

A RESEARCH CONCEPT FOR IMPROVING STUDENT ENGAGEMENT IN FLEXIBLE LEARNING

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Abstract

This paper aims to introduce a research concept focused on the factors affecting student engagement in flexible learning environments. To achieve this goal, the authors review a range of theories, concepts, and related studies to construct a comprehensive model of relevant factors. The research design employs a mixed-methods approach, utilizing quantitative research to test the relationships between variables in the model, followed by qualitative research to gain a deeper understanding of how these factors influence student engagement. The integration of results from both quantitative and qualitative research will provide guidelines for improving student engagement in flexible learning systems in the final phase.

Introduction

Learning is the cornerstone of personal growth and societal progress. It empowers individuals to expand their knowledge, skills, and perspectives, fostering adaptability, innovation, and problem-solving abilities. Through continuous learning, individuals not only advance their careers but also enrich their lives, finding fulfillment in the pursuit of knowledge and understanding. Student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students demonstrate when they are learning or being taught, which extends to the level of active participation, involvement, and investment in educational activities, both inside and outside the classroom (Fredericks et al., 2004).

Currently, flexible learning is crucial, as it caters to the diverse needs and circumstances of learners. By offering alternatives to traditional, rigid educational models, flexible learning accommodates different learning styles, schedules, and life situations. This approach allows individuals to pursue education and skill development at their own pace, balancing their personal, professional, and academic commitments effectively. Even though there are many benefits to flexible learning, some problems still remain: the developed flexible learning system is unable to satisfy the needs of students and inspire them to be dedicated learners. The fundamental cause of this problem is that educational institutions presently lack the information required to manage flexible learning due to a lack of study on the topic. Previous studies have not fully covered all crucial factors and have not presented clear guidelines for managing these factors. As a result, we are interested in investigating a flexible learning factor model that influences student engagement in order to gain a better understanding of these factors and to develop guidelines for the development of flexible learning to meet the needs of learners and improve their engagement for a higher quality of education.

Literature review

This section presents a review of theories, concepts, and research articles in order to gain a clear understanding that leads to the precise variables and conceptual framework of the research for factors affecting student engagement in a flexible learning environment.

Concept of Flexible learning

Flexible learning is an educational approach that allows learners to choose the time, place, and pace of their learning, incorporating a variety of instructional methods and technologies (Garrison, D. R., & Kanuka, H. 2004). With a student-centered teaching and learning approach, flexible learning provides learners with the autonomy to tailor their learning experiences, accommodating diverse learning styles and preferences (Anderson, T., 2003), and involves the use of various instructional modes, including face-to-face in-class learning, online learning, and hybrid models, allowing students to choose the mode that best suits their needs (Garrison, D. R., & Vaughan, N. D. (2008).

In-class learning

Based on many studies, such as Flanders, N.A. (1970) and Jimerson et al. (2003), we can conclude that the aspects that make up the in-class learning factor are teaching contents, lecturer characteristics, teaching method, and class environment. The use of indirect influence in teaching includes accepting students' feelings, giving admiration, bringing students' ideas for application, and asking questions, which will encourage students to express themselves, have self-confidence, and achieve higher results in learning than teaching that uses direct influence, such as lectures and exercises. In conclusion, the relationship between teachers and students greatly influences academic achievement.

Online learning

Online teaching refers to learning through the Internet or intranet, where the content of the lesson consists of text, images, audio, video, and other multimedia sent to the learner through a web browser by the learner and the teacher. Students can contact or consult with peers and teachers to exchange opinions with one another in the same way as studying in a regular classroom (Laohajarassang, T., 2002). Sapthanadol, T. (2011) studied factors affecting online learning management and found that the management of online teaching in terms of content, lessons, practice formats, teaching methods, quality of use of learning media and equipment, and assessment plays an important role in students' online learning, as shown in the application of the online test bank system, which provides suggestions for students to review the relevant online lessons related to their weaknesses and significantly helps improve students' achievement (Tapsai, C., 2015).

Technology Acceptance Model

The Technology Acceptance Model (TAM) is a theoretical framework that explores the psychological factors influencing users' acceptance of information technology. It posits that perceived ease of use and perceived usefulness are key determinants of users' attitudes and behavioral intentions towards technology adoption. It has been influential in understanding and predicting users' adoption behavior (Davis, F. D., 1989). There are many studies that explore the relationship between the acceptance of technology in educational contexts and student achievement. For example, Barbour, M. K., and Siko, J. P. (2013) explore factors influencing students' perceptions of success in mathematics, including their use of technology.

Family support

According to Morrow and Wilson's research (1961), students with high academic achievement have parents who praise, accept, show interest, understand, and make them feel like they are part of the family. Contrary to students with low academic achievement, they have parents who like to intimidate, are overly strict with children, often punish children, or are very protective of children. Therefore, the atmosphere in the home is tense and conflicting. Pascarella and Terenzini (2005) conducted a comprehensive longitudinal study to investigate the impact of family support on student learning and growth in higher education. Their findings demonstrated that family support, which included emotional encouragement, financial aid, and academic coaching, had a significant impact on kids' academic success and retention in college.

Concept of motivation

The term "motivation" describes the internal or external forces that propel someone's behavior, activities, and exertion in the direction of reaching a specific objective or result. Motivation gives people the will and vigor to start and keep going for their goals, get beyond obstacles, and complete their tasks. Abraham Maslow (1943) described motivation as the force that propels people to satisfy their needs and realize their full potential. Humans are motivated by a set of basic needs that are placed in hierarchical order. The first order satiates their basic physiological needs before being motivated to pursue higher-level needs, including safety needs, social needs, esteem needs, and self-actualization. There are two types of motivation: Intrinsic motivation is something driven from within a person, such as attitude, opinion, curiosity, interest, intention, satisfaction, pride, needs, wants, desires, etc. Extrinsic motivation, or social motivation, is a drive outside the individual that stimulates behavior, such as receiving awards, honor, fame, praise, and acceptance (Ryan and Deci, 2000).

Research framework and research design

Through an extensive review of many theories, concepts, and related research as presented in the previous section, we constructed a research framework that is the factor model to assess student engagement in flexible learning, as shown in Figure 1.

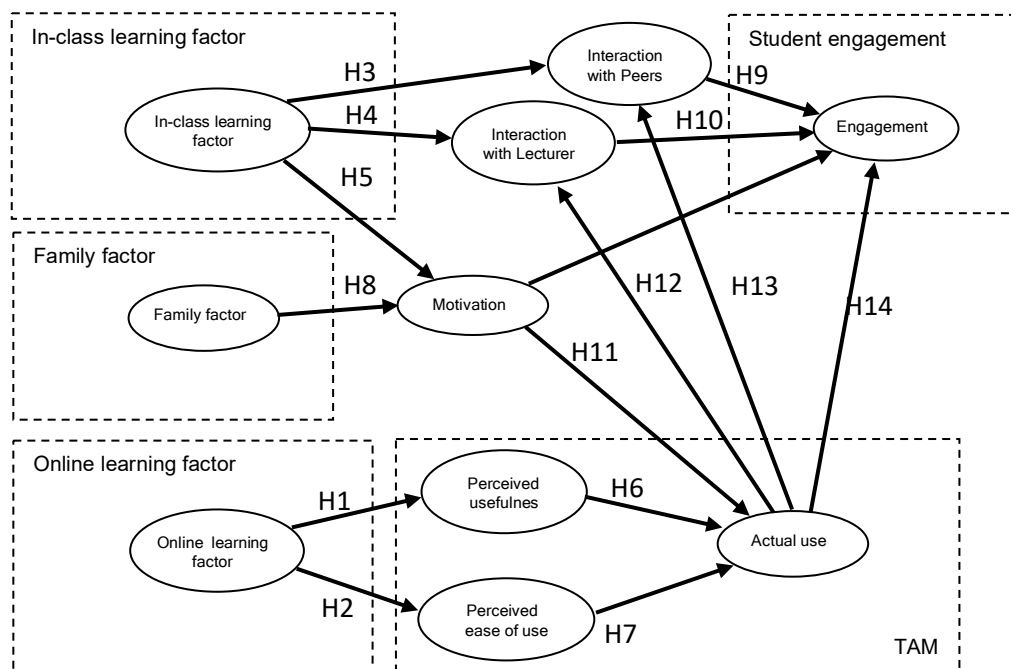


Figure 1. The factors' model of flexible learning

Student engagement is a dependent variable. The in-class learning factor, the family factor, and the online learning factor are independent variables. The mediating variables are interaction with the lecturer, interaction with peers, perceived usefulness, perceived ease of use, actual use, and motivation.

The research design of this research is a mixed-methods approach. It begins with quantitative research that applies a structured questionnaire as a tool for data collection with a

proper sample size of students who studied subjects with flexible learning systems. The data will be analyzed with confirmatory factor analysis (CFA) to ensure the model structure. Then, structural equation modeling (SEM) will be analyzed for relationships between variables, followed by qualitative research through in-depth interviews with the carefully selected samples to explore their individual experiences, educational beliefs, attitudes, opinions, etc., which will allow us to comprehend the reasons that cause factors to affect student engagement. In the final step, the results from both quantitative and qualitative research are combined to provide guidelines for the development of flexible learning systems to improve student engagement.

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