Review of Literature on a study of India's Most Popular Online Educational Portals, Website and Apps

*Benjamin Nakho KH and **Dr. Sharda Prasad Singh
*Research Scholar, Department of Education, SunRise University, Alwar, Rajasthan (India)
**Assistant Professor, Department of Education, SunRise University, Alwar, Rajasthan (India)
Corresponding Author: benngade@gmail.com

ABSTRACT: Teachers' effectiveness depends on various things and self-efficacy is one of them. The construct of selfefficacy was coined by psychologist Albert Bandura in his social cognitive theory. Self-efficacy refers to one's belief about his/her capabilities to accomplish specific tasks. Teachers who have a high sense of belief in their teaching capabilities will achieve higher goals while teachers who have a low sense of belief in their capabilities will be under the shadow of fear of failures. Over the last four decades, researchers have thrown the light on teachers' self-efficacy in teaching and learning and established it as one of the important effective constructs. Self-efficacy plays a vital role for teachers to accomplish their goals, tasks, and how they approach instructional challenges. Teachers with a low self-efficacy evade challenging activities, take creative activities and situations as difficult to do, take most of the things negative and lose confidence in their abilities while teachers with a high self efficacy welcome challenging activities as to be mastered, create deeper interest in their activities, develops a high sense of commitments and mend swiftly from failures. The purpose of this study is to review the construct of teachers' self-efficacy and its importance in teachers' effectiveness.

[Benjamin, N.K.H. and Singh, S.P. **Review of Literature on a study of India's Most Popular Online Educational Portals, Website and Apps.** *The International Journal of Interpretation, Observation and Analysis*, 2025; Volume 4, Issue 1:207-211 (October-December). ISSN 2349-0713, Peer-reviewed (online/offline), Refereed, Indexed and International Journal (Since 2013), Global Impact Factor: 6.205

Keywords: Fuzzy Logic, Fuzzy Inference System, Membership Functions, Fuzzy Rule Base

1. Introduction

Online classrooms have become the new normal for students and teachers during the ongoing COVID-19 pandemic. Students now communicate with teachers over video-conferencing apps to study and keep up-to-date with their course remotely. To aid students during this time, there are several online learning and education apps, which are available for both Android and IOS devices in India. While some of these learning apps focus on general topics or are used as study aids, others are designed with specialized fields of study in mind. Additionally, education apps India help you understand concepts in interactive ways such as animated videos, which make learning more fun and intuitive than the traditional method. Some apps also come with a live class feature to help clear doubts in real-time. If you're looking for the best online learning apps in India, here's a list that should help you. The old-school methods of conducting a classroom simply don't work for today's plugged-in students, who gain little from churning out stacks of worksheets and study guides. Modern learning theory supports the shift away from antiquated, rote learning models toward personalized learning opportunities in which instructional designs and academic-support strategies are tailored to each individual student's needs rather than uniform lesson planning. This model also creates fun and engaging classroom atmospheres that benefit students and teachers alike. Personalized learning is not a new concept, but the emergence of classroom technology has made it easier for educators to develop and deliver such student-centred lessons. This article explores the benefits of personalized learning and how technology provides alternatives to traditional "one-size-fits-all" approaches to teaching.

This research paper investigates the landscape of popular online educational portals in India, examining their features, user engagement, and impact on learning outcomes. As the demand for digital education surges, especially post-pandemic, platforms like BYJUS and Unacademy have emerged as significant players. The study employs a study of secondary data from the selected portals. Key metrics analysed include user accessibility, content variety, pedagogical effectiveness, and user satisfaction. Findings reveal a diverse range of educational resources tailored to different learning needs, highlighting the effectiveness of interactive tools and personalized learning paths. **A Modern-Day Approach:** The NEP 2020 has a special focus on online education. Universities and institutions like NITs and IGNOU will be conducting pilot research studies to maximize the benefits of digital learning in India. Online tools and platforms like DIKSHA and SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) will be upgraded with new insight into training content, in-class resources,

assessment aids, profiles, etc. that will allow seamless interaction. It also focuses on the creation of public digital and interoperable infrastructure that can be utilised by multiple platforms. NEP 2020 emphasizes the creation of virtual labs wherein students can practice their theoretical knowledge and make course content available in different languages. The newly renamed Ministry of Education proposes to set up a dedicated unit for the promotion of digital learning. The dedicated unit will comprise experts from the field of education, educational technology, administration, and e-governance who will focus on the online learning needs of both the school and higher education. More emphasis will be given to online assessment and examinations. The present age is driven by digital technology and the whole globe comes under the influence of the Internet and the World Wide Web. The internet equipped both the education seeker as well as the education provider and laid them together under the virtual roof. Due to this, the concept of virtual classrooms is already popularized across the globe. Therefore, in the modern era, the role of online technology in providing education is vital and with its flexible nature online educational technology has gained popularity. The online education is now more accessible to the less privileged groups in comparison to the centralized classroom education system.

Review of Literature:

Debnath in 2018 studied on the use of open learning resources run by research scholars of the University of North Bengal. For this study he used survey method and close ended questionnaire and showed that 54.54% research scholars are using open government learning resources to a limited extent whereas 21.21% research scholars are using open government learning resources to a large extent (Debnath,2018). Chakrabarti in his paper related with institutional repositories studied 75 websites of institutional repositories through content analysis in respect of subject, language, state, policies, etc., revealed that multidisciplinary subjects oriented repositories are available in large number and nearly all are available in English. It is also observed by him that a huge number of open educational resources have been found in these repositories. (Chakrabarti,2017). Thakran and Sharma in 2016 investigated the role of OERs in Indian higher education amidst lacking of trained faculty and geographical variation regarding accessing education. Both the authors gave a brief overview on initiatives of OER in India to overcome the barriers of educational challenges faced in higher education They ended the paper with the inferences of the aforementioned initiatives for the advancement of OEP in India (Thakran & Sharma ,2016). Dutta in 2016 threw light on the possibilities and challenges in connection with OER in Indian higher education. In this respect the author enumerated some initiatives of Government of India like SHAKSHAT, NKN, EKLAVYA, NMEICT, NPTEL, OSCAR, E-grid etc. He found that due to poor academic and infrastructural facilities, it was not being possible for India to meet with global standard if not distributing quality learning material among higher educational institutions of India (Dutta, 2016). Raman and others in 2014 threw light on The VLAB OER Experience and The study was conducted on 131 engineering students based on 'Roger's theory of perceived attributes'. After analysis the major findings were i) students 'performances were the same as in physical and virtual laboratory like OER. ii) They also remarked that policy makers in the field of education should be encouraged to apply OER to lessen digital divide of country like India (Raman et.al., 2014). Das in 2014 in his paper defined the term OER and international policy related to OER. He then emphasized Indian initiatives of the OER through the support of National Mission on Education through ICT (NME-ICT) (Das,2014). Sharma in 2013 highlighted some OER initiatives in India and he noted OERs initiatives like CSIR Explorations, Digital Library of India, Cultural Heritage Digital Library in Hindi, Kalasampada, INDEST Consortium, etc. He also mentioned CEC Learning Object Repository, NPTEL, Brihaspati, E-Grid, Ekalavya, etc (Sharma,2013). Khanna and Basak in 2013 studied on architecture framework of OER and they pointed out six dimensions of the OER architecture framework--pedagogical, technological, managerial, academic, financial, and ethical. They made proposal on OER Knowledge and Information Base, Information Management in an OER Framework, DES-OER Web Portal. Before making conclusion, they hoped that after successful implementation of the architecture in the distance education, accessibility of OERs would increase (Khanna & Basak 2013). Mulder, F. in 2013 studied on the logic of national policies and strategies for open educational resources. In this paper he observed a small number of countries which took initiative to set up a national OER. According to ''Report to the Nation 2007'' India was the pioneer to accept OER and hosted the National E-content and Curriculum Initiative. In this context, the author enumerated three liabilities of governments for education to encourage accessibility, quality, and efficiency (Mulder,2013). Bansal and others in 2013 observed current Initiatives and challenges to OERs in Indian Higher Education. They highlighted that in India OER movement was

not up to the mark due to lack of qualified teachers, lack of suitable infrastructure of the universities and libraries, and the inadequate use of OER. They addressed the challenges of OER faced in India and suggested outcome to break the barrier (Bansal et. al. ,2013). Venkaiah in 2008 studied on Open Educational Resources in India in the light of attitudes and perceptions of Distance Teachers. He investigated the level of awareness of OER among faculties. According to him, the result showed that the use of OER by the distance faculties was considerably high and they also contributed OER side by side reasonably (Venkaiah 2008).

The models that are not separated from the known technology or system and the participant feature quoted in the research literature. structural equation modeling provides better model support which is believed to have a strong systemic impact to be applied described in [1]. The main purpose of the system design leads to better retention of students and is a consistent learning method. Models incorporate determinants from well-established technologies for students to learn and apply new processes or knowledge in the workplace. The design of the experience, awareness, and implementation of the e-learning project is included in the student education portal called "eLearn central". The author focuses on the quality of e-learning lessons. The modelbased curriculum is designed to improve user-friendly applications i.e. students can easily use and learn individual learning styles, which are customized geographically[2]. the author takes the study of “Multimedia Implementation ” as an example. In a Moodle-based education program: by analyzing information or recording information. Targeted learning functionality that students are use effectively or simply and according to the needs they have customized. The model for the Indian education system using BLMM for improvement. Here he explains about MOOC (Massive Open Online Course). MOOC is in trend nowadays on the internet. This allows the learner to improve their skill. the data in BLM computer model analysis the output data is used to accomplish BLM analysis[3]. Comparison of these values derived from the model has repeatedly been found to be comparable to the results of lethal tissue concentrations from acute toxicity tests. BLM model work on past output. It learns from history output then it will implement on the future output. The model has been tested using PLS(Partial least squares regression) analysis, model[4]. PLS is a statistical model that gives some relation to principal components, alternatively finding maximum variance between the response and independent variables. By survey, the author got the conclusion that online study is very effective in this era. Students can find their tutor on online learning. He used PLS analysis and meta-analysis to build a model to conduct online lectures face-to-face. The security of the Django framework for web security. the features, limitations, and of the web development framework for python programming. An eCommerce and social network built in python framework for reducing the unwanted noise from access[5]. They described how the security of Django is strong and how we can prevent our application from an unwanted source. The most capturing and utilizing learner model. The learner model is described extracted based on factors like learning style, browsing history, knowledge factor’s like prior knowledge. in this paper he described extracting the learning model based on the Felder silver man learning model[6]. The learner in this problem is the one who studying basic science using the NB Tree classification algorithm technique in conjunction with a Binary classifier. The users can classify their interests. The individual learner concept. Here, he proposed a personalized learning system that is based on ITEM RESPONSE THEORY (PEL-IRT) consider as both course and study material difficulty. Learners need a single difficulty parameter which is used to model the course materials to obtain a more precise estimation of user ability[7].They also proposed a concept of collaborative voting to manage the course materials for study. The review on how e-learning styleswere integrated into the learning system. Felder–Silverman’s was founded on the most popular theory that was applied.[8]. Online learning classify in different methods like statical algorithm allowed coming back from traditional methods that were used mainly in integration learning styles and also adaptive learning system styles. He also includes a recommendation system that is used to take feedback from the user and also get the knowledge of what users want in ongoing tradition. The task technology fit, system success model, and also contingency theory for investigating factor that keeps learner for utilize online learning system[9]. The survey focused on both quantitative and qualitative group interview, methods and also applied the cases of blended online learning instructions. The relation between system factors and perceived fit can be motivated online learners to continuously utilize online learning systems in blended learning instruction. The automation of databases using the python framework. The framework automatically migrates and create a database field according to requirement. Also, create some dummy tables for backup and restoration. Here he explains the asynchronous feature on SQL[10]. In the case of data failure, we can easily restore our data from our database with some hidden feature of the

database that makes the database more secure and efficient use for users. An investigation was conducted to determine the extent of evidence for co-learning can be seen in the interactive testing of students in the online learning environment. Books in collaborative learning identified a variety of behaviors that reflect successful engagement reading there face to face. Evidence of this behavior was sought in existing messages student posts while participating in online workgroups[11]. A review of student contributions shows that there is a lot of evidence of cooperation, but there is a difference between the common face-to-face situations of collaborative learning and what is happening unconventionally in a network environment. This article is a chart of promises and concerns related to online college online education as illustrated in textbooks. It is argued that to appreciate the strengths and limitations of online education, we need to trace the problems of online education and postgraduate education. The article reviews the history of elementary education through the lens of three historical themes — democracy, free education, and quality of education — and chart the current state of online education in terms of three educational ideas that can inform the development of online program presentation[12]. The viewing, instructional performance instruction, and epistemic engagement views. The article highlights the potential contributions of online education to democracy and the development of a teaching scholarship The report focuses on online courses and programs offered as a regular part of the institution's programs, as well as Massive Open Online Courses (MOOCs) usually offered free of charge to those outside the institution's student organization[13]. An online course is defined as one in which at least 80 percent of the course content is submitted online. Face-to-face instructions include courses in which zero to 29 percent of content is delivered online; this section covers both traditional and web studies. The rest, combined (or mixed) instructions, are between 30 and 80 percent of course content delivered online. The definition of an online course has remained the same for the eleven years these national reports have been made. These definitions were presented to respondents at the beginning of the survey and were repeated in the body of each question where appropriate. Although there are significant differences between the delivery methods used by individual teachers, the following are presented to illustrate the classification of subjects used in this study. The collaboration is often charged as an important part of online success reading, tangible evidence of its value, and practical or direct guidance collaboration strategies continue to be lacking. Accordingly, this study uses both quantitative and qualitative data to investigate how teachers and students perceive the importance of online communication and the teaching methods that enhance that interaction. The results show that the educator sees the educator as well as the learner-student interaction as important features in high-quality online programs[14].While online readers often see collaboration as an effective way to learn, they differ about each other to have more interaction in online courses. Such diversity seems to be associated with it personality differences or learning styles. Current research also shows that they are not teachers they tend to use technology and engage in educational activities that they are familiar with or do not have to rely on traditional learning arrangements. When it comes to complex reading technologies or techniques, educators are very different in the methods of their new application. Due to increased concerns about the spread of COVID-19 and calls for the prevention of Corona Virus, a growing trend Tertiary institutions are closed about face-to-face classes around the world. Coronavirus already exists reveals the dangers posed by education systems around the world. It is clear now that the community needs flexible and robust educational systems as we face an unexpected future. The method of the meta-analysis was the findings of this study and the relevant literature were visited to capture the essence of continuous learning over time these are times never seen before. The results show that universities around the world are improving online reading or E-reading. The results also show that without resources, staff readiness, confidence, student accessibility, and motivation play an important role in integrated ICT learning[15]. This is a test paper suggests that employees should use technology and technology gadgets to improve learning in particular at these rare times. The findings also promote online and remote learning as a requirement during lock times declining social distance from the COVID-19 epidemic. It also provides a strong fur field

References

Bansal, T., Chabra, S., & Joshi, D. (2013). Current Initiatives and Challenges to OERs in Indian Higher Education. 15.

Chakrabarti, A., & Maharana, B. (2019). LIS Open Access Institutional Digital Repositories in OpenDOAR: an appraisal. 2757. Retrieved from https://digitalcommons.unl.edu/libphilprac/2757 (Accessed on 28th April, 2021).

Chakrabarti, A. (2017). Growth and Development of Indian Institutional Digital Repositories in OpenDOAR: A Bird's Eye View. World Digital Libraries-An international journal.10(2) 75 – 88.

Chakraborty, S., & Ghosh, S. B. (2011). Open resources for higher education: The Indian scenario. 11.

Das, A. K. (2011). Emergence of open educational resources (OER) in India and its impact on lifelong learning. Library Hi Tech News, 28(5), 10–15. https://doi.org/10.1108/07419051111163848

Das, A. K. (2014). Open Educational Resources (OER): Policy Perspectives and National Initiatives. In: CSIRNISTADS (ed): India - Science and Technology, volume 3. Delhi: Cambridge University Press India, ISBN 9789384463045, pp.16-21

Debnath, D. (2018). A Study on the Use of Open Government Learning Resources by The Research Scholars of University of North Bengal. 9.

Dr. Javed Khan. (2016). Awareness and Use of E-Resources In Delhi University, Jamia Millia Islamia And Jawaharlal Nehru University: A Comparative Study. https://doi.org/10.5281/ZENODO.158967

Dutta, I. (2016). Open Educational Resources (OER): Opportunities and Challenges for Indian Higher Education. Turkish Online Journal of Distance Education, 0(0). https://doi.org/10.17718/tojde.34669e

Gyankosh. (2021). About eGyankosh. Retrieved from http://egyankosh.ac.in/ (Accessed on and from 01st May, 2021 to 15th May, 2021). e-PG

Pathshala. (2021). About e-PG Pathshala. Retrieved from http://epgp.inflibnet.ac.in/ (Accessed on and from 01st May, 2021 to 15th May, 2021).

Gani, D. A. (2010). Mapping Open Educational Resources for Access and Equity in Higher Education in India. 6.

Ghalib, M. A. M., Shekara, C., & Talawar, V. G. (2009). Awareness and Extent of Utilisation of Web-based Open Source e-Learning Coursewares among Educators and Students. DESIDOC Journal of Library & Information Technology, 29(3), 43–48. https://doi.org/10.14429/djlit.29.251.

Khanna, P., & Basak, P. C. (2013). An OER Architecture Framework: Needs and Design. 14(1), 19.

Mulder, F. (2013). The logic of national policies and strategies for open educational resources. The International Review of Research in Open and Distributed Learning, 14(2), 96. https://doi.org/10.19173/irrodl.v14i2.1536

NDLI. (2021). About NDLI. Retrieved from https://ndl.iitkgp.ac.in/ (Accessed on and from 01st May, 2021 to 15th May, 2021).