

Support Required for Effective E-learning in Case of Pre-primary Education

Dr Pramod Pawar ¹, Dr Sachin Ayarekar ²

¹ Associate Professor, ² Assistant Professor

Bharati Vidyapeeth (Deemed to be University), Institute of Management and Entrepreneurship Development, Pune, India

Abstract

E-Learning has become integral part of life of students. Students from pre-primary to doctoral studies are now exposed to e-learning environment. This paper tries to find out the requirement in form of support system for effective e-learning environment.

Researcher has reviewed 4 books, 18 research papers and 4 reports from reputed organizations. Factors like availability of devices and hardware, internet connectivity, performance of the teacher, flexibility in learning, interactivity, quality of e-learning material, capacity of the learner and motivation for the learner decides the effectiveness of e-learning. If these factors are maintained properly, it will create a grate learning experience for the students as well as for the teachers.

Keywords: E-learning, Teaching, Education

Introduction

The World Wide Web has become integral part of human life in all types of situations and problems. World wide web has become vital medium for collecting, sharing and distributing various data sets. As world wide web has ability to collect, to share and to distribute information, it has become important tool for teachers and students.

Initially it was used in higher education with full of its potential and then it entered into high school, primary and pre-primary education. This media as become very popular in both the communities ie. teacher and student. One of the reason for its popularity is because of amount of information available on single click.

This movement continued and got transformed into a revolution in case of education industry because of availability of online course activities. Education industry experienced this see change and continued making necessary arrangement for online courses and online learning.

The COVID-19 pandemic as forced to traditional universities, schools and primary pre-primary education to go for online teaching and learning activities for the holistic development of their students. Students as well as teachers learned the new technologies required for online teaching learning and evaluation process. Now a day's online education has become a blessing for students.

Literature Review

Brittany Gilbert (2015) commented upon benefits and challenges of online learning. Researcher mentioned that the availability of internet and accessibility for various technologies has increased the demand for online teaching and learning. Online education has entered into schools and primary education.

Author also raised some questions related to the support required for online education to get operated in schools and colleges. To provide the support for online education, initial investment need to be done and compromises should not be made.

School from Home is a concept used in Indonesia during COVID-19 pandemic. This study was made to access the perception of primary school teachers about online learning. Online learning can be effective with the help of following four themes:

1. Instructional strategies
2. Challenges
3. Support
4. Motivation of the teacher

Instruction strategies will attract the attention of the learner as well as timely support and motivation of teacher will increase the learning curve for the learners.

Questions was raised in case of learning subjects having practicals. Science related activities and virtual learning environment can provide answer to teach subjects having practicals. This report also suggest that many open source tools are available for virtual science labs, galleries and physical simulations.

This report throws light on mobile learning strategies. The 4C framework for mobile learning strategies comprised of Content, Compute, Capture and Communicate.

The role of teacher is very crucial in Web Enhanced Learning Activities (WELA). Primary school students enjoy learning by face to face mode than learning with unknown online teacher.

This study clearly indicates that online in WELA and face to face teaching learning both options will improve the learning ability of the primary school students. The student's engagement levels are very high while exposed to WELA environment.

The above research clearly shows that students get an opportunity to interact and learn from WELA.

E-learning attracts and motivates primary school students more because they enjoy learning by using these platforms. E-learning gives more fun for the students which is going to increase the effectiveness of the learning for them.

It is important to consider following dimensions while designing information and communication technology (ICT) solutions for learning:

1. **Connectivity:** Ease of communication and global connectivity.
2. **Flexibility:** Anytime and anywhere for learner.
3. **Interactivity:** High level of interaction between expert and learner.
4. **Collaboration:** Collaboration between communication facilities and activities outside classroom.
5. **Expanding Opportunities:** Self explanatory e-learning material.
6. **Motivation:** Creating fun learning environment by using multimedia.

The impact of online learning was measured and it was found that 80% students are interested for online learning while 65% of the students feels that online learning is easier than offline classes. 85% students are taking notes during the online session.

Majority of students were of the opinion that online learning is cheaper than offline learning. But considerable number of students (60%) thinks that quality of online learning should be get improved. The above statistics is showing that students are positive towards online learning but there is need to improve the quality of online teaching.

The above discussion throws light on the following facts:

1. Online teaching learning is the need of hour and will continue in future.
2. Students do enjoy online learning but some students also mentioned about importance of offline classes.
3. Online learning is as per the requirement and needs of the students.
4. Online learning is comparatively cheaper than offline learning.
5. Physical and mental issues experienced by students and faculty members because of their presence in longer duration of time in online environment are increasing day by day.

Objectives

1. To analyze the condition of e-learning in pre-primary education.
2. To identify factors responsible for effective e-learning.
3. To suggest measures for effective e-learning of students of pre-primary schools.

Research Methodology

This investigation is diagnostic in nature with the purpose to find out the factors responsible for effectiveness of online learning. This paper is based upon secondary data source. Following resources were referred to collect the information related to the research topic:

1. Book: 4
2. Research Papers: 18
3. Reports: 4

After referring the above sources, it was found that following factor plays important role in case of effectiveness of online learning:

1. Availability of devices and hardware
2. Internet connectivity

3. Performance of the teacher
4. Flexibility in learning
5. Interactivity
6. Quality of e-learning material
7. Capacity of the learner
8. Motivation for the learner

Discussion

1. Availability of Devices and Hardware

Availability of devices and hardware is key component or vehicle in the process of e-learning. Both, instructor and students should have computer system, laptop, smartphone, Tablet, with proper configuration. Devices like camera, speaker, mike/microphone as per the requirement should made available for teachers as well as learners. It is the prime responsibility of institutes to invest their monitory resources for hardware and devices.

If total or partial unavailability of devices, we create wall between a teacher and student. This issues may affect the learning process of the learners and will further demoralize the instructor and the student.

2. Internet Connectivity

Internet connectivity is going to connect the teacher and the learner. Internet connectivity with adequate bandwidth will make the learning more effective. Connectivity issues will create gaps in continuous learning process. it is the duty of both sides (teacher and student) to ensure that they will get adequate bandwidth.

Gaps in learning because of poor connectivity will lead to following the problems:

- a) Student will not have proper understanding about what teacher has taught.
- b) Teacher will not be in position to get the feedback about the learning students.
- c) Learning interest of the students will go down which will affect their concentration level.

3. Performance of the Teacher

Performance of the teacher in case of e-learning environment are comprises of following points:

- a) Communication tools used by the teacher for transfer of knowledge like presentations, recorded videos, online assessments and forum discussions will help students to learn more effectively.
- b) Additional inputs given by the instructor about his or her course will help students to get deep understanding about the course.
- c) Teacher should prepare interactive teaching aids for the students.
- d) Teacher can use gamification tools for students to improve their learning curves.

4. Flexibility in Learning

E-learning environment is a boon for the learners because of its unique characteristic that is flexibility in learning. If a teacher shares or uploads his teaching videos and materials on an appropriate platform, learners can as per their convenience refer the same so many times. A slow learner may refer the material three or four times while quick learner will refer the same for once only. This will provide the learner to learner according to his or her learning ability.

5. Interactivity

The tools the teacher is using should be more interactive because it will develop the interest of learner in that particular course. If the tools are not interactive, it will create unfavorable environment for learning.

To make tools more interactive and communicative teacher can use sources like mind maps, stories and some creative videos.

6. Quality of E-learning Material

Learning material is going to remain with the learner for longer duration of the time. Learning material is going to help and support the learner for his or her learning even in absence of teacher. That's why learning material should be in simple language and should cover all the points mentioned in the syllabus of the course. It should not be too small as well as too long. The font size, quality of pictures used, quality of videos used and appropriate animation will make the learning material more reader friendly which will motivate the learner to use the material frequently.

7. Capacity of the Learner

Every individual's learning capacity will differ from one and other. E-learning platforms provides an opportunity for the teachers to design the strategies for slow, moderate and quick learner. Teacher can conduct assessments to identify slow, moderate and quick learners.

This data set will give an opportunity for the teacher to design learning tools for each type of learner. Teacher can also analyze the impact of teaching-learning tools on learning process of the students. If required, instructor can make changes in teaching tools on the basis of learning capability of students.

8. Motivation to Learners

Learners requires motivation which will improve their learning curve. After submission of an assignment through online mode, a congratulation balloon is appearing on the screen will increase the interest of the learner. Appreciation done by the teacher in an online class of work submitted by student will encourage the entire student community.

If the motivation level is high of the students e-learning will be an effective learning process for them. But if they are not motivated, e-learning will be more demotivating process for the students.

Conclusion

E-learning has emerged as inevitable part of knowledge dissemination in case of pre-primary, primary secondary, higher secondary and university level education. Even in pandemic and post pandemic

environment, e-learning has contributed significantly in student's education. E-learning to become more effective and impactful, there are certain prerequisites that the learning environment requires. Factors like availability of devices and hardware, internet connectivity, performance of the teacher, flexibility in learning, interactivity, quality of e-learning material, capacity of the learner and motivation for the learner decides the effectiveness of e-learning. In another words all the factors mentioned above are up to the mark (qualitatively and quantitatively) it will support to create conducive e-learning environment for the students. Conducive e-learning environment will create an enthusiasm amongst instructor community as well as learner community.

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