Study on learning through website

*Benjamin Nakho KH and **Dr. Neetu Sagar
*Research Scholar, Department of Education, SunRise University, Alwar, Rajasthan (India)
**Associate Professor, Department of Education, SunRise University, Alwar, Rajasthan (India)
Email: benngade@gmail.com

Abstract: Educational websites are one of the most important tools for students to learn and improve their academic performance. They are used by students to get information that they need like homework assignments, learning resources, and assessment data. They also make it possible for teachers to communicate with students and parents in real-time through text or video chat. Teachers can also post important announcements about upcoming events or exams on website so that everyone is aware of them at all times. For example, if a teacher wants to share an assignment with their students and they do not have access to school's computer lab, they can post it on school's website. This way all students have access even if they do not have computers at home.

[Benjamin, N. KH and Sagar, N. **Study on learning through website**. *The International Journal of Interpretation, Observation and Analysis*, 2025; Volume 3, Issue 1:185-188 (July-September). ISSN 2349-0713, Peer-reviewed (online/offline), Refereed, Indexed and International Journal (Since 2013), Global Impact Factor: 5.776

Keywords: online learning; students' challenges; remote learning

Introduction

The Website of any open university is the most common medium for distributing information among current and prospective learners. The use and importance of Websites is increasing with the global reach of the Internet. In the open and distance learning (ODL) approach to education, in contrast to conventional or traditional methods, learners and the teachers are geographically separated; and learners must learn independently, using information and communication technology (ICT; Sahusilawane & Hiariey, 2016). The Website of any ODL institution plays an important role in bridging this gap. The university Website is an information gateway for its users. Open university Websites are more advanced than the Websites of other educational institutions because the open university Website acts as a one-stop resource through which several learner support services are launched, such as online admissions; notices and announcements; student records; online examination forms; e-learning portals; evaluation results; and complaint, query, and grievance registration. This study aimed to identify open university learners' awareness of and satisfaction with the e-services that the university provides through its Website.

The Internet has made access to information and the distribution of educational content available to a large portion of the world's population. It has also helped move distance education into the digital era (Fidalgo et al., 2020). ODL has become an integral part of the teaching-learning process in higher education. e-Learning is becoming a popular medium because of its efficiency in providing education at lower costs and with easy access at any time and anywhere. In the ODL system, educational opportunities are deliberately planned so that education is available to large parts of society and can reach the remotest locations of a region. This system also helps overcome many of the problems involved in the traditional education system, such as a lack of classrooms, lack of quality education, and faculty shortages, among others. The ODL system is an opportunity for learners who are unable to join traditional classrooms for a variety of reasons and has great potential to increase the inclusivity of education because of its flexibility and distinctive user-friendly character. Furthermore, education prepares learners to be more productive and competent in the harsh competition of the global economy; and the ODL system can serve as a platform to pursue new levels of qualification and enhance learners' skillset and knowledge.

Review of Literature

Previous researchers have examined the effects of using technology in schools, but there is little data on the impact of educational websites on student learning. This study will document previous research on the topic and explore how educational websites can be used to enhance primary student learning and increase academic performance. Moreover, e-learning triggered more interest in educators after the recent COVID-19 pandemic and now education cannot exist without e-learning (Beladiya, 2022). E-learning is another form of education that uses technologies to facilitate

effective and efficient learning anywhere and time. E-learning can also be defined as any learning system, which uses electronic resources for formalized teaching. The main components of e-learning are computers and the internet regardless of where the teaching and learning happens (Beladiya, 2022; Kumar Basak et al., 2018). There are several types of e-learning that include these main three classifications: text-driven, interactive, and simulations. While teachers use a combination of elearning types, they mostly use interactive applications and simulations (Billington, 2022; Ferriman, 2013).

The interactive applications give more focus on visual effects and student system interaction components to enhance learning. Simulations are interactive and give a real-life experience to the learners by using different techniques such as virtual reality (Billington, 2022). Purple Mash educational website is a combination of interactive learning and simulations. It is a multicurricular website for students of age three to 12, which allows acquiring knowledge in an interesting, fun, and creative way. It allows the students to explore various topics and various open-ended tools that allow the students to create stories, design multimedia, and develop their own games. It also gives a creative online space for each student and teacher who is registered in the system (Purple Mash, n. d.). Despite the availability of plenty of e-resources or educational websites, educators and students are confused regarding the selection of the most suitable eresources and whether these educational websites will help in students' academic achievement. Reviewing the literature concerning e-learning, the researchers found despite the purpose of deploying e-learning being to enhance student's learning experience, it is not helping with the student's academic achievement in many cases. Therefore, the researchers decided to conduct research regarding the effect of using educational websites on students' academic achievement to contribute to resolving this gap. The researchers' hypothesis is if educational websites such as Purple Mash are incorporated into classroom teaching, then there will be no significant change in the student's academic achievement. This research is aimed to answer the following research question: RQ. What is the effect of using educational websites in classroom teaching on the academic achievement of primary students in the United Arab Emirates (UAE)? UAE is one of the fastest-growing and rapidly changing economies in the world. Hence, the education system in UAE has been required to meet the needs of the fast-evolving society.

In response to this fact, the Ministry of Education in UAE has given high priority to using technology in education since 2001. Adding to this, educational institutions all around UAE embraced e– learning with this educational reform. A new stream labeled STEM was introduced into the curriculum, where science and technology is given uttermost importance (Iran, 2011). Saleem and Rasheed (2014) found that using e-learning supports managing workload, saving time, and reducing the burden of work. Once technology became an inevitable part of education, different types of educational technologies came into existence. According to Bruce and Levin (1997), educational technology can be classified into the taxonomy of inquiry, communication, construction, and expression. This taxonomy helped the educators to choose the right types of educational technology like drill and practice software, educational websites, and basic tools, which include word processing or power points and others. Taylor (1980) suggested a framework for understanding the application of computing in education. This framework is used to classify the function of a computer into three roles: a tutor, a tool, and a tutee. As a tutor the computer will give or present information to students just like a teacher and later students will be assessed based on the information, which was delivered by the computer. From the time computers came into existence computers were used as a tool to perform calculations or other functions in a variety of subject areas. One of the most efficient ways to use computers is to use them as a tutee that is to teach the computer. In order to achieve this, the student or teacher doing the tutoring must learn to program, to talk to the computer in a language it understands, where real programming knowledge will be acquired by the students. The main paradigm for learning with technology is knowledge construction. Technology should not be used as a substitute for a teacher to pour knowledge into a passive learner; instead, it must be used to engage students with real-world problem-solving, conceptual development, and critical thinking (Ringstaff & Kelley, 2002).

Usability of the Websites of Higher Education Institutions

According to the guidelines of the Distance Education Bureau in India, in order to provide effective student support services and quality education, ODL institutions should have a dedicated Website for its ODL system, regularly update its technology, and introduce new technological innovations (Distance Education

Council, 2009). The ideal Website of an ODL institution, and the e-services provided through it, is a reflection of current and prospective learners' needs. However, Website design is often driven by available technology and business objectives, though usability is gradually gaining in importance. There are several methods to assess the usability of Websites, such as heuristic methods, prototyping, cognitive walkthroughs, and questionnaires, among others (Mustafa & Al-Zoua'bi, 2008). Website usability can also be studied from different perspectives and different usability assessment tools can be used. Website designers and developers can use the results of such assessments to improve the Website (Chiew & Salim, 2003).

Numerous studies have been conducted on the usability of the Websites of higher education institutions. These studies conclude that university Websites should include relevant content for users, be maintainable, have an efficient structure, and provide contact information, among other features (Islam & Tsuji, 2011; Mentes & Turan, 2012; Roy, Pattnaik, & Mall, 2014, and Jabar, Usman, & Awal, 2013). Islam and Tsuji (2011), in their study of the usability select university Websites in Bangladesh, found that the overall usability of the Websites was unsatisfactory; though a few of the Websites were satisfactory in terms of the available features (e.g., educational information and user interface design). Among the weaknesses found were poor structural design and interface and performance issues. In a study of the usability of Namik Kemal University's Website in Turkey, Mentes and Turan (2012) used the Website analysis and measurement inventory (WAMMI), which measures Website usefulness and its ease of access. WAMMI is based on five factors: attractiveness, controllability, efficiency, helpfulness, and learnability (Mentes & Turan, 2012). It has been concluded in the study that the website is having key role in establishing a healthy communication between the university and its stakeholders.

Other studies have focused on usability from a user's perspective. Jabar et al. (2013) explored the perspectives of 364 university learners on the usability of university Websites and investigated whether the learners' areas of specialization had impact on the perceived usability of the Websites. They concluded that usability factors (i.e., attractiveness, controllability, helpfulness, efficiency, and learnability) must be given more consideration when designing educational Websites. In a quantitative study of the usability of academic Websites from a user perspective, Roy et al. (2014) employed both questionnaire- and performance-based methods. Participants were asked to perform a task on a university Website and then complete a questionnaire. Data was collected on observed task success rates and task completion times, as well as participants' post-task satisfaction levels and their feedback on the Website's usability. The impact of task completion times on participant's satisfaction levels was also explored. This study shows that the multiple language supports in sharing information and less response time are the effective usability factors which satisfy its users (Roy, Pattnaik, & Mall, 2014). Hasan's (2014) study on the usability of educational Websites based on student design preferences found that learners preferred design category was Website content followed by navigation, while organization was considered the least important to them. It is important to note that there was a statistically significant difference between male and female students regarding the Website content and its navigation. In another study, Undu and Akuma (2018) investigated the usability of the Benue State University Website from a users' perspective. The university Website is used to communicate with learners and offers computing services. Undu and Akuma concluded that the university Website had a neutral usability level because of the usability issues found in the study. Inconsistence in design and layout of web pages, dismay with the website navigation, controllability, and inappropriate labelling of the navigation menu are some of the usability issues found in the study.

Garett et al. (2016), in their review of literature on Website design and user engagement, identified eight key elements of effective Website design, including navigation, graphical representation, organization, content utility, purpose, simplicity, and readability. Garett et al. also suggest that before designing a Website, one should decide on the priorities and objectives of the Website based on its field. For example, a Website related to online business seeks to optimize brand, loyalty, profit, and smooth and fast page loading; while an academic Website seeks content accuracy, privacy, publicity for academic achievements and success, and availability of important information for prospective users. To develop an attractive and interactive Website for an academic institution, structural planning, quality content, and useful information for potential users are key factors. Keyword search and navigation links or menus are in high demand among users of the academic institution Website (Raduica et al., 2019).

Various studies have been conducted to identify and assess the perceptions of learners on e-learning and the performance of online services that ODL institutions offer their learners. The review of

literature conducted for this study revealed that most studies on the use of ICTs or ICT interventions in ODL were conducted before the COVID-19 pandemic. Learner satisfaction with the performance of ODL institution Websites has yet to be studied during the COVID-19 pandemic, when the role of ICTs in disseminating knowledge through e-learning has become a necessity. This study addressed the research gap by conducting this study during the COVID-19 pandemic. Due to the lockdown across the country, people everywhere are required to stay at home. In situations like this, the use of ICT plays a key role in disseminating knowledge and information amongst its seekers. Therefore, we conducted this study to explore learner satisfaction with the website performance of an open and distance learning institution during this period of time. We investigated both the opportunities available to and challenges faced by users of ICT during the COVID-19 pandemic. The results of this study will assist policy makers and the various service providers who offer services through ICT. We explored learner satisfaction with the performance of an ODL university's Website in India during the COVID-19 pandemic, in terms of the e-services that the university provides through the Website and the Website's visibility. The study also investigated learners' perceptions of the usability of the Website and the e-services, which include information about the university, links to admission processes, counselling session scheduling, examination forms and announcements of results, access to transcripts and degree certificates, and learner grievance procedures, among other services. Suggested measures to improve and enhance the usability of the university Website are made based on the study results. The results of this study may be useful to distance education institutions or universities that offer their programs of study through ICTs, especially during a crisis, such as the COVID-19 pandemic.

REFERENCES

Alderbashi, K. (2021). Attitudes of primary school students in UAE towards using digital story-telling as a learning method in classroom. Research on Humanities and Social Sciences, 11(10), 20-28.

Aljraiwi, S. (2019). Effectiveness of gamification of webbased learning in improving academic achievement and creative thinking among primary school students. International Journal of Education and Practice, 7(3), 242-257. https://doi.org/10.18488/ journal.61.2019.73.242.257

Beladiya, K. (2022). Why online learning is the future of education. https://elearningindustry.com/whyonline-learning-is-the-future-of-education

Berkun, E., Schmidt, J. P., & Yordanova, K. (2007). The effect of online versus traditional instruction on academic achievement: A meta-analysis. Journal of Educational Psychology, 99(1), 47-60.

Bhavsar, S., Sarkar, A., & Dey, S. (2018). Technologyenabled learning: A systematic review of the literature on online learning. Journal of Computer Assisted Learning, 34(2), 158-178.

Billington, J. (2022). Common types of e-learning? https://myownconference.com/blog/en/whatare-the-types-of-e-learning/

Brockett, R. J., & King, S. L. (2010). Educational psychology: Developing learners. Cengage Learning.

Bruce, B. C., & Levin, J. A. (1997). Educational technology: Media for inquiry, communication, construction, and expression. Journal of Educational Computing Research, 17(1), 79-102. https://doi.org/ 10.2190/7HPQ-4F3X-8M8Y-TVCA

Fernandez, A. I., Al Radaideh, A., Singh Sisodia, G., Mathew, A., & Jimber del Río, J. A. (2022). Managing university e-learning environments and academic achievement in the United Arab Emirates: An instructor and student perspective. PLoS ONE, 17(5), e0268338. https://doi.org/10. 1371/journal.pone.0268338

Ferriman, J. (2013). 3 types of e-learning. https://www. learndash.com/3-types-of-elearning/

Huerta, L., Shafer, S. R., Barbour, M. K., Miron, G., & Gulosino, C. (2015). Virtual schools in the US 2015: Politics, performance, policy, and research evidence. National Education Policy Center.