

New Media Interventions at Open Universities in India

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Abstract:

New Media has bridged the gap between teachers and learners in distance education. Distance education has shifted to new way of instructional delivery through new media technologies. In this study researcher examined the status of utilization of New Media Technologies in Indian Open Universities. Fifteen Indian Open Universities (IOUs) were studied including 14 State Open Universities and one National Open University. Researcher investigated New Media technologies of IOUs which consist of E-SLM, Audio Channel, Web Radio Channel, TV Broadcasting Channel, Web Based Video Channel, Social Media and Mobile Apps. It was found that 80% of IOUs are providing E-SLM, 33% of IOUs are telecasting learning support materials via Radio Channels. 53% of IOUs have own web Radio Channels. 27% of IOUs are broadcasting of study materials via TV Channels. 73% of Indian Open Universities have web based Video Channels (YouTube). 60% of IOUs are using Social Media platform for student learning support. 33% of IOUs have developed own Mobile Apps. Further it was observed that although more than 50% IOUs are using New Media technology but in order to make it more effective, IOs need to develop a strong system of distance education equipped with new media. This research provides a platform to find out the status of New Media adopting by IOUs.

Key words: Indian Open Universities (IOUs), New Media, E-Learning, Open Distance Learning (ODL).

INTRODUCTION

New Media is an internet based medium which provides e-learning material through various digital channels. The New Media is used to define in all content related to the internet and the interplay between technology, images and sound. In fact, the definition of new media is dynamic, thus frequently changes occurs in definitions. In a broader sense New Media include internet such as websites, online newspapers, blogs, or wikis, video games, CD-DVDs, mobile app, social media, electronic digitised materials like, e-books, e-slm (Self Learning Material) etc.

New Media has been viewed as "new media" which are digital, often having characteristics of being manipulated, networkable, dense, compressible, and interactive (Flew 2008).

New media refers to "those digital media that are interactive, incorporate two-way communication and involve some form of computing" (Logan, 2010). However New Media does not include television programs (only analog broadcast), feature films, magazines, books, or paper-based publications unless they contain technologies that enable digital generative or interactive processes (Manovich 2003).

Social Media is a part of New Media which consists of YouTube, Facebook, Twitter, LinkedIn, Google+ or similar other web based services, facilitating group interaction. In present era New Media has penetrated in all geographical regions. New Media has been playing pivotal role in the area of Education. It provides interactive e-learning platform for learners, facilitating instruction and strengthening teaching and learning process. Presently, many educational institutions are extensively using New Media platform for teaching and learning. As a result of development of New Media creative changes took place in non-formal education system in 21st century and contributed in developments in e-Learning system. E-Learning has gained popularity worldwide (Sharma and

Mishra 2007). ODL system provides students an easy access of education at their doorstep. It bridges the gap between formal education and drop out learners. At present many Educational Institutes, Universities are widely using e-video learning through New Media. New Media technology became a newest pedagogical path for Open Distance Learning. The capacity to provide education using multisensory approach makes New Media based learning system is equally beneficial to normal as well as exceptional learners (Blind, deaf, dumb, gifted, and creative) etc. New media promotes involvement and participation in learning.

ODL has established its roots in the as a form of instructions at least 150 years ago as correspondence study. The University of London was the first university to offer distance learning degrees, establishing its external programme in 1828. The background to this innovation lay in the fact that the institution (later known as University College London) was non-denominational and, given the intense religious rivalries at the time, there was an outcry against the "godless" university. The issue soon boiled down to which institutions had degree- granting powers and which institutions did not (Rothblatt, et al., 1988).

Otto Peters observed that open and distance learning methods have had a major impact on teaching and learning. He emphasised on "Lifelong Learning" through the spectacular use of New Media. He summarized *"The concept of open learning offers interesting opportunities for the further development of distance education, which can only be exhausted if teacher and students work out a new conception of themselves, and if learning and teaching in distance education is structured, arranged and organized differently so that it can be adapted flexibly to the difference learning requirements of a very heterogeneous clientele"* (Peters, 2001).

The digital information and communication development have created a new trend of Teaching and Learning. The

further development of Personal Computer (PC) and Multimedia have enhanced the facility to store the information and reproduce it as and when needed in a minimum time period. It also provides interactive learning programmes by means of various softwares. It creates a channel for larger and more extensive databases and their connection to international global digital information networks. The improvement in telecommunication through the audio video technology is not just a technological development, but it is a new pedagogical innovation. Otto Peters has found general structural advantage of development of technology for ODL. The distance between teacher and students which is constitutive for distance education, turns into virtual proximity, diversions presented in writing are replaced, where necessary, by the oral form, dead letters give way to the live voice of teachers or participants, and the rigid, time delayed sequence in the articulation of learning and teaching process makes way through the audio-video conferences. Distance education has always been a very flexible form of learning and teaching (Peters, 2001).

Further Otto Peters (2001) has suggested a virtual-distance-education model, the flexibility of which can be enhanced by Internet-based learning. He puts forward "One important factor is the increased speed of communication, which reduces the turnaround time of assignments to be assessed, improves the cooperation of all members of the learning projects and the universities, and strengthens the ties to students, especially to those living far away in all parts of the world." As a result of advancements of telecommunications technologies, distance learning programs have become more easy and effective. Distance education can be now defined as "the acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance" (Peters, 2001). The distance education offers flexible learning through online new media based materials. Distance education courses are

designed for these students who are unable to attend classes on regular basis in campus or who are not getting education due to other reasons. New Media provides more than one of the study options to students through ODL.

Despite of wide use of new media in whole teaching and learning process, very less number of research studies have been conducted, it's considering pedagogical aspects. As Mendels (1999) found that *“researchers have so far overlooked the thorny details of what is involved with online pedagogy, while extolling the educational potential of technology”*.

Brown (2000) describes the important feature of web-based learning as a new powerful fabric for learning cross-pollination of ideas cross-linked interest groups, both real and virtual, form a rich ecology of learning”. As he observed the web-based learning process is constantly developing, largely self-organizing and forming a creative way, which has a feature of cross-pollination of learning.

Zhang, Zhao, & Zhou (2004) in this extensive study on “Can e-learning replace classroom learning?” concluded that traditional classroom education or training does not complete the need of the present world’s lifelong learning. Learning is shifting from instructor-centeredness to learner-centeredness, and is moved from classrooms to homes and offices. E-Learning, referring to learning through the Internet provides people with a flexible and own respectively way to learn. It is provides opportunities learning-on-demand and reduces learning cost. E-Learning now a days has created a far-reaching impact on learning in the new millennium.

Pathak & Chaudhari (2005) proposed collaboration between students and teachers to produce more effective e-lectures. The investigation was set up involving five lecturers for five hundred students in a technological university in Singapore. Teachers recorded their lectures through customized software. Teachers seemed to be more preoccupied with their body language, facial expressions and trite organization.

Students seemed to focus on voice and the matter on the slides and did not mind a rather repetitious delivery. As researchers concluded The effectiveness of e-lectures in Asian education would largely depend on the extent to which the teachers are able to address the students concerns. To achieve this, the teachers would also need to enhance their awareness of the new medium.

The study by Kumar and Sharma (2006) was focused on accessibility to various media; media use profile, views on usefulness of media, impact of media on their learning activities, problem faced in the use of media and suggestions for improving the utilization of media in distance education. Investigators found that computer and internet were preferred by students in distance education. Researchers explored the problems faced in the use of electronic media like audio video cassettes/ CDs of different courses are generally not available. Timing of teleconferencing did not suit to learners, Non-receipt of schedules of radio counseling and programs, access of internet at the study centers is mostly not available and non-availability of trained manpower to operate various media etc. They concluded that *“distance education has been accepted by nearly all segments of society; ranging from eighteen-year-old student to a service man, who is nearing his retirement, 10th class pass learners to Ph.D. holders. Open universities have been successful in their endeavor of making learning a lifelong activity”*. The study found that the trend in media use by the learners were not very encouraging state of affair, none of the media were used by more than half the learner’s population.

Murthy & Naraharisetty (2011) investigated the effectiveness of video-based lectures and voice-based presentations in terms of e-Learning content, retention of learning, Ease of use, Satisfaction, Video quality and Audio quality. The study followed the video-based lectures to make learning more interesting, fun, and effective in task accomplishments. Researchers conducted the survey with the

Master of Science in Information Technology (MSIT) program's students. The knowledge component of the course was delivered to the learners as video-based lectures and presentations with voice-overlay. These become learning support materials to the learners in accomplishment of their tasks. They observed that length of video lectures may be limited to a maximum of 20 minutes. Video lectures can be effective with voice over and also consist with text-based concepts along with animated diagrams and graphics supplemented with connected hyperlinks for more examples, illustrations.

Open and Distance Learning (ODL) system wherein teachers and learners need not necessarily be present either at same place or same time and do not require classroom (face to face) teaching and is flexible enough in regard to modalities and timing of teaching and learning. The admission criteria are also flexible without compromising necessary quality considerations. ODL system in India consists of one national university, Indira Gandhi National Open University (IGNOU) and 14 State Open Universities (SOUs) including Odisha State Open University. (The name Odisha State Open University has not mentioned yet in MHRD and DEB websites).

New Media has multiple approaches for distance learning. It is cost effective and easy to access for every student. It has international and multisensory approach. It provides many facilities for e-learning like live online sessions which give immediate feedback with results. New media technology is offers an intensive platform to students of ODL system. Given below the benefits of New Media based Audio Video Lectures.

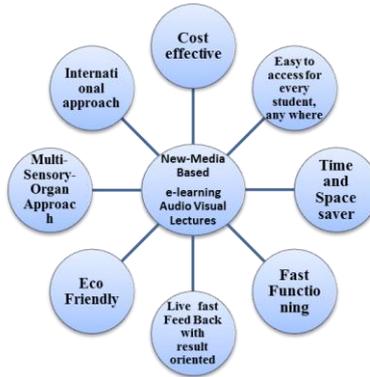


Figure 1: Benefits of New-Media based e-learning Audio Visual Lectures

METHODOLOGY

The present study was focused on finding out present status of use of New Media based technologies at different Open Universities of India. The study involved mainly internet based New Media Technologies. Although most of the Open Universities in India have embraced New Media technologies, in various ways a uniform New Media-based platform is not introduced as yet.

The research was intended to find out answer to the following research questions:

- Q.1. What is the status of E-SLM in Indian Open Universities?
- Q.2. What is the status of Audio Channel being used by Indian Open Universities?
- Q.3. What is the status of Web Radio Channel webcasting by IOUs?
- Q.4. What is the status of Educational Programme's TV Channel broadcasting by IOUs?
- Q.5. What is the status about You Tube channels being used by IOUs.
- Q.6. How many IOUs are using broadcasting Channel and YouTube Channel both?
- Q.7. To what extent Social Media is utilised by IOUs?

Q.8. How many IOUs are using Mobile apps?

In present study researcher used website based New Media information of all 15 Open Universities of India. New Media Technologies which were considered for present study are as below:

1. E-SLM : Any digitized text content
2. Audio Channel: refers to any radio transmission.
3. Web Radio: website based audio channel.
4. TV Broadcasting channel: refers to TV Channels.
5. YouTube channel: Universities having own YouTube based Video Channel.
6. Social Media: Universities having Facebook, Twitter, Google+ etc. page.
7. Mobile Apps: Universities having own mobile app.

DATA COLLECTION

14 State Indian Open University and One National Open University (IGNOU) were selected for data collection for this Research.

URL of Indian Open Universities considered in present research.

www.braou.ac.in

www.v mou.ac.in

www.nalandaopenuniversity.com

www.ycmou.digitaluniversity.ac

www.bhojvirtualuniversity.com

www.baou.edu.in

www.ksoumysore.edu.in

www.wbnsou.ac.in

www.uprtou.ac.in

www.tnou.ac.in

www.pssou.ac.in

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www.uou.ac.in

www.kkhsou.in

www.osou.ac.in

www.ignou.ac.in

The major finding of the research as per the pre-defined criteria has been presented below in the given table:

S N	Indian University	Open	E-SLM	Audio Channel	Web Radio	Video Channel	Web Video Channel YouTube	Social Media	Mobile App
1	Dr B R Ambedkar Open University, Hyderabad (1982)		No	No	No	Yes* *DD Saptagiri & Gyandarshan Channel	Yes* *BRAOU- But only one video uploaded	No	Yes* * i-vidya
2	Vardhman Mahaveer Open University, Kota (1987)	Open	Yes	No	Yes	No	Yes* *vmouonline	Yes* * Facebook * Twitter * LinkedIn, * Google+	Yes* *vmou online
3	Nalanda Open University, Patna (1987)	Open	No	No	No	No	No	No	No
4	Yashwant Chavan Maharashtra Open University, Nasik Maharashtra (1989)	Rao	Yes**e-books	No	Yes* Yashvaani YCMOU	No	Yes* *YCMOU	Yes* *Facebook *Google+	No*
5	Madhya Bhoj Pradesh Open University, Bhopal (1991)	Pradesh (Open)	Yes	No	Yes* Bhojvaani	Yes* *Video Lectures Telecast via Eduusat	Yes* *Bhoj Darshan	No	No
S N	Indian University	Open	E-SLM	Audio Channel	Web Radio	Video Channel	Web Video Channel YouTube	Social Media	Mobile App
6	Dr. BABA SAHEB AMBEDKAR Open University, Ahmadabad (1994)	Open	Yes**dyotirgam ya	No	Yes* *Swadhyay	No	Yes* *Swadhyay web-TV	Yes* * Facebook * Twitter	Yes* 4 types 1. info@baou 2. courses@baou 3. student@baou 4. wanttostudy@baou
7	Karnataka Open University, Mysore (1996)	State	Yes**e-books	Yes* *Gyanvaani FM- 105.6MHZ	No	No	No	No	No
8	Netaji Open University, Kolkata (1997)	Subhash	Yes	Yes* * Gyanvani Programme	No	No	Yes* *NSOU- Audio- Visual Resources	No	No
9	Rajarshi Open University, Allahabad, UP (1998)	Tandon	Yes	Yes* but not working	No	No	Yes* *UPRTOU Allahabad But only Cultural Videos Available	Yes* *Facebook * Twitter	Yes* *UPRTOU
10	Tamil Nadu Open University, Chennai (2002)	Open	No	No	Yes* *TNOU	No	No	No	No
S N	Indian University	Open	E-SLM	Audio Channel	Web Radio	Video Channel	Web Video Channel YouTube	Social Media	Mobile App
11	Pt. Sunderlal Sharma Open University, Bilaspur (2005)	Open	Yes	No	No	No	Web broadcast icon available but not working	Yes* *Twitter	No
12	Uttarakhand Open University, Haldwani (2005)	Open	Yes	Yes* *91.2FM	Yes* *Hello Haldwani	Yes* *Gyandarshan	Yes* *uouonline	Yes* *Facebook * Twitter * LinkedIn * Google+	No
13	Krishna Handique Open University, Guwahati (2005)	Kanta	Yes**E-BIDA	Yes* *AIR-Ekalya Programme	Yes* *JANAN TARANGA community	No	Yes* *KKHSOU	Yes* *Facebook, * Google+	Yes* *SMART KKHSOU

1	Odisha State Open University, Sambalpur	Yes	No	Yes* *Panyanva ni radio	No	Yes* *Info OSOU	Yes* *Facebook/Twitter	No
1	IGNOU, New Delhi	Yes	Yes**Gyanvani	No	Yes* Gyandarshan	Yes* *E Gyankosh	Yes* *Facebook, Twitter	No

DATA ANALYSIS

Use of New Media in Open Universities in India

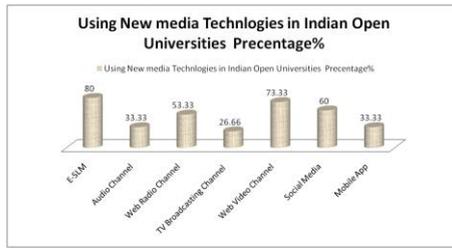


Figure-02

Analysis of the data obtained indicates that majority of IOUs (80%) are providing E-SLM only 20% IOUs have not developed any such mechanism. Around 33% of IOUs are using audio channels like FM or Community Radio. 53% of IOUs are using Web Radio while 27% of IOUs are broadcasting videos for distance learning purpose. YouTube Channel was found very popular medium for video webcasting. 73% of IOUs are having own YouTube channels. 29% IOUs are using both broadcasting and webcasting. 60% of IOUs are active on social media, having their social media web page. 33% of IOUs have developed their own mobile apps.

E-Self Learning Materials

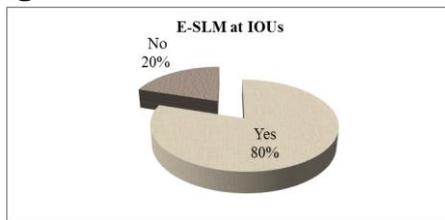


Figure-03

As above figure 03 indicates to 80% of IOUs are providing E-SLM to students. Only 20% of IOUs have no such E-SLM on their websites. E-SLM refers digitized study materials like e-books, e-papers, question banks etc.

Audio Channel

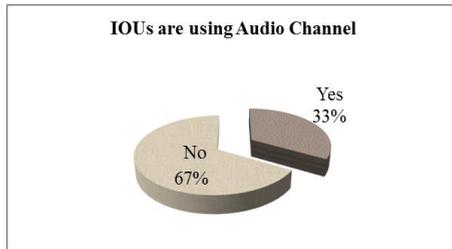


Figure-04

As the above figure shows Indian Open Universities are using only Gyanvani FM and AIR FM or Community Radio to facilitate the students. As indicated in above figure-04, 33% of Indian Open Universities are using Digital Audio Channels. 67% of IOUs have no such facility.

Web Radio Channel

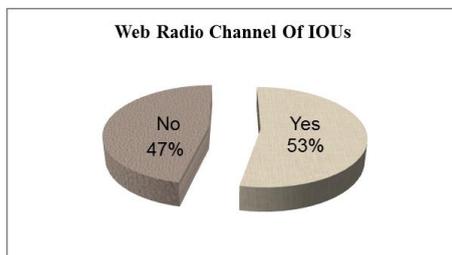


Figure-05

Web Radio is a new intervention in radio field. Web radio is an internet based platform to educate the students. 47% of Indian Open Universities are using web-radio but 53% of IOUs have no such facility.

Video Broadcasting

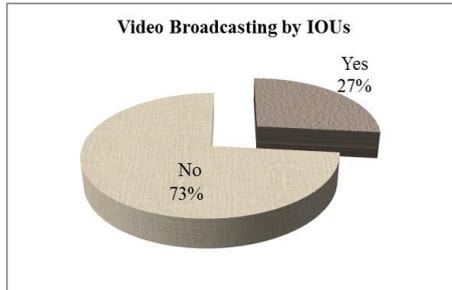


Figure-06

As above figure 06 shows that 29% of IOUs have Video Broadcasting technology for distance learners where as 71% of IOUs have not such facility to cater the need of learners.

Web Video Channel

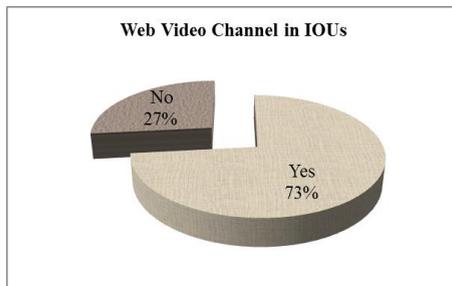


Figure-07

Data obtained indicates that 79% of Indian open universities have created their own YouTube Channel which is being used for distance learning.

Social Media in IOUs

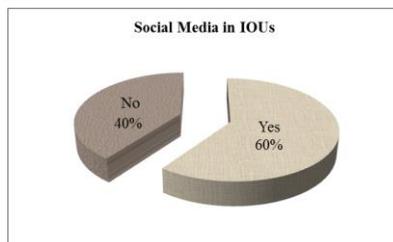


Figure-08

Figure 08 indicates use of Social Media by IOU. Social Media is emerging part of New Media. 64% of IOUs have created social media web pages which help the students for learning. 34% of IOUs have not adopted Social Media yet for academic or administrative purposes.

Mobile App

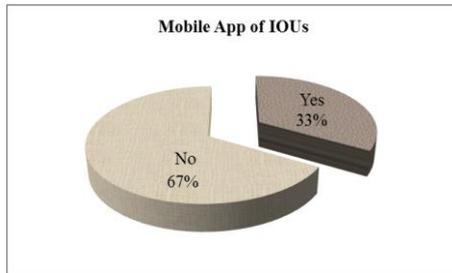


Figure-09

Mobile Apps are important channel of New Media. 36% of IOUs have developed own university mobile apps like i-vidya, vmouonline, iwanttostudy@baou, uprtou, smartkkhsou. 64% of IOUs are using this technology.

RESULT & DISCUSSION

In this present study was investigated the status of New Media technologies being used by IOUs. Research was conducted on certain new media like E-SLM, web channels, mobile apps etc. It was observed that IOUs have started to adopt New Media Technology for Distance Education. After exploring to all 15 IOUs websites, study concluded that 80% of IOUs are providing E-SLM and 33% of IOUs are using audio channels like FM or community Radio. 53% of IOUs have own web based radio for distance learning. 27% of IOUs are using video broadcasting technology for distance learning purpose. YouTube Channel has become a popular medium for video webcasting and 73% of IOUs are having own YouTube channels. 60% of IOUs are active on social media and they have social media web pages.

33% of IOUs are developed own mobile apps which are using for distance education. It was observed that IOUs are shifting traditional study support technologies to New Media based technologies but requires to develop a more structured Learning Model. It will be create a horizon for students to distance learning. Indian Open Universities need to create a model to providing all learning facilities to the students which are developed by New Media technologies. They also need to require knowing the path of maximum utilization of produced video learning material. New Media based technology is offering a pedagogical path to all students who wants to gain knowledge through distance learning. To the way conclusively it can be interpreted that use of New Media based technologies at Indian open universities have a wide scope but a long way to go.

REFERENCES

1. Brown, J. S. (2000). Growing up digital : How the web changes work, education, and the ways people learn. *USDLA Journal*, 16.
2. Flew, T. (2008). *New Media An Introduction*. United Kingdom: Oxford University Press.
3. Kumar, A., & Sharma, R. C. (2006). A Survey of the Electronic Media Utilisation by Distance Learners of Indian Open Universitie. *International Journal of Instructional Technology and Distance Learning*.
4. Logan, R. (2010). *Understanding New Media*. Toronto: Peter Lang Publishing.
5. Manovich, L. (2003). *The New Media Reader* (Vol. The New Media Reader). (N. W. Fruin, & N. Montfort, Eds.) Cambridge: The MIT Press.
6. Mendels, P. (1999). *Study finds problems with web class*. New York: New York Times.

7. Murthy, S., & Naraharisetty, P. (2011). Investigating the Effectiveness of Non-interactive video-based Lectures in eLearning. Retrieved from <http://www.iicacademy.com/docs/effectiveness-of-non-interactive-video-based-lectures.PDF>
8. Neese, B. (2016). *what-is-new-media*. Retrieved 04 20, 2017, from <http://online.seu.edu: http://online.seu.edu/what-is-new-media/>
9. Pathak, A. L., & Chaudhari, N. S. (2005). Medium is the Message : Web-based Lecture Presentations in Distance Education in Singapore. *Asian Journal of Distance Education, 03*, 13-22.
10. Peters, O. (2001). *Learning and Teaching in Distance Education: Analyses and Interpretations from an International Perspective*. London: Routledge.
11. Rothblatt, S., Muller, D. K., Ringer, F., Simon, B., Bryant, M., Roach, J., Symonds, R. (1988). *Supply and Demand: The "Two Histories" of Education* (Vol. 28). History of Education Quarterly.
12. Zhang, D., Zhao, . J., & Zhou, L. (2004). Can E-Learning Replace Classroom Learning. *Communication of the ACM, 47*.