social perspectives of technology. Do technologies help you build positive, meaningful relationships, or do technologies hinder this process? Are you better able to communicate, listen, and share because of the technologies in your life? Do you use technologies to improve your relationships and build new ones? Are you letting a few people to know who you are and what you contribute to this world, or are you merely distracting yourself with shallow pursuits? Does technology increase or decrease your concern for others, your compassion for others, and your desire to serve them? These are some of the pertinent questions that need immediate attention.

1.2. Connotation of Sociability and Social Skills for Net Generation

To win with poise, to lose with grace, to communicate with clarity and convince with ease, to command respect and be endearing to all is an ideal, for many, especially at the workplace. To accomplish this task of universal endearment, positive attitude and appropriate action that exudes grace and all one needs is to have the correct social skills (Adler and Rodman, 2003). Social skills are one's ability to interpret situations and to behave in an appropriate manner. To banish all sulking and rise above stress, to smile with ease, connect with others and communicate effectively are all aspects of sociability that are bound to lead one to be acknowledged, liked and also triumph at the workplace. Thus it is the duty of teachers and parents to train adolescents in social skills like cooperation, sharing, participation, be friendly, helping others, being patient, following directions, taking turns, remaining on task, accepting differences, listening, praising others and refraining from put downs, positive communication and interactions, being polite and courteous, using good manners, respecting ourselves and being respectful.

Social skills are needed by everyone to excel from others in today's competitive society. To progress in a job, business or to maintain relations, social skills are the basic requirement. Due to the technology embedded work culture and education adolescents do not get the opportunity to refine their social skills and this leads to a negative drift in their personality and thinking.

Social skills are most often thought of as a set of skills that allow us to communicate, relate and socialize with others. Social skills in different cultures may be defined differently. These are the ways by which others determine our status, consider us as potential friends or mates, and consider us for employment or promotions in the workplace. The opposite of social skills (which imply skill), is social ineptitude, which is an inability to use the defined set of social skills that would make one a good communicator.

Social skills are patterns of social behaviour which make individuals socially competent i.e., able to produce desired effects on other people. Social skills have a powerful effect on personal life i.e., on mental health and successful work performance. These are usually regarded as the behavioural side of social competence, including knowledge, understanding and absence of anxiety, which contributes a lot to skilled performance. Social skills have a massive effect on popularity, marriage, social relations, health, happiness, and work performance. Most professionals like teachers, lawyers, doctors, sales managers, sales persons etc., involve too much public dealing, if they are socially unskilled it leads to a low

turnover and produce high levels of discontent among subordinates and colleagues.

Social skills are both verbal and nonverbal forms of communication. Verbal social skills include being able to determine the appropriate thing to say at the appropriate time, being able to communicate in ways that are engaging, have a range of vocal tone and quality, and being able to speak in an educated but reasonably understandable manner. In a sense, social skills are judged by what we say, when we say it, and how we say it. People with good verbal social skills are thought to speak with a clear voice, have inflection, speak appropriately to a situation, and have confidence in their voice. Poor verbal social skills might be read as having a monotonic voice, saying the wrong thing, speaking too softly to be heard or too loudly to be tolerated, or simply speaking on boring topics. The person who can only address one topic is thought to have poor social skills.

The other aspect of social skills is nonverbal. Body language, standing up straight, making eye contact, making appropriate gestures, leaning toward the person one is speaking to, smiling appropriately, and keeping the body open can all define good nonverbal social skills. It should be noted that these things can be overdone. Gestures can be too dramatic, people who smile too much may not be trusted, and leaning too far forward into someone else's personal space may be considered rude (Argyle, 1984).

Research has shown that lack of social skills lead to delinquency among children; in adolescents it leads to destructiveness, frustration and lack of confidence; in adults and old people it leads to mental disturbances, loneliness and breakdown of relations.

There are many difficult situations which everyone faces in the day to day life and needs the training of social skills to deal with these difficult situations according to Scott, Cutlip & Center (1998), humans need social skills for:

- Complaining to a neighbour about his constant noisy disturbances
- Going for a job interview.
- Visiting the doctor when unwell.
- Going to a close relative's funeral.
- Being a host or hostess at a large party.
- Giving a short formal speech to a group of about fifty persons that one does not know.
- Going across to introduce oneself to new neighbours.
- Dealing with a difficult and disobedient child.
- Going to a function of a different culture.
- Attending a distant relation's wedding ceremony where one knows a few people.
- Apologizing to a senior for forgetting an important task.

- Taking turns in group discussions.
- Expressing love and hatred in a face to face situation.

In the aforesaid situations most people try to avoid the situation or they become passive or fail completely to deal with the situation tactfully. Good social skills are critical to successful functioning in life. These skills enable us to know what to say, how to make good choices, and how to behave in diverse situations. The extent to which children and adolescents possess good social skills can influence their academic performance, behavior, social and family relationships, and involvement in extracurricular activities.

1.3. Social Impact of Digitalization

Society is likely on the cusp of a social revolution, during which it will be important to redefine socially appropriate and acceptable behaviors with regard to digital or virtual interaction. We are at a point in history where very few people have given critical thought to new social realities created by technology and what those realities mean to an individual and society.

With the proliferation of technologies that are able to overcome the obstacles of time and space, one would think that these tools would be used to gain an understanding of other cultures, meet people all over the world, maintain and strengthen familial relationships, communicate effectively with others, and help people to become more socially adept. However, some technological advances cause people to be distracted, overly stressed, and increasingly isolated. Many people are involved in an abundant number of relationships through technology, but sometimes the quantity of these associations leaves people feeling qualitatively empty. Obviously, technology has had a profound impact on what it means to be social (Jean-Francois, Yutaka & Michael , 2002)

It is a common sight to come across a moody, withdrawn kid with music blasting out of his/her white ear buds, or a girl rapidly texting on her phone. The youth of today are constantly immersed in technological advancements that promote nonstop communication and instant gratification, whether through cell phones, gaming systems, laptops, or MP3 players. But are these technological advancements a good thing? The growth of technology no doubt has negatively influenced social interactions of today's youth because it isolates individuals from reality, hinders communication, and perpetuates the concept of immediate satisfaction.

1.3.1. Social Networking and Social Development

A study of students and information technology found that 85 percent of undergraduates surveyed used social networking sites (Salaway et. al., 2008). Majority of the respondents reported using such sites daily; it indicates that use of these sites is increasing yearly. The use of social networking sites has both positive and negative consequences. It is

amazing how someone can find a long-lost friend through a social networking site, enabling them to reconnect. In a society where people have become quite mobile and family and friends are often geographically separated, it is convenient to keep in touch through technology.

These vessels for communicating allow for larger and more complex networks for people to interact with. Someone can have thousands of friends (if you want to call them that) at any given time in a multifaceted environment. But is it really a true community? Do you know these people? Does it actually count? It is like you could separate your online social life into little silos of independent friend groups; for example one section for Twitter friends the other for your Xbox live friends. It clearly conveys that these people do not know you outside of this one thing and nobody would call them friends (Sophie, 2009).

To overcome a sense of isolation is one of the greatest features of online communities and virtual worlds. Someone might feel like an outcast in her own community or family but might find someone online with similar hobbies, pursuits, and interests. Consider someone who enjoys photography as a serious leisure pursuit. This person would be able to share that passion with people all over the world by using the Internet and its powerful tools like e-mail, video chat, discussion boards, online video, family Web sites. However, simply sharing common interests and pursuits with people through technology does not necessarily have a positive impact on social skills and social development.

1.3.2. Net Gaming and Social Development

Gaming is an instance where one may encounter potentially serious social setbacks. The high exposure to video games increased aggression over time. It was found that playing violent video games is a significant risk factor for later physical aggression in both Japan and the United States—for boys and girls (Anderson et. al., 2008).

Technology negatively affects us by perpetuating the mindset of immediate satisfaction. With gadgets like the PS3 or Nintendo DS, which allow users to play games anywhere, one grows up learning that whenever one wants pleasure or enjoyment, it will automatically be granted and all it leads to isolation from the family, society and relations.

1.3.3. Television and Social Development

Television is another technology that has mixed reviews with regard to social skills and social lives. Some researchers suggest that spending a limited amount of time watching wholesome programs can strengthen families and friendships. Others believe that television contributes to the downfall of social values. It does seem that many people spend less time with others in their community than they do with the people they watch daily on television. Television tends to be a passive medium, which

requires little skill and thought on our part and television provides little opportunity for meaningful interaction while watching. Watchers simply sit there and ingest what is presented to them without having to respond or react to another person. Obviously this can have serious effects on people's social skills because viewers are not practicing how to relate to and deal with other people.

Exposure to what is viewed on television can have some serious effects on people's social lives. For example, exposure to television programmes with sexual content may increase the chance of teen pregnancy (Chandra et. al., 2008). Furthermore, when some people see violence, sex and all manner of lasciviousness on television, they may be prone to mimic the behavior and think that it is acceptable. If everyone initiates to copy the social behaviors portrayed on television, our society would lack moral principles.

1.3.4. Internet and Social Development

Technology is both encouraging and destroying our ability to interact with people. A few years ago nobody had imagined that we would have all the possibilities to communicate that we have now. Beyond the usual suspects, chat rooms, instant messages, text messaging, e-mail, Face book and other similar clones; there are also online video game networks similar to Xbox Live, virtual worlds like Second Life and of course massive online worlds comparable to World of Warcraft or Everquest (Greekgenius, 2009).

The Internet actually detracts from the communication abilities of society, especially the young. When our communication skills are gradually lessened, we begin to spend less time in talking to families, experiencing more daily stress, and feeling more lonely and depressed. In our formative teen years, lack of personal communication due to excessive Internet usage can have an overall negative effect on mental and physical health. Social and communication skills are critical for everyone, yet use of the Internet is undermining this development.

Some argue that the Internet has a positive effect on social interactions because it allows us to form friendships online, to meet virtually unlimited number of people through chat rooms and bulletin boards (Salaway et.al., 2008) However, the Internet can foster openness, self-confidence, and a greater sense of ease and comfort in dealing with others and can even provide opportunities by freeing those who are too depressed to conduct a social life in the real world, but it is extremely unhealthy to make and sustain all of your social interactions online. We will not be positively impacted by communicating through a computer screen if we already do not have the self-confidence to socially interact in reality.

There are standards and well-accepted practices on how to treat people you encounter and if you do not abide by them, people will not interact

with you. Technology has removed this norm. People talk the most trash while communicating online and disrespectful is an understatement. Hiding behind the mask of anonymity, some of the most racists, sexist and ignorant statements are plastered on forums, talkbacks and comment section of websites. This is a strange side effect of the technology movement that we had never thought off.

1.4. Unenthusiastic Impact of Digitalization on Social Development

The advancement of technology has negatively impacted our social interactions because it detaches us from what is happening around us, obstructs communication, and spreads the concept of instant gratification (Katherine, 2004 and Durano, 2007). Society must be able to utilize technology while not allowing it to impede social interactions, particularly for those who are easily influenced during formative years. The world must learn to embrace technology without allowing it to negatively impact the creation of functional adults in society.

Digitalization has separated individuals from reality, the iPod is one example. By putting in ear buds and immersing in music while in public, one virtually disconnects oneself from the real world. "For some people, the main appeal of the iPod is that it preoccupies you so that you do not have to deal with the uncontrollable factors of everyday life" (Zinkerman, 2010).

The ability of the people to surround themselves with the familiar by iPod is appealing because it rarely provides the listener with something unexpected or unknown. However, it can be argued that by constantly being cut off from personal interactions and new experiences because of a technological device, a generation with substandard social abilities is being groomed (Borba, 2011). If one is not given to face reality by experiencing new things, making personal relationships, and problem solving, then one will never be able to function as adults.

It is true that the modern society has hopped on the mass media train and is riding it for all its worth, but we cannot confuse advanced technology with reality. People should be able to communicate without something electronic connected to them. Let's strip everyone of their phone, pager, computer, fax machine and Blackberry and see if we can still master a conversation. The fact that we have the intelligence and abilities to create new items and learn how to use them shows our potential as a species. But if our day-today social abilities depend on these tools, we have either reached to a plateau or failed as a society. It is a matter of concern that students are more passionate about video game discussions, recent movie releases and chat rooms than about politics, environment, culture and world issues.

1.5. Parenting in a Digital World

Hardly surprising, considering that from as early as the late nineties, most of the Indian parents have been obsessed with teaching kids how to use their computers efficiently and how to navigate the web, as not to be left behind in the techno race for supremacy. Nowadays all accept that if our children were to make any real progress in life, they must be at ease with a computer mouse and keyboard. In the present scenario, it is unacceptable for any school leaver to be unskilled in computer technology. Some have only basic knowledge but enough to get into a world run by computers. It does seem a pity, however, that we have neglected our children's other social skills so woefully. Many are reporting that the more they use social networking sites to communicate, they get more stressed about important face to face chats (Katherine, 2004). Face book and Twitter have benefits but are we relying too much on communication through cables? Are we losing the art of conversation?

Many young adults have very little confidence in their own abilities to enter into social situations. So they spend their social time glued to a computer screen in their leisure time. They thus have been rendered socially inept in just about every other respect. It is important that responsible parents and teachers promote social skills in children to prepare them for adult sociability. Parents have as great a role to play as teachers. Teach your child to answer a telephone politely and correctly. Give your child some basic information to ease their journey into maturity; tell them how to address someone formally as well as informally, it cannot harm them to know these things and one day they might value their own ability to be comfortable at any social level. By all means, encourage your children to be a whiz on a keyboard, but do not allow them to neglect other areas of social behavior.

Research reports show that a teen is now plugged into some kind of digital media seven and a half hours a day; youth online time is steadily increasing by 38 percent in just five years behavior (Affonso, 1999; Gamm, 2008 and Jennifer, et.al. 2008). Technology is transforming our kids' lives. But what affect will all that plugged-in time have? A small but growing number of parents are realizing that digital world has an unexpected and negative outcome. Plugged in time is reducing our children's face-to-face time with real live human beings. The important things at risk are like the strength of our bond with our children, strong family interactions and the development of empathy. Child experts and parents alike are now realizing that one of the biggest dangers for the digital natives may well be the diminishment of the parental-child relationship.

Research has confirmed that the more time kids spend plugged in the more likely is the possibility of less attachment to parents in forming a crucial relationship or an emotional bond. It's not just what kids are

plugging in that matters but what they are tuning out to be. There are some commendations for the parents to deal effectively with kids of Net Generation (Borba, 2011):

- **Strengthening Face to Face Connections in a Digital World:** One-to-one communication enhances the parent-child relationship; boosts communication and allows parents to model those essential interpersonal social and emotional skills according to our tech-dependent kids need. Take time for those crucial informal chats and discussions related to school, society, politics, sports, environment etc. To encourage eye contact, face-to-face interaction and tuning into one another enforce one family rule that always look at the color of the talker's eye.
- **Get into your child's digital world:** Play the video game with your child. Ask your child to teach you to text. Watch a favorite TV show together. But do not forget to also turn and chat about what you are doing.
- **Create sacred unplugged times:** Set specific times to remain unplugged. Ask your kids for input. Prime family times might be family meal, those fire-side discussions, family meeting, or at an outing which involves other family members. The aim is to strike a balance between plugged and unplugged that works for your family.
- **The 3 T Rule:** Set a family rule: No Texting, Taping or Talking-on cell-during family times.
- **Turn off your cell:** Make sure you follow your own digital rules. Kids say that family meals, school activities, sporting events and after school are times when they are most bothered by their parents' networking behaviors. Turn off your cell phone during those times.
- **Turn the TV off:** Research finds that leaving the TV when unwatched is a communication barrier especially to younger kids or those who are more easily distracted. Switch off the TV during family meals.
- **Reduce technology distractions during family time:** Don't put a TV in your kids' bedrooms where they can retreat from family life. Turn the television off when no one is watching. Leave the computer in a central family spot where you can connect to your kids even for a short backrub.
- **Don't be media-lenient:** Studies show that children whose parents set clear technology rules spend less time with media than their peers. In fact only 52% of 8-18 year olds say their parents set rules about what they are allowed to do on computer.

Stress 'WE' vs 'ME': Find ways for your family—and particularly your child – to do community service and empathies others not themselves. Work at an old age home and community centre; deliver gently-used possession to charity. Also point out other people's feelings and ask often how does the other person feel?

These are some of the important ways to help the digital natives to start focusing on being friendly, connecting with others and being respectful.

1.6. Summing up

Technology has indeed revolutionized our lives, socially and culturally as well, but with great technology comes great responsibility and challenges. In the context of technology, the biggest challenge seems to in the realm of communication. *Fifty years of child development research confirms that the most powerful source of psychological impact on children is the strength of their relationship with their parents.* For that there are no shortcuts or computer programs, it is only achieved by applying that timeless, unplugged, good parenting strategy of quality face-to-face communication with our kids. Begin with smile, greet others and make eye contact when in conversation, maintain a comfortable distance, check your body language—a critical stance does leave behind an unsaid message and can be perceived negatively. Use of courteous language and an appropriate tone of voice makes a lot of difference. Above all, all is lost if expressions fail or are misunderstood. Speaking, and behaving with clarity avoids misunderstanding, and helps one get across as they truly are and is a sign of confidence. Nonetheless, it is the time to edify and nurture the sociability and social skills of the digital natives in the digital world.

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