
IMPACT OF DIGITAL EDUCATION ON INDIAN SOCIETY- AN ANALYSIS

Komal Joshi¹, Dr. Alok Tiwari²

Department of Education

^{1,2}Shri Venkateshwara University, Gajraula (Uttar Pradesh)

Abstract

This paper discusses the effectiveness of digital education on Indian society. It is to determine core curriculum items that should be taught to ensure that graduates have the capabilities and skills to fully participate in the digital society. There was considerable agreement between the colleges regarding the importance of twenty aspects of digital literacy. Application skills continued to be viewed as very relevant. However, our findings also show the need for a greater focus on information literacy skills that go beyond the focus of the current one-credit-hour software applications course designed to achieve computerized application literacy. A case can be made for additional topics to be included in the curriculum common to all students such as ethics, security and privacy, and how to validate the relevance and usefulness of data. The study also highlights the need for discipline-specific topics to be embedded in subject-knowledge courses.

1. OVERVIEW

India has made tremendous progress in improving elementary education provision and increasing participation. However, it progresses in improving education at post-elementary stages, and in improving quality outcomes has been modest (Sankar, 2010). India has a very rich history dating back to several millenniums. Knowledge was preserved and propagated through oral tradition. In this context, the teachers set up 'residential schools' in their own homes. Students were supposed to reside with the teacher and his family and the students were expected to share the daily chores of the teacher's family. Sanskrit was the language of the educated and the texts were composed in this language. Most of the major modern languages in India are derived from

Sanskrit, except the classical language of India, Tamil. During the regime of Buddhist kings belonging to the Mauryan dynasty in the third and second century BC India flourished with the establishment of exclusive institutions of learning. Taxila, now in Pakistan, became the seat of learning where scholars journeyed to learn and to be educated. Nalanda, in eastern India became famous for the Buddhist University where several religious conclaves were held.

In the 10th century, India was invaded from the northwest and many founded their dynastic rule in India. Persian became the court language² and the educated elites became conversant in Farsi and Arabic. The dual traditions of Sanskrit and Farsi education were kept alive till the colonization of India by the British. The

British established schools to teach English and the sciences (Kuppusamy, 2009).

2. GENESIS OF HIGHER EDUCATION IN INDIA

The higher education in India began with the establishment of Hindu College at Calcutta (1817) by Raja Rammohan Roy and his friend David Hare with the objective of providing a channel by which real knowledge might be transferred from European sources to the intellect of Hindustan.

Growth of Higher Education in Uttar Pradesh

The region of Uttar Pradesh had a long tradition of learning, although it had remained mostly confined to the elite class and the religious establishment. Sanskrit-based education comprising the learning of Vedic-to-Gupta periods, coupled with the later Pali corpus of knowledge and a vast store of ancient-to-medieval learning in Persian/Arabic languages, had formed the edifice of Hindu-Buddhist-Muslim education, till the rise of British power. But the system became decadent as it missed the advancements that were taking place in Europe during and after the Renaissance, resulting in serious educational backwardness.

Digital learning guarantees more participation from students as the current generation of students is well-versed with laptops, I-pads, and smart phones. The electronic books, or e books, offer students,

teachers and schools an extra medium or device of directions that can support or upgrade the learning process in Uttar Pradesh. This while, the utilization of e books is constrained to college students in Uttar Pradesh. Utilizing e books as course books in the classroom at schools is another worldview particularly Uttar Pradesh. Similarly as with all books, there are different kinds of E-books accessible to suit students' learning, attributes, abilities, and premiums. The exploration gives some understanding on what a digital book is, and its focal points, impediments, systems and structure of utilizing it as a course reading in classrooms. Over numerous years, innovation has turned into a relevant point among the instructors as a decent and successful apparatus to teaching children in Uttar Pradesh.

3. DEFINING DIGITAL EDUCATION

Digital research involves the employment of digital technologies in research practices and is a rapidly growing area of scientific development and deliberation. The task force initially focused on determining what constitutes digital literacy. Regular change as a defining characteristic makes precise definitions difficult reveals a myriad of definitions many of which are quite different in nature and often inconsistent introduced the concept of digital literacy as “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers”.

The California ICT Digital Literacy Assessment and Curriculum Framework

provides a more detailed definition of digital literacy as “the ability to use digital technology and communications tools, and/or networks to access, manage, integrate, evaluate, create and communicate information in order to function in a knowledge society. Similarly, digital competence as used by the European Reference Framework is “the confident and critical use of information technology for work, leisure and communication, underpinned by basic skills in ICT: the use to computers to retrieve, assess, store, produce, present, and exchange information, and to communicate and participate in collaborative networks via the Internet.”

Learning through technology

Learning scientists have suggested providing students an active role in solving problems. This may empower learners to communicate effectively when analyzing information and designing their own learning. In the Enhancing How Children Learn section, the researchers explained that: “Some of the pioneers in learning research also have been pioneers in exploring how technologies can improve learning. ... They have realized that the structure and resources of traditional classrooms often provide quite poor support for learning, whereas technology—when used effectively—can enable ways of teaching that are much better matched to how [students] learn.

According to How people learn: Brain, mind, experience book and Handbook of educational psychology the researchers suggested that we should bring together

experiences, interpretation, and structured interactions with peers and teachers in order to promote actively constructing knowledge and learning through active engagement.

The main factor that restricts teachers from using ICT in education is the access to technology. The interviews paint a rather negative picture of the technology access at the schools at hand. The educational establishments generally have from one to several computer rooms that are equipped with a small number of computers that range between 10 to 20 stations. Typically, they are also not equipped.

Educational initiatives are set in a context of societal change. One major societal shift is the rise of digital technologies. Computing and the World Wide Web are permeating people’s lives, including all aspects of the learner’s life. It is estimated that there are in excess of 27.2 million weblogs and the blogosphere continues to double about every 5.5 months. There are about 75,000 new weblogs created every day and 1.2 million posts per day on average or 50,000 posts per hour. People are changing patterns of communication and self-presentation, allowing more personal control over their lives and of the way they interact with knowledge. The current generations of students are able to work with technologies in ways un-thought of by even their elder siblings.

4. STATUS OF LIBRARY IN THE ERA OF DIGITALIZATION

Technology has drastically changed the way librarians define themselves and the way they think about their profession and the institutions they serve. The librarian in the digital world now acts as a guardian of information, as a consultant to the users, information broker and a continuous learner. The platform of Internet and WWW has helped to change the ways of accessing and locating information and thereby change the functions of an academic librarian and academic library in the modern information society. The role of librarians and the importance of libraries in this digital era are even now based on the basic principles of library science described by Dr S.R Ranganathan in his Five Laws of Library Science.

- Books are for use
- Every reader his book
- Every book its reader
- Save the time of the reader
- Library is a growing organism.

Several attempts have been made to reinterpret these fundamental laws by others, but they do not encompass the whole of library and information science as achieved by Ranganathan's laws. These five laws furnish an interpretative explanation of the empirical facts of experience and technology necessary in experience in relation to library service. The biggest challenges facing the library profession today is repairing the professionals to use technology effectively. An academic library professional will be required to serve as an information service

consultant with specific information technology skills.

5. INTEGRATION OF THE SOCIAL MEDIA WITH E-LEARNING IN HIGHER EDUCATION

Many have noted the development of social media - especially Facebook, Twitter, YouTube and Wikipedia. Since 2006 when Time Magazine 's 'Person of the Year' was declared, social media has come to control the ways in which digital technology is now used around the world. There are many distinct geographical and cultural variations within this global adoption where people in the USA may log on to Face book and Twitter, the Arabic users like to access Face book and YouTube, while Chinese users are more likely to access Renren and Net .Ease All these applications show the principles of social media remain same, which rely on flexibly shared digital content that is authored, commented and reconfigured by a quantity of users.

Therefore, social media applications allow users to converse and interact with each other; to create, edit and share new forms of textual, visual and audio content; and to categorize, label and recommend existing forms of content. The key characteristic of all these social media practices is that of 'quantity socialization', attaching the power of the collective actions of online user communities rather than individual users. The younger generation students are accessing Facebook & Twitter and numerous other websites to connect and share with those around them. One of the

most interesting things about social media is that users can interact and engage with each other solely through a Web presence, possibly never even meeting in person. They are share personal links to other sites or comment on others' posts, and students engage, stretching beyond social interaction purposes alone. Students use social media day in and day out to interact with their peers and even teachers about class-related subjects.

In a world where online correlation is important for all the businesses, they are becoming experts at developing a sense of internet presence. It is not just that they know how to interact with others on the internet, they also know how to use basic and even complex functions in order to do so. These skills remain the same, which are not learned suddenly, as with any skill, social media prowess takes training. The younger generation has amazing potential. They approach professional challenges with zeal and excitement. With an understanding of the latest social media tools, many of younger generation are extremely talented in the use the social media.

6. OPPORTUNITY FOR EMPLOYMENT IN THE WORLD OF INTERNET

Social media poses plenty of opportunities for learning and teaching, and it is clear to see how students benefit from using social media. As younger generations use such technology in their classroom, they remake and change the educational landscape. The students, especially the younger generation,

are facing the world through more than just books and assignments, they are learning to approach the world using a new formula of communication. Graduates are coming into the workplace with a lot to offer. The generation of those using social media share among themselves by giving and receiving information at rapid speeds. They share views and opinions, tips, comments and even the projects, which can be helpful information for classes. Their ability to assess, analyze, retain and share information help them to develop their skills.

Educational Technology is defining differently by different authors depending on their needs because of diversity and different perceptions.

1. Educational technology is the use of technology to improve education. It is a systematic, iterative process for designing instruction or training used to improve performance. Educational technology is sometimes also known as instructional technology or learning technology. (Wikipedia: Educational technology)

2. The study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources.

3. A definition centered on its process: "A complex, integrated process involving people, procedures, ideas, devices, and organization, for analyzing problems, and devising, implementing, evaluating and

managing solutions to those problems, involved in all aspects of human learning"

7. CHANGING TIME OF INDIAN EDUCATION SYSTEM

Currently, the nation battles a spate of issues like skill-gap and unemployment, and the broken education system is riddled with issues ranging from an outdated syllabus, lack of hands-on practical experience, lack of quality educators, and so forth. This points out the sad and scary state of India's engineering system and presents the difficulty graduates face while looking for a job. Educational generation is a process-oriented method. Educational era is not confined to teaching and studying manner and theories nonetheless teaching-getting to know method is inspired a whole lot more by using educational technology. Theories were shifted from getting to know to teaching simplest because of educational generation. If the academic technology is limited to audio-visible aids, mechanical and electronic devices the scope of educational era becomes constrained, but educational technology isn't always restricted to all this stuff alternatively, it pervades all over. Instructional era needs to move into:

- At home with family and relative
- Help by External sources
- Continuous and rigorous analysis
- Obstacles in solving problems
- Specification of direct behavior
- Clear Specification of the problems
- Management and organization of man, material, resources

8. CONCLUSION

This study shows that there is not only the potential for e-reader devices to be equal with textbooks. In fact, they are possibly even better when used for learning. Previous research conducted on the effects of e-text, in any form, on learning has tended to show negative results. The results of this study are significant due to the fact e text has a more positive effect on transfer learning than did a traditional textbook. The findings of this study are important because researchers who focus on learning need to know the potential positive effects e-text can have when it is appropriately displayed for readers.

Current research is lacking, specifically for the impact of e-text in an e-reader device such as an iPad. Therefore, this study provides a foundation in a new realm of cognitive research. Educators, too, benefit from being informed of reader's ability to learn the same material in an e-device that differs from traditional textbooks. Educators are responsible for educating students. The fact students may be able to simply purchase one simple device that stores all their books has the potential to greatly impact how teachers teach.

With such information presented, teachers may have to rethink and readapt how their current curricula are taught. Not only would this be easier to manage but the fact that students may even be able to learn better from e-devices is of significant interest for educators. Not only do educators involved in the learning process need to be informed of this relevant debate but textbook companies

may begin to change what they are currently producing. Currently, companies have already begun to produce e-textbooks that are available for download on the iPad, Kindle, and various other e-reader devices. Most textbook companies' primary focus still revolves around mass production of textbooks as opposed to e-text books.

More emphasis is now being given to developing regional language software and encouraging multilingual multipoint sites like www.indianlanguages.com and www.apnamail.com. The progress of any country depends upon the quality of education offered and its practices. Indian

education was well known for its Gurukul System of education in the Vedic age. Education in India has undergone various phases and stages of 86 development starting from Vedic age to post-independence period. At all stages of development, there was a concern for bringing in the quality of education reflecting on the practical aspects in education.... The development of technology has changed the world outside the classroom; it is more eye-catching and interesting for a student than the classroom setting.

REFERENCES

- [1]. Clements, D.H., & J. Sarama. (2003). "Strip Mining for Gold: Research and Policy in Educational Technology: A Response to 'Fool's Gold.'" *AACE Journal*, 11 (1): 7-69.
- [2]. Rao, Narasimha V, and K. Srinivas. "Human Resource Development Practices in Indian Information Technology." *IJSR* 263. Web. 18 Aug. 2010.
- [3]. Klara Nelson Marcy Courier Gilbert W. Joseph *Journal of Information Systems Education*, Vol. 22(2) An Investigation of Digital Literacy Needs of Students Available at <http://jise.org/Volume22/n2/JISEv22n2p95.pdf> accessed on 3/05/2017 on 6:05 pm.
- [4]. Ahuja, Shiri. "Information Technology in India: The Shift in Paradigm." Delivered at the 'Where in the World?' Conference, Budapest 24/25 October 2000.
- [5]. Heap, Nick, Ray Thomas, and Geoff Einon, eds. *Information Technology and Society*. London: Cromwell Press, 1995.
- [6]. Chang, C. Y., Sheu, J. P., & Chan, T.W. (2003). Concept and design of ad hoc and mobile classrooms. *Journal of Computer Assisted Learning*, 19(3), 336-346.
- [7]. Bandura, A. J. (1986). *Social foundations of thought and action*. Greenwich, CT: JAI Press.
- [8]. McLuhan, Marshall. *Understanding Media: The Extensions of Man*. Routledge: London, 1964. Web. 13 May. 2009.
- [9]. Randall . Davies "Technology Integration in Schools"
- [10]. Report To The People (201 1-2012). UPA Government. [Direclorutc' o/ ;hlvertising](http://www.direclorutc.gov.in/hlvertising) and [1'isuul](http://www.direclorutc.gov.in/1isuul) Publicity

Ministry of Information and
Broadcasting, Government of India
Compilation: Press Information
Bureau Printed at I3rijbasi Art Press
I,td., Noida. Retrieved from
111!/ICIU. UT.111.getdoC.php td
.!"Pub't7!]32'.f)[/.

- [11]. Sachdeva. M. S.& (Iupta. V. K.
(2003). Essentials of instruc-don
technology. Jullandhar Ludhiana:
Vinod publications (Educational
publishers) Bright Press.