

Impact of Using LMS and Learner Autonomy in On-demand Lecture

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Abstract

The current COVID-19 pandemic has caused a huge impact on all aspects of social life. It has also led to a change in the mode of the higher education, where face-to-face class have been canceled and transformed into on-demand lecture. It is becoming increasingly difficult to ignore the importance of online learning. A learning management system (LMS) is an application software that is used to help in the online learning process. LMS has various features that can support higher education student activities online. Some of the learning activities supported by LMS are (1) syllabus; (2) video; (3) bulletin board.; (4) question chat; (5) material; and (6) quiz. LMS provides a more effective learning environment for the on-demand class. Lecturers and students can communicate with each other through LMS to solve problems in the teaching process and henceforth increase students' learning autonomy. This research focused on Japanese university students who choose on-demand lecture. And the research method is through the questionnaire to analyze how they used the LMS. The purpose of this research is to clarify the relationship between students' use of LMS and their final academic performance in on-demand lecture.

Keywords: COVID-19, Learner autonomy, Learning Management System (LMS), On-demand lecture, Online learning

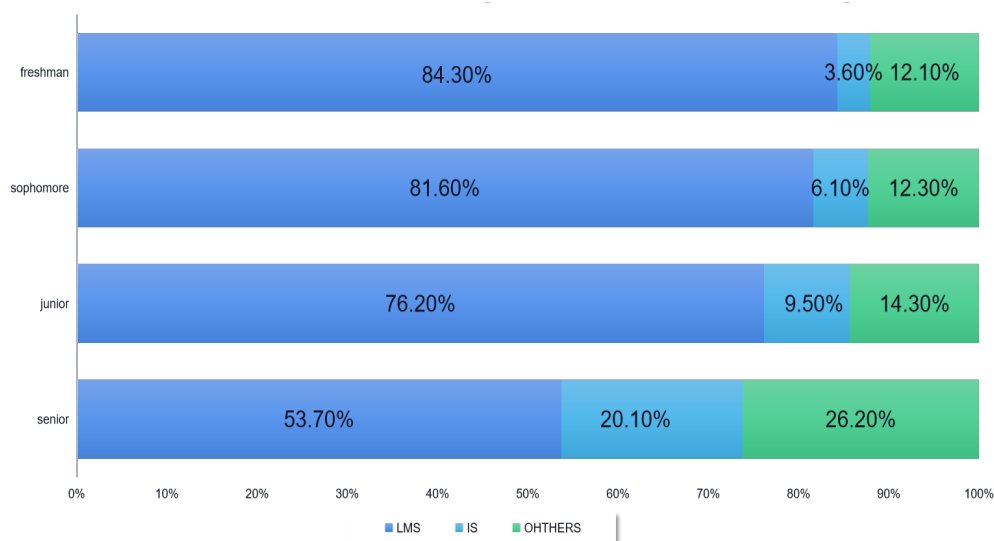
Introduction

Due to the impact of the COVID-19 from the end of the 2019, the use of online learning has increased at the universities in Japan. As argued by Ministry of Education, Culture, Sports, Science and Technology of Japan (2019), the results for 2020 show that about 37% of the students took online class, increasing about 10% from the 2019 (about 28%). In the COVID-19 era, online learning is said to have advantages such as no time and place constraints, and it is expected that more universities will continue to make efforts to utilize online learning. On-demand lecture is a form of online learning that is different from real-time class. On-demand lecture can be learned from anywhere at any time at your convenience and are e-learning in which each student takes a lecture recorded in advance in a studio or classroom via the Internet (Takagi,2005).

Learning Management Systems (LMS) provide teachers and students with an online class that reinforces learning processes. A standard LMS supports an inclusive learning environment for academic progress with interceding structures that promote online collaborative-groupings, professional training, discussions, and communication among other LMS users (Dias & Dinis, 2014; Jung & Huh, 2019; Oakes, 2002). Blau (2010) state that LMS usage allows online learners to become independent. Learner autonomy consists in becoming aware of, and identifying, one's strategies, needs, and goals as a learner, and having the opportunity to reconsider and approaches and procedures for optimal learning (D Thanasoulas,2000). The most direct result of conducting independent learning should be student's grade, so the purpose of this study is to clarify the relationship between student's use of LMS and their grades in on-demand lecture.

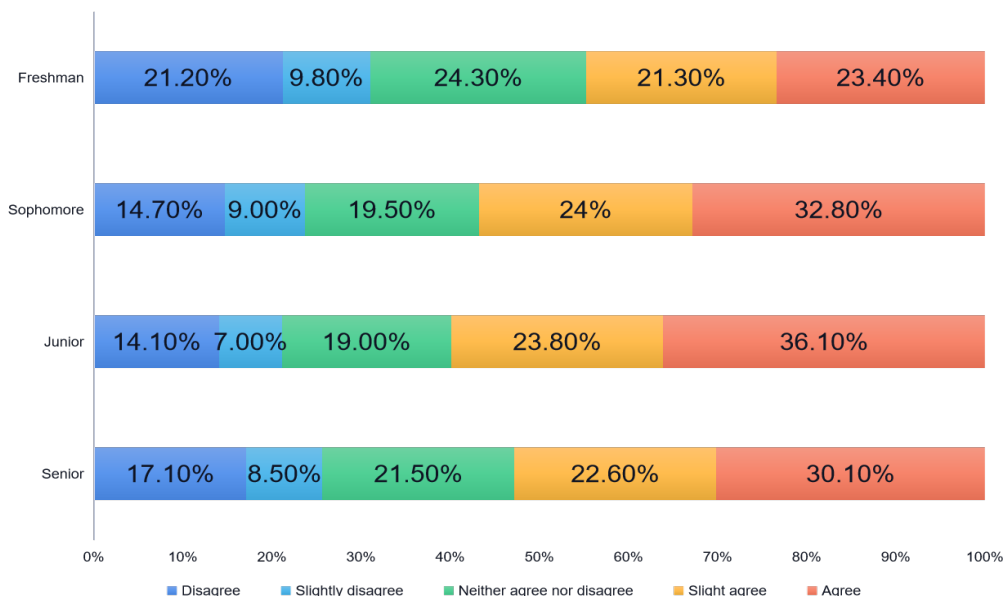
In 2020, Kansai University implemented a questionnaire survey on online learning. The questionnaire was administered to all 28369 students, resulting in 12655 students responding (44.6% response rate). According to the survey results, the easiest learning tool to use is LMS. Especially for freshman (84.3%) and sophomore (81.6%) are as shown in Figure 1.

Figure 1. The most useful tools to get information about learning. Adapted from Kansai University,2020,https://www.kansai-u.ac.jp/ir/online_survey_2020sp_digest.pdf



There are three types of online class at Kansai University, real-time class, on-demand class and by presenting teaching materials class. Figure 2 show that more than half of the students in years 2-4 want to continue with on-demand classes.

Figure 2. After the COVID-19 are you willing to continue on-demand classes. Adapted from Kansai University,2020,https://www.kansai-u.ac.jp/ir/online_survey_2020sp_digest.pdf



According to the Kansai university 's questionnaire, most students have a positive attitude towards LMS and on-demand lecture. After the COVID-19 they also would like to choose online course. It is becoming increasingly difficult to ignore the importance of on-demand lecture.

Methods

This on-demand class was held once a week, with two to four 15-minute videos each week. After watching the videos, students must write two points of their own thought on bulletin board. Each week, students are required to complete the quiz related to the previous week's video. There are no periodic examinations will be given, but students will be comprehensively evaluated through regular examinations, confirmation quiz (30%), assignment (10%) bulletin board post and reply (10%), report (30%), and final confirmation quiz (20%).

We will implement questionnaire to analyze how the students' responses to bulletin board affects their own independent study. Through the LMS can know each student's bulletin board post and reply, and communication among other LMS users. After questionnaire, we will sample a few students for semi-structured interview.

Discussion

Basing on LMS, using bulletin board, quiz, viewing condition in on-demand lessons, we expected that the students more flexible to use LMS, the higher final learning outcomes it would be. It is also expected that various functions in LMS can promote students' learning motivation.

Reference

Bradley, V. M. (2021). Learning Management System (LMS) use with online instruction. *International Journal of Technology in Education (IJTE)*, 4(1), 68-92.

Dimitrio, T. (2000). What is Learner Autonomy and How Can It Be Fostered? *The Internet TESL Journal*, Vol. VI, No. 11.

Holec, H. (1981). *Autonomy in Foreign Language Learning*. Oxford: OUP.

Mori, Y., Matsushita, Y. (2021). How First Year Students Watch Lesson Videos in Online On-Demand Courses. *Japan Journal of Educational Technology*, (45), 177-180

Simanullang, N H S., Rajagukguk, J. (2020). Learning Management System (LMS) Based on Moodle to Improve Students Learning Activity. *Journal of Physics: Conf. Series* 1462.

Takagi, N. (2005). A Challenge by the Forum for On-demand Lecture Circulation (FOLC) to create a new form of education. *Journal of Multimedia Aided Education Research*, 2(1), 29-42.

Tominaga, A., Kogo, C. (2010). Relationship between Achievement and Preference of Class Forms in Blended Learning Course. *Japan Journal of Educational Technology*, (34), 37-40