

WEB BASED CONTENT DELIVERY USING LEARNING MANAGEMENT SYSTEMS UNDER HIGHER EDUCATION

Arvind Chandrasekaran,

Colorado Technical University

ABSTRACT

Information technology advances facilitate new training and educational practices, thereby creating opportunities for new tools and methods, and these technologies modify educational patterns. The intelligent education frameworks are mostly qualitative studies, thereby enumerating the conceptual framework of the education systems smartly. Peer and teacher interaction and the teaching practice accommodate comprehending the students' status and need in multiple ways and thereby provide the students with real-time asynchronous/synchronous help and guidance. The experts surveyed by the Analytic Hierarchy Process (AHP) were selected from E-learning and information technology totaling 14 people. The sub-criteria weight values display the E-Learning Education Planning key factors, which are the optimizations of educational resources; teaching is differentiated among the person, rate of course completion, and wireless connection reliably. The minor importance is the innovative pedagogies based on learning attention, theory, and data backup. Regarding contribution, only some studies used hierarchical design, and the AHP model presents the current research.

KEYWORDS

Smart classroom; Smart education design; Smart e-learning education;

1. INTRODUCTION

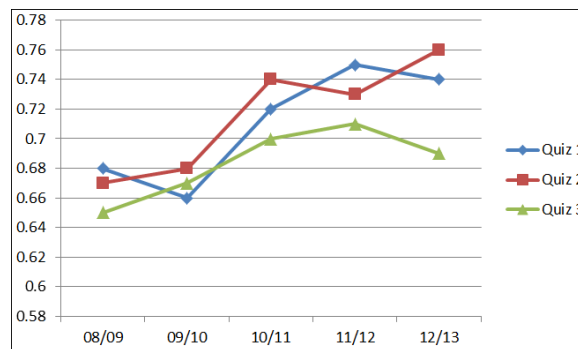
Distance education is the new educational system that combines multimedia technology and the computernetwork, referring to the academic form wherein the teachers and students use various media for communication and teaching. Students must arrange the learning plan flexibly; the actual situation's progress also shares excellent educational methods and resources. (Shanzhi. et al., June 09, 2021) Modern distance education concentrates on the teaching process, and the school gradually opens the learning time and space, creating an environment for students' personalized and independent learning. Multiple distanceeducation courseware is cut up into two types, one through the text arrangement and adding the guiding instructions. Students ingress the courseware through the browser, and simple interactive behaviors are added to the courseware through the web dynamic technology such that the teachers and students communicate. (Shanzhi. et al., June 09, 2021) For instance, in assignment submission and acknowledging the questions through e-mail, the first interaction is asynchronous, and the latter is in a synchronous mode where the students and teachers carry out the teaching activities using the network. The current distance education system is deeply studied, and still, there are multiple areas for improvement in the demonstration of coursework for the current distance education system in the country. (Shanzhi. et al., June 09, 2021) The challenges in this regard are the system's inability, display errors, poor results in editing and presentation, and other issues. The design and development of the distance education system are constructed from the courseware editing demonstration, thereby improving the courseware shortcomings in demonstrating and editing the present distance

education system. (Shanzhi. et al., June 09, 2021) The improvised system could meet the requirements of the students and different distant learning forms. Compared with the traditional distance learning system, they possess noteworthy improvements for comprehensive performance, especially in the connection hit rate. (Shanzhi. et al., June 09, 2021) The analysis displays that the research has significantly contributed to designing the distance education system and the courseware editing and demonstration.

2. LEARNING OUTCOMES ASSESSMENT

The students' average grades for the quizzes judge the students' comprehension of the firewall configuration and the implementation of the filtering rule starting from the 10/11 academic year, and the total average grade has improved gradually. (Mustafa; Trabelsi. et al., January 2014) The Edu-Firewall tool allows students to anatomize better, and the lecture assimilates and teaches firewall concepts. The students learn better through the Edu-Firewall tool, positively affecting their performance. Through introducing the Edu-Firewall tool, the Quiz 2 student's average grade improved by 9% from 0.68 to 0.74 and is maintained throughout the academic year's improvement. (Mustafa; Trabelsi. et al., January 2014) The pictorial representation below represents the students' middle grades for the three quizzes.

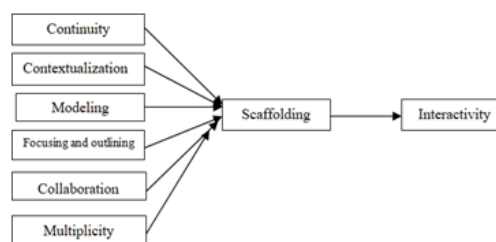
Figure. 1 Average student performance



3. HYPOTHESIS AND MODEL

Network-based learning automatically turns the students into independent learners; hence the technical attributes of the interactivity, without the instructional design, might fail the learners' expectation for efficiency. The study argues that the learners perceive the essential interactivity attributes of efficiency enhanced by the accurate information and exact guiding assistances to which the learners possess contingent and convenient access. The study confirms that technical interactivity is positively related to proper scaffolding. The pictorial representation for the same is shown below,

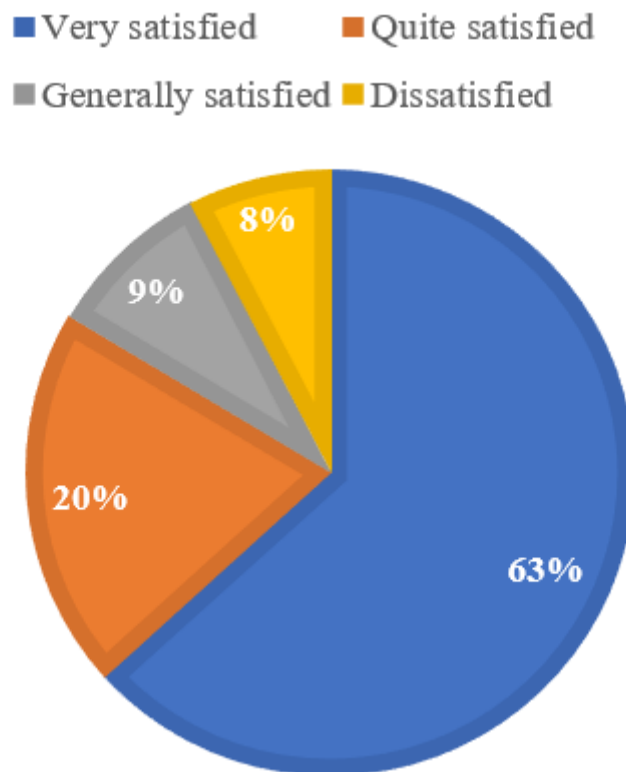
Figure. 2. Research Model



4. PARENTS' SATISFACTION WITH THE ONLINE PRESCHOOL EDUCATION LEARNING PLATFORM

Parents are satisfied with online preschool education based on the cloud learning platform and the use of big data. 63% of the parents are satisfied with the online educational platform, and 8% are dissatisfied. (Zhong. et al., September 2021) The dissatisfaction is that the online learning distance could be shorter, requiring students to have substantial autonomy, needing a sense of the atmosphere, and needing more correspondence learning atmosphere. The parents and students support the use and promotion of online preschool because of the effective exchanges and communication between the students and teachers (Zhong. et al., September 2021) adapted for every student through the data mining method. Targeted teaching and education improve the teacher's teaching ability and educational level, improving the students' learning skills. The pictorial representation of the parents' satisfaction is displayed below.

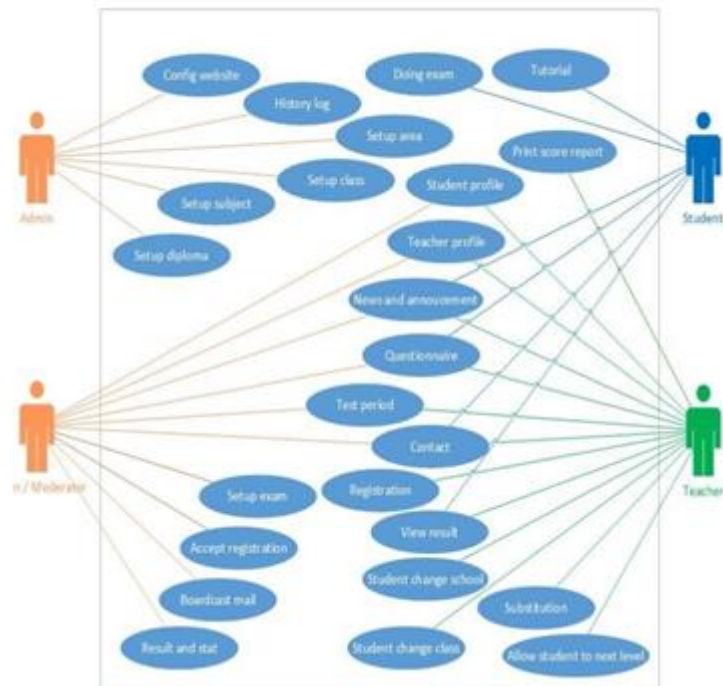
Figure. 3. Parents' Satisfaction



5. WEB-BASED EXAMINATION SYSTEM

The web-based examination system is an adaptable interface, using the central examination management and reliable examination system supporting many test item formats, and is designed for grades 1 to 12. It is hoped to add eight more subjects in the future. (Harnkajornsuk; Chinda; Witayasakpan. et al., March 2019) The system provided functions like the real aloud, the screen keyboard, and the highlight texts. The use case diagram for the online examination system is embellished in the chart below.

Figure 4. Online examination systems use case diagram



6. CONCLUSION

Web-based articulates the information technology system, thereby adding to the available choices. Under the research, a web-based online examination system has advantages over paper tests concerning immediate assessment, information integration, and standardization. They could be effectively used for academic purposes, tracking growth, screening examinations, etc., The tests serve the value of research tools for the researchers to standardize the instruments for studying the talent. Web-based education is effective for students well prepared in computer skills, and the test center must fully support the online examination. Future studies investigate the concurrent validity of the tests through the achievement tests and the system's need to keep the students requiring social needs, thereby allowing more time for the tests or the sound for explaining the test part unrelated to the reading skill.

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AUTHORS

This is Arvind Chandrasekaran. I have worked for PPG Healthcare for the past seven years. I am pursuing my doctoral degree from Colorado Technical University and completing 66 credits, tending to complete the same by this year. This is my eighth research paper published so far.