Application of ICT in Education through ODL

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Abstract: In an era of ICT, education has seen a revolution with free access to unlimited information and learning tools. ICT stands for Information and communication technology useful in communication and management discipline. In the era where online and distance education is being leveraged by the role and importance of Information and Communication Technology. Role of teachers in education ICT has become increasingly persuasive in daily routine activities and now it has started reaching Schools. ICT enable cognitive and technical learning. Using ICT as a learning tool enhances teaching abilities. Now Education is based on child centric education. So the teacher should prepare to cope up with different technology for using them in the classroom for making teaching learning interested.

This paper is a descriptive research studying the effectiveness of ICT enabled teaching methodology Nagpur. The paper tests the efficiency of ICT after implementation of ICT tools to aid the teaching process.

The findings of this paper are based on primary and secondary data collected through observation and questionnaire and the outcomes are partly based on the results of primary data and secondary data collected from the internet and other sources like books, Articles, Journals.

New trends in teacher education are Inter-disciplinary Correspondence courses, orientation courses etc. Simulated Teaching, Micro Teaching, Programmed Instruction, Team Teaching are also used in teacher education.

ICT acts as the gateway to the world of information and helps teachers to be updated. It creates awareness of innovative trends in instructional methodologies, evaluation mechanisms.

ICT as a medium for teaching and learning. It is a tool for teaching and learning itself, the medium through which teachers can teach and learners can learn. Hence the paper would focus on application of ICT for instructional purposes and application of emerging ICT tools and preparing teachers for digital learning environment.

Keywords: ICT, ODL, Learning, Teaching

I. Introduction

ICT is a major factor in shaping the new global economy and producing rapid changes in society. Within the past decade, the new ICT tools have fundamentally changed the way people communicate and do business. They have produced significant transformations in industry, agriculture, medicine, business, engineering and other fields. They also have the potential to transform the nature of education where and how learning takes place, and the roles of students and teachers in the learning process.

Embedding ICT in teaching-learning process is a major initiative in all branches of education; ICT has a particularly important role to play in developing provision for bilingual learners. This is concerned with exploring new ways of working with bilingual learners as well as facilitating more established techniques. The increased use of ICT to deliver and enhance aspects of educational provision is now an emerging practice for all learners belonging to rural and geographically remote and mainly monolingual areas thus having advantages in overcoming geographical barriers.

For example video conferencing facilities developed to enable isolated learners to share learning with others in remote areas can also be used to reduce linguistic isolation by allowing same first language learners to discuss and communicate remotely.

Learners Support Services are an important part of Distance Educational system. Since the learners in ODL system are not directly involved in the regular classroom teaching-learning process having direct interaction with the teachers regularly, they are provided with adequate Learners Support Services.

Such support services include the pre-admission counseling, admission process, provision of study materials both in print media and audio visual forms, subject specific academic counseling, audio visual viewing facilities, participation in teleconferencing, ICT facilities for e-learning, library services, laboratory support facilities, academic career guidance, information services related to rules, regulations, procedures, schedules etc.

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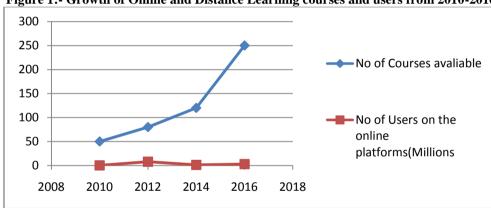
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The role of ICT to speed up the delivery of the support services has now become inevitable for the distant learners. It also considers the shift from mass produced generic resources to tailored, personalized support and communications and sets this in the context of globalization of the economy and the changing expectations of students as 'consumers.'

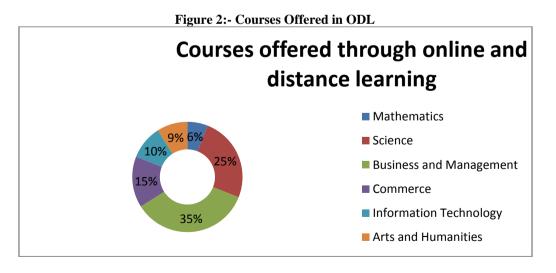
II. ICT and learner support

Distance and open education schemes that have until recently relied mainly on the mailing of written materials, videos, cassette recordings, and radio or TV broadcasting techniques can be augmented, enhanced or replaced by new on-line tools and technologies which have the power to transform the learning environment. Technological developments are coming together which offer the following benefits:

- Through the Internet and worldwide web, new and enlarged sources of information and knowledge that offer teachers and students opportunities for self-development as well as benefits from incorporation into classroom environments.
- Through e-mail and other Internet related feedback mechanisms, greater opportunity to reduce the isolation and time delay associated with distance education.
- Through the extraordinary pace of software development, enriched teaching and learning with enhanced graphics, interaction, animation and visualisation.
- Through lowering telecommunications bandwidth costs and emergence of enhanced cable, wireless and satellite systems, greater opportunities for basic access, video conferencing, on-line interactive learning, and live interaction with the central place of a distance education programme.
- Through community access schemes, more potential to make the benefits of distance education eventually available to lower income people and rural communities.







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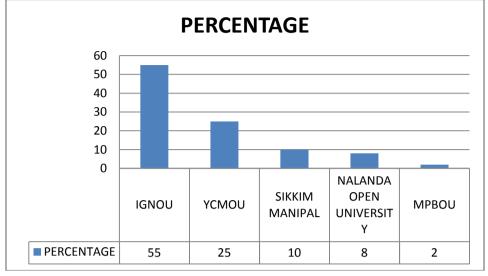


Figure 3:- Preference of ODL sources and websites based on survey of 100 faculty members of Nagpur

III. Conclusion

ODL provides multi-channel, multiple media teaching-learning packages for instruction and selflearning. The different components used for teaching/learning include self-instructional print and audio-video materials, radio and television broadcasts, face to-face counseling/tutoring, laboratory and hands-on experience, teleconferencing, video conferencing, interactive radio counseling, interactive multimedia CD-ROM and Internet –based learning, and the use of mobile phones for instant messaging.

While the traditional distance education delivery through print and study centre support is being strengthened, the University is gearing towards the development of interactive multimedia content and learner support through video-conferencing and web –based platforms, by utilising both the EduSat and the Internet. The design of the instructional system, as well as teacher and learner capacity building, are facilitated by the different Schools, Divisions and Centres of the University.

The Electronic Media Production Centre (EMPC) is entrusted with the task of production of audio and video educational programmes. This centre is equipped with state-of-the-art production facilities: two digital audio studios, two large video studios, Betacam SP edit suites, non-linear editing, audio editing suites, a large duplication plant, graphic facilities, etc.

Nevertheless to say that in ODL, ICTs are really effective in enhancing the learners support services above the conventional means and methods of learning and therefore, days are yet to come to explore newer technologies in distance learning further.

References

[1]. Internet Resources

- [2]. <u>http://www.itdl.org/journal/may_04/article05.htm</u>
- [3]. http://www.g-casa.com/download/ONeil_Distance_Education.pd
- [4]. <u>http://www.achva.ac.il/sites/default/files/achvafiles/maof_book/8/2002_2.pdf</u>
- [5]. http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=2F027F002B92C469A4D54BB36830D25D?doi=10.1.1.457.9604&rep=rep1&type=pdf:

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