

Disposition of Teachers and Students towards the use of E-Learning in Schools.

Ilyas Husain¹ & Nisha Nair²

¹Professor and Dean & ²Ph.D. Scholar

¹Faculty of Education, Jamia Millia Islamia

²Deptt. of Educational Studies, Jamia Millia Islamia, (Assistant Professor, Jindal Global Law School, O.P. Jindal Global University)

Email: ilyashusain2004@gmail.com

Abstract

The paper stresses on the need for adequate e-learning and technological training in the pre-service and in-service programmes for teachers. It aims to study the outlook and competency of teacher towards the use of technology and e-learning resources in teaching at secondary level of education. The paper looks at the ways in which teachers are inculcating e-learning material in the teaching learning process. The study considers the data collected from four secondary school of New Delhi, equipped with technologically enhanced learning facility, language labs and e-learning resources. The responses of teachers and students from four schools were randomly selected and recorded for analysis to gauge how e-learning resources are being used for teaching and learning and how is the perspective of teacher towards its usage affected by their level of training.

Key words: Technology, e-learning, disposition of teachers, students, ICT, Pedagogy

Globalization fueled by technological growth has made technology an important medium to connect with the rest of the world. Technology plays an important role in extending a learning enriched environment within and beyond the walls of classroom. The National Policy of Information Communication Technology (ICT) School in Education, 2012 which was rolled out with the vision of "preparing youth to participate creatively in the establishment, sustenance and growth of a knowledge society leading to all round socioeconomic development of the nation and global competitiveness". The policy identifies teachers as a key player in infusion of ICT related practices in the school education system. It emphasis on the need to orient teachers at both in-

service and pre-service level to acquire competency in facilitating ICT enabled education.

It is therefore important for teachers to be aware of the latest technologies or soft-wares available to enhance their pedagogy and its effectiveness. This calls for two important measures; first, providing adequate training and orientation to teachers at the pre-service or initial teacher education level, equipping them with the knowledge and skills required to use e-learning resources in the pedagogical processes, secondly, providing adequate training and support at both in-service and pre-service level; facilitating adequate access to web, hardware and software at institutional level and developing a positive outlook towards the use of technology by making it an intrinsic part of lesson planning and equipping schools with adequate infrastructure.

The National Council for Teacher Education (NCTE) took a significant decision and rolled out a policy which increased the duration of B.Ed. programme by another year making it a two year course from 2015 onwards. This also resulted in the re-structuring of the B.Ed. curriculum in Universities offering B.Ed. programmes across the country. It was believed that increasing the duration of the course would enhance the quality and output of teacher training institutions in the country. ICT is an essential component of B.Ed. curriculum to enrich teachers and students technologically and equip educational institutions in terms of rich and modern infrastructure to enable the access to web, digital devices and e-learning resources. It is expected that the pass outs of teacher education programmes would be prepared and equipped to integrate e learning in their teaching learning process at the later stage.

But apart from training the teachers and the students for the effective use of technology, it is equally important to develop in them a positive outlook towards its use.

Hence a study has been conducted on teachers and students of private schools to study their disposition towards the use of e learning with following objectives:

- to study the various components of e-learning being used by the teachers,
- to study the various components of e-learning being used by the students

- to study the level of preparation (training) for the use of e-learning for teacher
- to study the ultimate disposition of teachers and students towards the use of e-learning

Methodology and Sampling

The present study is qualitative in nature where in four private Secondary schools were chosen through non-probability sampling and forty students of standard IX and X respectively from each of these school were chosen through random sampling technique. The sample size included one hundred and sixty students and twenty teachers from the four schools.

The study focused on gauging the means and methods being used by teachers for the inculcating technology and e-learning in their teaching practices and to study their disposition towards the use of e-learning in teaching at secondary school level. To probe the issue further responses of students were also recorded and analysed.

Tools

An interview schedule and questionnaire for teachers and students respectively were developed by the researcher. This self-made interview schedule contained fifteen open-ended questions meant to be answered by the teachers teaching in classes IX and X. The purpose of this interview schedule was to probe the means and methods employed by teachers in using e-learning sources in the teaching process at secondary school level.

The researcher prepared questionnaires consisting 20 interlinked questionnaire administered on the both teachers and students to note the responses of the teachers regarding their knowledge of and comfort with using technological aids and e-learning sources while teaching; whether they have any formal training in using such sources.

What kind of the guidance and support teachers expect to be able to successfully use technology while teaching. The questionnaire for students focused on gauging how students experience and respond to the usage of e-learning and what is the frequency of its usage in the teaching-learning process.

The data thus collected through the questionnaire and interview schedule for teachers was compiled item wise and analysed through frequency tabulation and percentage analysis.

Analysis and Interpretation

The analysis of data and interpretation of teachers' and students' responses are as follows:

Table 1: Means and methods used for e-learning by Teachers

Particulars	Category	Percentage
Means of Using e-learning	Smart Class	40%
	PPT	60%
	Language lab	40%
Software being used, if any	Educom/TATAEdge/Teach Next	40%
	MS OFFICE- PPT	60%
Frequency of using e-learning in teaching	Once a week	50%
	Twice a week	20%
	Twice per term	10%
	Not used	20%
Source of using e-learning	Language lab/ AV Room	20%
	Digital Library/ Wi-Fi	10%
	Computer/Internet/Video clipping/PPT	40%
	Smart board	30%

The study revealed that sixty percent teachers under study used PPTs for instructing while twenty percent used smart class and language labs. Use of Smart Board is restricted to those schools has the infrastructure and limited further by the availability of the relevant e-learning module. Most teachers claimed to use technological aid at least once a week, while there were some teachers who used them twice in 6 months and others who did not use technology.

One of the school had a single AV room shared by the entire school from classes K-XII and one school had a recording room plus a K-yan, shared by the entire school for which one months' advance booking was essential if it is to be used for educational purposes. Most schools did not have web access/Wi-fi outside computer labs for either teachers or student. None of the school had digital libraries, though some of them stocked educational CDs.

Table 2: Means and methods of using e-learning by students

Particulars	Percentage	
	Yes	No
If technological aids are used in teaching	60%	40%
If technological aids are used frequently (once a week)	39%	61%
Able to finish given e-module exercise within one period	22%	78%
Visits to language/technology labs	30%	70%-
Computers used for e-modules work properly	60%	40%
Use of e-learning in the past two weeks	23%	67%

It is note-worthy that when questionnaires were administered to the students of the schools under study to gauge their experience of the use of technology it was found that technology is not used very frequently in the classroom. Only thirty-nine percent students responded in affirmative when questioned if technological aids are used frequently in teaching (once a week) while sixty-one percent of students claimed that their teachers do not use technology very often. Seventy eight percent students mentioned that they are not able to complete exercises on e-learning modules in the duration of a single class (45 minutes; effectively 30 minutes). This aspect may be related to the length of the topic being taught or may also indicate that the computers do not work as fast as they should, as pointed out by some of the respondents. Forty percent students mentioned that the computers are very slow, they consume a lot of time to open and hang often. Only 23% students responded in affirmative to the question if e-learning was used for teaching in the past two weeks.

Table 3: Responses about Training of Teachers in using e-Learning

Particulars	Percentage	
	Yes	No
Formal training in using e-learning material	20%	80%
Attended works shops on ICT	100%	-
More training required for using e-learning	100%	

Only twenty percent teacher respondent had application based training in using e-learning sources and most it was acquired on job. Eighty

percent teachers felt that they have limited knowledge when it came to using technology and e-learning resources and expressed the need for more training in the use of technology. Even though all the respondents have attended multiple workshops organized by schools on software or smart class trainings, they felt that they require expert trainers and training in using the existing and new technologies while teaching. This is indicative of a need in improvement of the quality of technological training that teachers have received at pre-service and in-service level.

Table 4: Disposition of Teachers and Students towards using e-Learning

Particular	Teachers' Response		Students' Response	
	Yes (%)	No (%)	Yes (%)	No (%)
E-learning makes class interesting and increases attention span.	100%	0	100%	-
Comfort in using e-learning	80%	40%	60	40
Using e-learning for teaching learning is not essential	20%	80%	40	60
Technology provides motivation	82%	18%	80	20
E-learning enables constructive learning	80%	20%	60	40

All teachers and student respondents believe that using e-learning makes the class interesting breaking the monotony of teaching from books, which increases the attention span of learners. Eighty percent of teachers and 60 percent students claimed that they are comfortable with using e-learning resources. This is related to their level of training in using e-learning, which has a direct impact on their disposition towards e-learning and the frequency of its usage during teaching. Most teachers and students respondent displayed a positive disposition towards using e-learning with only 20% teachers and 40% students claiming that it is not essential. Approximate 82% teachers and eighty percent of student respondents claimed that use of technology motivates them to learn and that they feel comfortable while using computers indicating a positive disposition. Majority of the teacher and students respondent feel that e-learning enables constructive leaning.

Findings and Conclusion

An overview of the findings based on the responses given by the teachers and students revealed that adequate measures have to be taken to enable the teachers to effectively use technology in teaching and learning process. This calls for a dual approach of bringing a systemic and curricular change in teacher training colleges on one hand and providing adequate in-service training to existing school teachers on the other. Student teachers often acquire basic computer literacy in B.Ed. colleges, hence are not able to creatively and effectively inculcate technology in their teaching practices. The course also focuses more on the theoretical aspect rather than instilling skills where student teachers can innovatively acquire and apply skills to produce teaching modules or e-learning material.

Technological Infrastructure of both teacher training institutions and schools is another vital aspect that affects the effective inculcation of technology in the teaching-learning process. All schools under study did not have adequate infrastructure, with respect to language labs and e-learning resources. Where there were language labs; teachers felt taking students to labs every-week was time consuming activity and hindered course completion. Most teachers relied on the use of PPT and video clipping. School, in which there were AV rooms, faced the problem of overbooking, leading to ineffective resource usage.

Though most of teachers under survey displayed a positive outlook towards the idea of using technology some considered it a burden and felt that role-play, project method etc., are more useful in affecting learning. It was observed that some teachers were using technology for the sake of using it, and were not oriented towards aligning its usage with the learning objectives. Some teachers used video clipping to generate initial interest but were unable to sustain the interest to effect learning.

Student survey revealed that technological support even where available is also not used effectively. Most teachers are not making adequate use of technology and are not in a position to manage or respond to the concerns that arises in the process of using these technologies. It has been observed that often the computers in language labs do n't function properly and the headphones are broken or faulty. There is need for appointing experts or have post sale services

with agencies providing ICT facilities in the field of education to tackle such concerns.

Lack of technical know-how owing to inadequate training is a major roadblock that plagues the teachers today and also affects their outlook and ability to use technology in classroom. The current pre-service course offer one paper on educational technology, in which basic skills of using computers and at times power-point presentations (PPT) are taught. All teacher respondents had gathered the knowledge of using technology (making PPTs, language lab or digital lab, Smart boards etc.) after joining the profession. Many teachers in-spite of having adequate experience were not exposed to the use of smart boards and language lab considering their schools could not provide such facilities. Most teachers were willing to use technology and wanted to undergo formal training and their schools to appoint an expert trainer to help them use and inculcate creative and innovative methods of teaching.

Attaining funding to enhance infrastructure is important to enhance the capacity of teachers and students in using e-learning. There is a need for systemic collaboration between government and educational agencies (public and private partnership) to promote the inculcation of technology in education. Government's intervention at state and central level is imperative in allotting adequate funds and also provide support in terms of government agencies working on developing e-content and modules for school.

The National Policy on ICT in School Education (2012) also forwarded such guidelines and suggested a setting up of an advisory board at the state level to oversee the successful implementation of ITC in schools. The need of the hour is to do a follow up of the measures suggested in policy framework.

Implications

The teachers must understand the importance of using technology in today's time, and should make an honest attempt to inculcate it in their teaching practices. They should not feel burdened by technology, rather should understand that using technology will fasten the process of teaching and learning, making it more interesting.

Students are observed to be enthusiastic about using technology in their learning process, and only a few of the respondent under study felt uncomfortable with its usage. Children who do not have computer or

internet access at home must be supported and encouraged by schools to use the computer lab for learning and enhancing their skills.

Teachers have to be adequately trained in the use of technology at both pre-service and in-service level to equip them with the skills and knowledge required to use both existing and new technologies while teaching. Therefore, the teacher training institutes should lay adequate stress on providing application based course on educational technology.

A look at the current B.Ed. course content would reveal that the theoretical component remains much higher than the application based component. It is also felt that teacher training colleges will have to considerably enhance their own technological infrastructure to be able to provide application based technological training to trainee teachers to enable them to inculcate e-learning and other ICT based practices in their pedagogical style.

Schools adopting ITC in education must provide periodic in-service training to teachers, to enable them to use these technologies effectively and efficiently. Adequate trainings and workshop by both, external agencies or experts and peers should be conducted. New-hires should be made to take sessions to apprise them of existing teachers of new ways of inculcating technology in the pedagogical process.

Access to hardware, software and adequate web connectivity is one greatest concern. Adequate infrastructure needs to be put in place such as; buildings to house the equipment, computers, installing smart boards, and affordable internet services. It was observed that schools under study purchased e-learning modules from privately run organizations and business houses, which were very expensive. With adequate training teachers can be encouraged to develop in-house modules in collaboration with government agencies.

It was observed that most schools under study had classes flooded with not less than 50 students. Computer lab, often used as language labs or multipurpose labs did-not have adequate number of computers to accommodate every single student even when taken in two different batches, hence it is important that schools should invest in separate language or e-learning labs.

Overall, both teachers and students largely have a positive disposition towards using technology. Today's teacher and student need to be adept in the language of technology and e-learning, only then will they be in a position to stay abreast with today's time. It has been proved by

various studies conducted in the field of technology and learning that using e-learning helps in enhancing the interest, attention level and performance of students. Teachers certainly have a vital role to play in the promotion, and implementation of technology in the teaching and learning process

References

- Campbell Kim., Hila Mehr., and Ben Mayer.(2013). Education Technology in India: Designing Ed-Tech for Affordable Private Schools. <http://www.centuralsquarefoundation.org/wp-content/uploads/2016/02/Education-technology-in-india-designing-ed-tech-for-affordable-private-schools.pdf>
- Ezhilrajan K. (2013). Implementing E-Learning in Teacher Education – Issues and Problems, *ICT Education International Electronic Journal*, 1 (1), 1-5.
- Government of India.(2012). National Policy on Information and Communication Technology (ICT) In School Education., Department of School Education and Literacy Ministry of Human Resource Development.
- Honey, Margaret, Moeller, Babette.(1990). Teachers' Beliefs and Technology Integration: Different Values, Different Understandings. Technical-Report-No. 6., Center for Technology in Education, New York. <http://files.eric.ed.gov/fulltext/ED326203.pdf>
- Kaur, Ravinder Pal, Teacher Development through E-Learning, Thakur Shyamnarayan College of Education & Research. www.tscermumbai.in
- Nair Nisha(2015). Use of Technology in School Education: Importance and Challenges, *Learning technologies in Education, International Education Conference, Jamia Millia Islamia, New Delhi*
- Premsky Marc (2001). H. Sapiens Digital: *From Digital Immigrants and Digital Natives to Digital Wisdom, On the Horizon*, MCB University Press, Vol. 9 No. 5.
- Schacter John.(1999). The impact of Education Technology on Student Achievement. What most current studies have to Say. *Milken Exchange on Education Technology, Santa Monica, CA*