

# Impact of Information Communication Technology on Open Learning in India

**Iti Tiwari**, Department of Sociology, U.P. Rajarshi Tandon Open University, Allahabad, India,  
**Tripti Gautam Tiwari**, Graphic Era University, Dehradun, India,

## Abstract

The establishment of Open Universities was essential to provide education to those who are not able to get admission in the formal system of education. In India being most populous country. The establishing of Open Universities started in the beginning of 1970s in one of the Province followed by Indira Gandhi National Open University established by Govt. of India. At present most of the Provinces have Open Universities with full support by local Governments. With advent of Information Communication Technology, the delivery of education at far places has been quite simple subject to availability of required infrastructure which is lacking in some parts of rural sector of India. The present study has conducted the impact of Information Communication Technology being used in Open Universities of northern part of India. The age group of respondents varied from 8 to more than 30 years and their living conditions, parental income, family support, interest in open learning, objectives of life and other similar parameters have been taken into account to arrange the meaningful impact of ICT in such system of education. It has been observed that the uses of various tools of ICT have not been fully exploited to facilitate the education through open mode. This is because of lack of adequate infrastructural facilities at both delivery and receiving ends. With the active steps taken by Govt. of India through National Mission on Education through ICT it is expected that in a decade the impact of ICT will be quite feasible and user sector will be beneficial in receiving the education in a meaningful manner.

## Keywords:

*ICT, Distance Education, Open Learning, Rural and Urban Sectors, Human Resource Management.*

## Introduction

The population of India is increasing continuously and at present it is more than 1000 million and is expected that in the next two decades it will be around 1030 millions. Several measures have been taken to create awareness, training, advantages and disadvantages of small and large families and other such measures by Govt. of India. There is an impact of such measures. However, it will

have its proper advantage in next ten years. The efforts for educating the younger generation are enormous. The Federal and Provincial Governments have launched a number of programmes to establish new Universities, Institutions and Colleges. At present there are about 500 Universities including Federal, Provincial, Private and Deemed to be Universities, and about 25,000 Colleges in the country. Even then we require more than triple of these numbers to cope up the aspirations of young generation for their higher education. The horizontal expansions of Institutions including Open Universities are in almost all the provinces in India and have contributed a lot. However, quality has to be ensured substantially.

There have been a number of studies [1-7] to find out the impact of education imparted by Open Universities which have started their role since last century. In India Andhra Pradesh Open University was the first followed by Indira Gandhi National Open University in New Delhi established by Govt. of India. Subsequently almost all Provinces have established Open Universities in the country.

The promotion of developing knowledge society through open and distance education is increasingly adopted in past years globally resulting in encouragement of economic development at the local, state and national levels. Several researchers (8-15) have concluded that developing a knowledge through distance education programmes are receiving importance in the society. As a result, the western countries have developed strategies to encourage this effort to the aspirants not having the opportunity to receive education in Conventional Institutions of Higher Education [1-7, 16-27].

The distance or open education comprises separation between teachers and learners. Thus it includes printed edited materials, teleconferencing, telephone and other tools of ICT to bridge physical gap between the teacher and the student. This type of education has given opportunity to those who otherwise would have been denied from the formal system.

### The uses of Information Communication Technology (ICT)

The tools of Information and Communication Technology for delivery of education, management of higher education systems including day to day administration, laboratory working, finances, residential complexes and others need such tools for accuracy, time saving, effectiveness and customized services to all inhabitants. The ICT is also supposed to enhance literacy rate and expected to revolutionise the educational system. It provides knowledge, skill and aptitudes to a person for identification, searching effectively and presenting specific information in order to built knowledge and develop critical along with creative thinking process to a particular study. This has resulted in advances in our living ways of life. It is expected that ICT have measurable impact on educational methodology, both on conventional and open education systems in the whole world. In India this revolution is not much widespread and requires efforts to benefit the last person of the society.

Open Universities are playing a major role to impart education through distance mode. In the beginning they were distributing literatures, books and other materials to the registered students. They have also established Regional Centres for helping in this endeavour. The application of the technologies for such purposes using tools of Information Communication Technology are being applied by almost all the Universities to support the printed materials being made available to the students. Although, technology is growing very fast and adoption

of such technology is at a slow pace not only by Open Universities but other Universities as well [1-4].

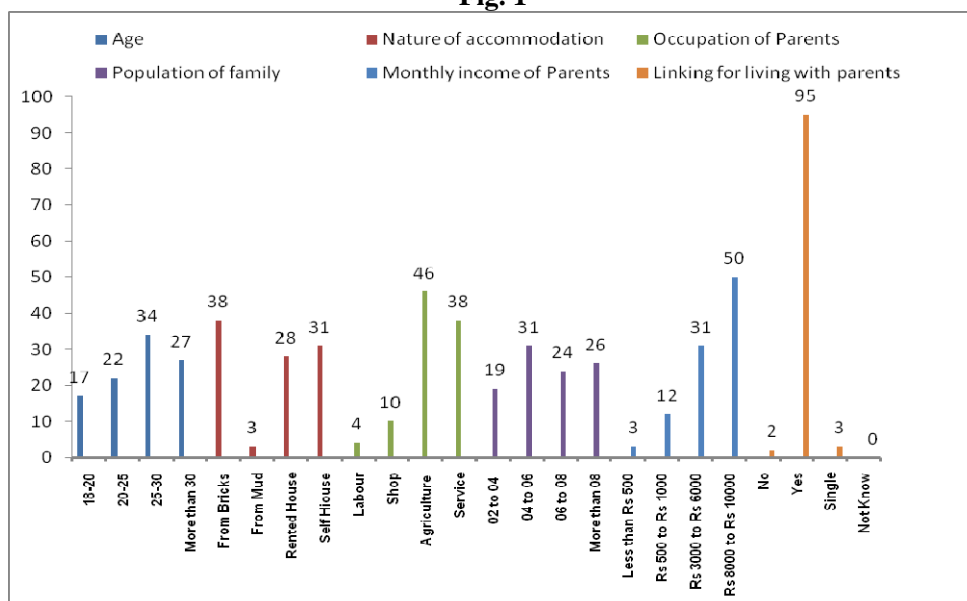
In the present study the impact has been assessed in the Open Universities located in the northern part of India. After developing the questionnaire it was circulated to eminent persons for its validation to ensure the appropriateness and effectiveness.

The methodology adopted in the present communication confined to developing and identifying important parameters related to:

- (i) Residential ambience of the respondents
- (ii) Parental status
- (iii) Employment and yearly income of parents
- (iv) Unitary or combined family
- (v) Objectives of education through Open systems
- (vi) Uses of ICT in delivering education
- (vii) Employment opportunities after getting education through distance mode.
- (viii) Whether such education is treated at par with traditional education.

The distribution of questionnaire was done to the students already taking education in Open Universities. The age group of the respondents was from 18 years to more than 30 years. They were selected in such a manner that partly belong to urban sector and others from rural sector. Their nature of employment or expected employment was also considered in selecting the respondents. Their ambitions and other social constraints were also taken into account in this study. The results were analysed by using statistical methods and are depicted as under:

Fig. 1



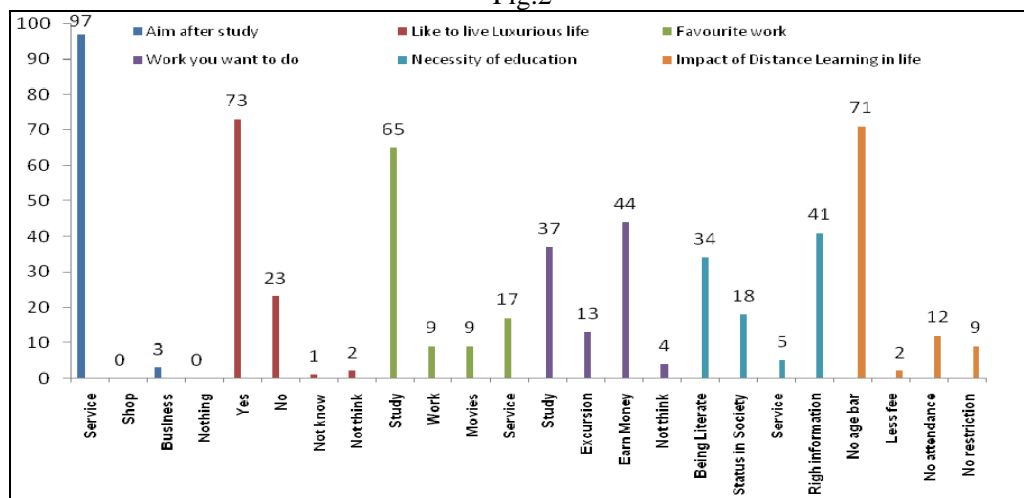
**Figure 1** reflects that participation of the respondents in the case study there were 17% of the age group of 18 to 20, 22% from 20 to 25, 34% from 25 to 30 and more than 30 there are 27%. This is very important to mention that the study has covered a large span of age group of the participants. This is necessary since it has been observed that about 80% of the respondents are employed where others are still in search of job. However, they need to enhance their qualifications and are denied to get education in formal sector. This is the situation in more or less in every part of India.

The gap in the social ambience including basic facilities such as approach roads, power, drinking water, telephone, schools, adequate amenities for living are quite low in the rural sector particularly in very far flung places in India as compared to urban sector. In villages which are slightly developed i.e. some of the basic facilities are available, the awareness about relevant higher education leading to appropriate employment is still insufficient. In Fig. 1, 38% of the living houses are made from bricks, 31% are living in their own houses, 28% live in rented houses and even in this century there are 3% houses made from mud. The houses constructed from bricks, their quality and maintenance are very poor. If we consider the situation of parental side, most of them (46%) depend on agricultural

products whereas 38% are in service, 10% have their own shops and 4% are working as a labour. The monthly income of the parents ranges from Indian ₹ 500 to ₹ 10,000. Only 50% have their income in the range of Indian ₹ 8,000 to ₹ 10,000, 31% from ₹ 3000 to ₹ 6000, 12% from ₹ 500 to ₹ 1000 and 3% have their income less than Indian ₹ 500. Although, the number of family members they are having vary from 2 to more than 8. It is interesting to find that 26% have more than 8 members in the family, 24% have 6 to 8 members, 31% have 4 to 6 members and only 19% have from 2 to 4 members. This data reflects that substantial percentage of the size of family members is quite high

The joint family culture is still prevailing in India. Only 3% of the respondents like to stay away with their parents whereas more than 95% believe in joint family. These aspects have both advantages and disadvantages. In the combined family, parents play quite dominating role affecting the freedom and away from real life situations by the children. However, in case of illness and other similar situations the joint family concept have tremendous advantages.

Fig.2



**Figure 2** reflects similar important parameters taken into account for impact whereas the monthly income is not commensurate with this size. It reflects that their living conditions including food, education and other necessary living ingredients are very poorly managed. In this situation, one can imagine that if they are struggling for their survival everyday their contributions to national development will be quite meager resulting in various types of other problems for their life sustainability.

analysis of Information Communication Technology. 97% of the aspirants would like to go for service. However, this is not clear whether they prefer employment in the Govt. sector or in private sectors. In normal course most of the aspirants would like to opt for such an employment where security of job along with handsome packages are available. In case of Govt. service security is better as compared to private sector. However, the packages are in the reverse order in some of

the private organizations. Of course, it is not applicable to all the employment sector offering jobs in non Government system.

In a very typical question whether the respondent would like to have luxurious life, only 73% are in favour of this whereas 23% are against it. 3% are uncertain with the status of their future life. It is very subjective to define the luxurious and normal living conditions. There are minimum requirements for any person to live comfortably. These are a house of the size depending upon the family members and basic facilities such as power, water, living rooms, bedrooms, kitchen and so on. To make it more luxurious one has to have expensive items required for day to day uses. One may also need climatic conditioning for good living. In a different question related to the desires of the participants whether they are interested in study, excursion, earn money or uncertainty in life. It has been found that 37% like to have further education, 13% favoured for excursions, 44% favoured for earning money and 4% were not certain what to do? It is very interesting that in earlier questions majority of them were interested for luxurious life but in this question less than 50% are interested in earnings. Therefore, sometimes the respondents are not in a position to have clarity in their thinking processes. In a slightly different question if we analyse the responses, it is found that 65% have favours to education, 9% wishes to work, 9% are interested in movies and only 17 % in jobs. These data are quite informative for the persons taking education through open systems. This was expected because the spectrum of age group is quite wide. Therefore, interests are also quite varied.

Some of the respondents were not highly educated. Therefore, they do not have clarity in their approaches and future directions of their life. The responses in respect of necessity of education, 34% wants to become literate, 18% desire name and fame in the society, 5% for service and 41% wants to get proper information in their life. This reflects that majority of the respondents being employed need enriching their knowledge and desire right type of communication and information in the society. This is very important as if one desires to achieve vertical growth then he should have exposure and vision in the society to manage various responsibilities and discharging their duties in an effective manner.

The impact analysis of distance learning in life reflects that there is no age bar for education through this mode or any other mode available in the society as reflected by 71% of respondents. 12% find that distance learning is good because they have not to spend time in attending classes. They can learn from their own home or from office. Thus, they can manage both office and family along with education through open system of education. 9% of the respondents are happy that there are no restrictions or binding as being imposed in traditional

education system by the Universities i.e. there is a fixed time for the classes. Therefore, one has to manage the time accordingly with schedule of normal universities.

The impact analysis as reflected above is quite interesting since in one of the questions on uses of ICT for delivery and management of education, it was found that most of the aspirants are in favour of such facilities. However, ICT requires basic facilities such as connectivity, power, hardwares (desktops, servers) and related infrastructure. In the Open Universities of India the usage of ICT is only 25% as infrastructural requirement for such communication at Regional Centres are not sufficient. Even in the Headquarters of the Universities sufficient facilities require strengthening. The efforts are there to generate resources for developing such infrastructure at the Centre of the Universities and at Regional Study Centres. However, it may take some more time to achieve the target of 70 to 80% of usage of tools of Information Communication Technologies. It has also been observed that wherever such facilities are available, the aspirants for taking education through distance mode are not trained to use such tools because of lack of basic knowledge of operating the computers. They do not have sufficient facilities in their educational institutions at private and secondary levels.

Recently, the Govt. of India has launched National Mission of Education through ICT. A number of Universities and Institutes have been identified to develop contents in different subjects being imparted at tertiary level of education. More than 25 areas of Information Communication Technologies have been identified to develop such contents along with effective delivery with audio, video, animation and other tools so that every student of the class can understand the subject being taught to them. The facilities are also being planned to enable aspirants for higher education living in rural sectors and at far flung places of the country. It is expected that within a decade, the situation will improve substantially through usage of tools of ICT in the delivery of education and management of human resources.

## Conclusion

The domain of distance education has been examined in the light of impact of Information Communication Technology being used in delivery of course contents, examination, evaluation and declaration of results. The respondents taking education through this mode are in the age group of 18 to more than 30 years. They have been provided well defined questionnaire taking into account of their living situations, ambiance around them, family status, earnings, ambition of life, comparative views of distance and general education and other related parameters. The case study has reflected very interesting

results which have been shown and discussed in Figures 1 and 2. The impact of ICT have been analysed, keeping in view the status of the students, infrastructure of the Open Universities in northern part of India and at Regional Centres spread over various parts of India. It has been seen that only 25% of tools of ICT are being used in imparting such education. This is because of the reasons that either the University is not in a position to arrange hardwares and softwares at their centres or recipient of education are not in a position to take the benefit of ICT support since they do not have basic knowledge of operation of computers. With the recent initiatives of Govt. of India by launching National Mission on Education through ICT, it is expected that situation will be considerably improved in coming decade.

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**Dr. Iti Tiwari** just after completion of her Doctorate Degree was appointed as Reader and Head in Sociology Department at Jagadguru Rambhadracharya Handicapped University, Chitrakoot, India in 2001. She then shifted to Uttar Pradesh Rajrishi Tandon Open University, Allahabad, India on the same status in 2007. Apart from publishing adequate

number of research publications and 03 books, she has published more than 500 popular articles reflecting various issues of the society particularly that of women, children, senior citizens and other deprived class of the society. She is proven and very famous writer in various fields. Dr. Tiwari is also good manager of human resources in the Universities she has got the opportunity to serve. Her present interests are devoting her energies on studying the Impact of ICT on various aspects of Open Education Systems in India.



**Ms. Tripti Gautam Tiwari** has passed her Master of Business Administration in high ranking and is working as Assistant Professor in Graphic Era University, Dehradun, India. She has established herself as a reputed and popular teacher in delivering of education in different subjects of Business Management. She is already enrolled for Ph.D. degree since 2009 and

it is expected that she will complete her work within next couple of months. She is working on problems of Human Resource Management in the University System of India.