



Online Learning in English for Nursing Using Moodle: Students' Perspectives on Satisfaction

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ABSTRACT

The emergent shift in education due to the COVID19 pandemic leads to the implementation of online learning exclusively using various digital platforms. Moodle (Modular Object-Oriented Dynamic Learning Environment) as the popular learning management system used offers various features and flexibility to support the online learning. Involving students' perspectives to improve the quality of online learning is highly needed. Therefore, this study aims to investigate the students' perspectives of satisfaction toward the asynchronous learning Using Moodle by involving 230 nursing students as the respondents. The results show that the student satisfaction was mostly affected by content quality. The implementation of online learning needs to consider the several factors to determine the quality of the course.

Keywords: *Online Learning; Students' Perspectives; Satisfaction*

1. INTRODUCTION

The COVID-19 outbreak has a destructive impact on education activities. This public worldwide health crisis shifts the face-to-face learning to online learning. This sudden transition forces teachers and students to adapt learning into digital world [1]. Consequently, educational institutions need to response this difficult situation by accommodating them connected virtually. Since the old education models are no longer adaptable, online learning has become the only one solution for education in terms of quarantine situation [2], [3]. Many scholars and teachers have been involved to look for the best way in conducting an online learning.

The massive change in education leads to the implementation of online learning exclusively using various digital platforms. Consequently, there are various software tools promoting online education and helping students achieve learning objectives. Learning management systems (LMSs) is the most common because of their advantages in creating and managing online learning [4], [5], [6], [7], [8]. Furthermore, one of the most popular open-source platforms is Moodle (Modular Object-Oriented Dynamic Learning Environment) [9], [10], [11], [12], [13]. It is widely applied worldwide by schools, college, and universities. This platform is designed to enable the educator or course

developer integrated learning system to create personalized and formal learning environment [14]. In other words, it has multiple features that can be adjusted and integrated with the school or university portal and website. This facilitates each institution, particularly instructors, to design effective and relevant online learning. However, the flexibility and various features offered by Moodle challenge teachers to manage the course and provide interesting learning activities which impact on students' engagement and learning outcomes. Hence, the voice of students' learning experience can be valuable information to examine the quality of developed online learning [15], [16].

Students' perspective in using an online learning is essential to provide insightful feedback [17]. The information of students' experience includes feeling of comfort with the learning process, technical proficiency of the online learning platform, and their own sense of learning achievement and social interaction. This information shapes the students' satisfaction toward the quality of online learning [18]. This satisfaction may affect their retention towards what they have learnt. Students' satisfaction in online learning environments has been examined when the ICT utilized fully in education, with researchers attempting to uncover characteristics that determine e-learning system success [19], [20], [21], [22]. Scholars have discovered a strong link between

students' perspectives of their academic achievement and their satisfaction with their online learning settings [21], [22], [23]. Important antecedents associated to students' satisfaction with online learning course are shown in the literature, such as quality of information and activity [4], course design [24], technical support [25], [26], and online interaction [27].

The purpose of this study is to look at the elements that influence student satisfaction with online learning in English for Nursing courses, taking into account the content characteristics, in order to develop and strengthen the E-learning system. In other words, our study investigates nursing students' perspectives on the usage of E-learning platforms, as well as how these technologies affected their interpretation and absorption of knowledge. This study's noteworthy discovery leads to a better understanding of students' happiness and success in online learning, particularly in English. Higher education educators, teachers, and students may be interested in this study.

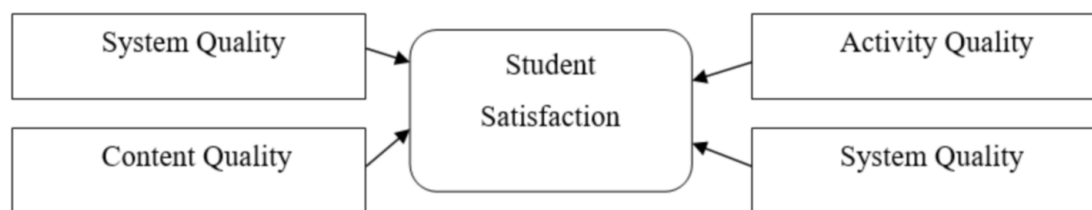


Figure 1 Modified Construct Measurement on Student Satisfaction for E-learning

2.1. Participants

The study was intended for nursing students joining the online learning at English for Nursing course. A total number of the respondents were 230 nursing students taken from Harapan Bangsa University, Indonesia and Boromarajonani College of Nursing, Phayao – Thailand. After taking an asynchronous learning of EFN course via Moodle platform, they were obliged to complete the questionnaire.

2.2. Data Collection

An online survey method was utilized to assemble information about the perspectives of nursing students concerning on satisfaction during joining EFN course via Moodle Platform used in Harapan Bangsa University – called SCALSA (Student Centred Activity Learning of Harapan Bangsa). This includes a total of 20 survey items that serve as the foundation for measuring four constructs that may have an impact on student happiness. Individual satisfaction and worry levels were assessed using a 5-

2. METHOD

The critical reason for this exploratory study was to locate the overall perspectives of nursing students towards virtual learning process amid the COVID-19. This study was conducted in two universities holding English for Nursing (EFN) course using Moodle platform. In conducting this research, there were four quality dimensions involved to measure important aspects affecting students' satisfaction experiencing online learning. It was adopted from IS Success Model cited in the study of Lee et al. [28]. In Figure 1 conceptualizes the four constructs influencing the nursing student satisfaction toward the implementation of online learning in EFN course. Those constructs in examining the qualities of online learning environment where system quality, content quality, activity quality, and evaluation quality.

point Likert scale ranging from 1 (lowest value) to 5 (highest value) (highest value). Taking prior research into account, the questionnaire was created [26], [28],[29].

2.3. Data Analysis

The data analysis was started by checking the fit of measurement model to all constructs proposed. In this study, the reliability was assessed by using McDonald's omega (ω) and ω^2 , and the validity with Average Variance Extracted (AVE). In addition, Omega and AVE values above 0.70 and 0.50 indicate good reliability and validity [30].

3. RESULT AND DISCUSSION

3.1. Results

The results shows that the reliability, as measured by Cronbach's alpha (composite reliability/CR). Each construct will be reliable and valid when they are greater than 0.7 and 0.5. All constructs in this study showed reliability and convergent validity.

Table 1 Reliability and validity testing.

| Construct | Item | loading | t |
|----------------------|---|---------|--------|
| System quality | Q1. Were you able to join the online learning via SCALSA? | 0.887 | 48.979 |
| | Q2. Were you able to access learning materials via SCALSA easily? | 0.829 | 27.761 |
| | Q3. Were you able to use presence feature on SCALSA without any difficulties? | 0.882 | 36.590 |
| | Q4. Were you able to access Quizzes via SCALSA? | 0.920 | 67.013 |
| | Q5. Did you have any trouble connecting to the SCALSA system? | - | - |
| | Q6. Did you have inconvenience during taking course evaluation due to instability of the SCALSA system? | - | - |
| Content quality | Q7. Were the lesson units provided by EFN course helpful for understanding? | 0.920 | 67.013 |
| | Q8. Were vocabulary used in the EFN Course relevant to the nursing field? | 0.840 | 33.458 |
| | Q9. Were the video quality good enough to follow the lecture? | 0.740 | 15.215 |
| | Q10. Were the course loading suitable for the lectures? | 0.746 | 13.396 |
| Activity quality | Q11. Was the pair work and group work activity helpful for facilitating student interaction? | 0.815 | 26.761 |
| Evaluation quality | Q12. Were the Quizzes helpful for giving more understanding the lessons? | 0.835 | 41.595 |
| | Q13. Were questions in the Quizzes manageable in difficulty? | 0.876 | 30.715 |
| | Q14. Was there enough time to finish the Quizzes? | 0.889 | 47.707 |
| | Q15. Were the Quiz suitable for evaluating or reviewing your understanding? | 0.739 | 12.935 |
| Student satisfaction | Q16. Did you gain improvement of your English by taking EFN via SCALSA? | 0.882 | 36.590 |
| | Q17. Are you satisfied with the online course design of EFN? | 0.817 | 22.186 |
| | Q18. Are you satisfied with the evaluation system for this course? | 0.891 | 51.686 |
| | Q19. Are you satisfied with group activity in this course? | 0.768 | 16.938 |
| | Q20. Do you think you have successfully completed this self-directed course? | 0.864 | 43.224 |

The first-order constructions vary from 0.57 (System quality) and 0.83 (Content quality). The decreased dependability scores of second-order constructs can be explained by the reduced number of indicators in certain of these constructs. AVE varied from 0.53 (for System quality) to 0.79 for first-order constructions (for Content quality). According to the dependability metrics, second-order constructs, particularly those with sparse indications, had lower AVE.

3.2. Discussion

According to the study findings, the influence of activity quality on e-learning quality is less important than other aspects such as content quality, which is the most determining factor. These findings are consistent with prior research (e.g. [22]), which revealed that content quality is positively associated to students' perceptions of satisfaction, but contradict Lee, S.J. et al. [28], who reported no significant content quality influence. This study's findings also reveal that different forms of system quality affected content quality, which in turn influenced student happiness.

Taking into account all four characteristics of online learning quality, content quality has a very substantial positive influence on perceived student satisfaction. Students who are happy with the quality of their e-learning experience are often more satisfied with their education, which effects their perceived academic achievement even more positively.

4. CONCLUSION

This study investigates nursing students' learning experiences by expanding asynchronous learning using the Moodle platform. The altered learning environment causes us to reconsider the worldview shift of the instructor–learner relationship on the one hand, and the instructor–technology relationship on the other, and suggests ensuing educational changes in terms of instructive objectives, course design, and learning forms to improve instructive effect—student satisfaction, retention, assessment, and so on—for a more significant learning involvement.

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