

# Improvement of E-Learning on Students Learning Motivation during Covid-19 Pandemic

Anisah<sup>1</sup>, Syahid Suhandi Aziz<sup>2</sup>, Ferdian Ari Bowo<sup>3</sup>

<sup>1</sup>Universitas Jayabaya, Jakarta-Indonesia, <sup>2</sup>Universitas Jayabaya, Jakarta-Indonesia, <sup>3</sup>Universitas Jayabaya, Jakarta-Indonesia

**Abstract:** The purpose of this research is to see pandemic policies and phenomena whose impact forces the world of higher education to change service work patterns from conventional to online-based services, one of which is to use e-learning which has an impact on student learning motivation. The research used a correlational descriptive method. The research was done in the semester of January-May of 2020 at the Faculty of Engineering Jayabaya University. Using the Slovin technique for 30 respondents, the primary data was closed-ended questionnaires. The research found that e-learning can affect the learning motivation of students. Based on the test, e-learning positively affects and improves the learning motivation of students. Learning motivation of students to use e-learning is a critical factor in the learning process. This is because the use of interactive features in the e-learning can boost motivation and thus providing a better learning result.

**Keywords:** E-learning, motivation learning, student.

## I. INTRODUCTION

Since the advent of the COVID-19 outbreak and the enforcement of social and physical distancing, all Indonesian higher universities, including Universitas Jayabaya, have implemented outright the Indonesian Ministry of Education and Culture's Circular Letter No. 3 of 2020 to bring the learning-teaching activities to home. Undoubtedly, the policy is motivated by the increasing number of victims and uncontrolled widespread all over Indonesia.

All academic activities that were typically carried out at college should be done from home. Not only students but also the lecturers and teaching workers should work from home for supporting the prevention of and accelerating the alleviation process of the COVID-19 outbreak. This massive and immediate effect of both the pandemic phenomenon and the policy to mitigate it has imposed higher education to alter their work patterns from conventional to online-based service. A means that is picked the most as the medium for the new learning process is e-learning.

Recently, many universities have exercised e-learning to adjust to the situation and, because of that, academic and technical knowledge regarding teaching and learning through the internet has become a common primary skill, primarily among lecturers and students. In higher education or universities, e-learning has been involved for: (1) enhancing university's visibility, (2) expanding educational feedbacks, and (3) getting to know "virtualization." Learning is an

essential device that can be used by lecturers to strengthen the motivation and education of their students [1].

Learning improvement through motivation can affect what one learns, how one learns, and when one decides to learn [2]. A study by Ryan & Deci (2000) shows that a motivated student tends to execute a challenging activity, and actively involve, enjoy, and adopt an in-depth approach to study and show improvement in performance, diligence, and creativity. Considering the vital mutual relationship between motivation and learning [4], it is not surprising that motivation has been profoundly researched in various fields of traditional educations [5]. Nevertheless, as recorded by [6], studies that explore motivation to learn online are limited, whether in terms of numbers or scopes,

### A. E-learning

E-learning can be interpreted as a unification of two essentials fields, learning, and technology [7]. Learning is a cognitive process to obtain knowledge, while technology is what enables the learning process, meaning that technology, such as pencils or notebooks, is similar to other devices in the practice of educations. Although it seems straightforward and logical, a pencil is a more transparent tool in terms of technology, and, thereby, the use seems more natural for many people.

E-learning is a technology capable of modifying the learning process. Thus, by exercising e-learning, students can have basic knowledge regarding technology, which is useful for achieving the aim of education. According to Wagner (2005), e-learning can be interpreted as a learning process in using information and communication technology, distributing learning contents, easing communication between students and lecturers, and managing the study plan. Despite admitted as a new solution, e-learning is a challenge for traditional courses and learning. For example, the role of a teacher may change from an importer of knowledge to exporter. [9].

### B. Learning Motivation

Kim & Frick contend that promoting motivation to learn is the main principle for an efficient education [10]. Motivation to learn shows that a university student wishes to take part in the learning and training process [11].

Koff & Mullis argue that learning motivation is an intention or wish of a student to participate in learning endeavors, which is done in the level of student's choice in a specific learning activity[12]. Therefore, learning motivation may be

defined as a student's guide in retaining study and a student's attempt to achieve the goal of learning designed by teachers in the learning process. Furthermore, Chou, Block, & Jesness show that although students are more into finishing a problem independently in a particular work (a behavior encouraged by intrinsic motivation), lecturers' help is inevitable to deal with some learning problems (a behavior promoted by external stimulation) [13].

In learning, student intrinsic interest and teacher or parent external appreciation can work hand-in-hand to create learning motivation. In light of the studies above, intrinsic and extrinsic motivation was used as a measurement of the dimension of learning motivation in this research.

C. Research Method

The research used a correlational descriptive method. The research was done in the semester of January-May of 2020 at the Faculty of Engineering Jayabaya University. The free variable was the use of e-learning (X) as a learning method, while the bound variable was the learning motivation of university students (Y). The population in this research was students of faculty of engineering in the semester of January-May of 2020, which took a course in Pancasila and Citizenship and conducted e-learning. Using the Slovin technique for sampling, 30 respondents and 20 respondents were found for research and testing, respectively.

In the data collection process, the primary data was closed-ended questionnaires that had been validated and tested in terms of reliability and were given to all students of faculty of engineering in the university in question that took a course in Pancasila and Citizenship. The data analysis method to analyze the influence of media use in e-learning to learning motivation of students was descriptive analysis and regression analysis. Before conducting regression analysis, a requirement analysis test was conducted to make sure that data were distributed in a normal and linear way. In this research, a t-test was used to prove the hypothesis.

II. RESULT

Table 1:

Means, Standard Deviations, and Correlations of the Study Measures\*

Variable	Mean	S.D	1	2
1. E-learning	33.71	4.56	1	
2. Learning Motivation	34.43	4.12	6.83**	1

\*  $p < .05$ , \*\*  $p < .01$  (two-tailed).

$n = 30$ .

Table 1 shows the means, standard deviations, and correlations of each variable. It can be seen that the correlation between e-learning and learning motivation was consistent with the hypothesis.

Table 2: Results of Regression Analyses

	Learning Motivation	
	$\beta$	t test
E-learning	.68**	8.86
R <sup>2</sup>	46.6%	
Adjusted R <sup>2</sup>	46.0%	
Model F	78.55	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .  $n = 30$

Table 2, on the other hand, shows the regression analysis. In the model, e-learning affected learning motivations. In the hypothesis, e-learning influence towards learning motivation was found (coefficient: .68 and  $p < .05$ ). This result stated that e-learning partially affected learning motivation. That is, engaging e-learning can enhance the learning motivation of students. The research tested whether e-learning can affect the learning motivation of students. Based on the test, e-learning positively affects and improves the learning motivation of students. Learning motivation of students to use e-learning is a critical factor in the learning process [14]. This is because the use of interactive features in the e-learning can boost motivation and thus providing a better learning result.

III. CONCLUSIONS

The implementation quality of e-learning was not affected by the internet exposure time of students, contents given during e-learning, and facilities used by the students, such as computers and the internet that also can support students to do e-learning. Those were customized by students' learning styles so that the learning process becomes dynamic. With that, students can always be motivated to learn, or student motivations to learn become higher. In addition, a lecturer as a facilitator is responsible for facilitating the learning style by using a suitable method. With that in mind, a learning process becomes more productive.

REFERENCES

- [1]. J. M. Mateo, D. P. Del Rey, and S. M. Hernández, "Student motivation and cross-curricular development through e-learning applied to cooperation," in *2010 IEEE Education Engineering Conference, EDUCON 2010*, 2010.
- [2]. D. H. Schunk and E. L. Usher, "Social Cognitive Theory and Motivation," in *The Oxford Handbook of Human Motivation*, 2012.
- [3]. R. M. Ryan and E. L. Deci, "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being," *Am. Psychol.*, 2000.
- [4]. J. Brophy, *Motivating students to learn: Third edition*. 2010.
- [5]. P. R. Schunk, D. H., Meece, J. L., & Pintrich, *Motivation in education: Theory, research, and applications*, 4th ed. Boston: Pearson, 2014.
- [6]. T. A. Bekele, "Motivation and satisfaction in internet-supported learning environments: A review," *Educational Technology and Society*. 2010.
- [7]. M. Aparicio, F. Bacao, and T. Oliveira, "An e-learning theoretical framework," *Educ. Technol. Soc.*, 2016.
- [8]. E. Wagner, "Interaction strategies and experience design:

- Guidelines for technology-mediated learning,” *EdMedia+ Innov. Learn.*, pp. 4118–4119, 2005.
- [9]. M. Haverila and R. Barkhi, “The Influence of Experience, Ability and Interest on e-Learning Effectiveness,” *Eur. J. Open, Distance E-Learning*, 2009.
- [10]. K. J. Kim and T. Frick, “Changes in student motivation during online learning,” *J. Educ. Comput. Res.*, 2011.
- [11]. T. N. Garavan, R. Carbery, G. O’Malley, and D. O’Donnell, “Understanding participation in e-learning in organizations: A large-scale empirical study of employees,” *Int. J. Train. Dev.*, 2010.
- [12]. L. Koff and R. Mullis, “Nutrition Education and Technology: Can Delivering Messages via New Media Technology Effectively Modify Nutrition Behaviors of Preschoolers and Their Families?,” *J. Nutr. Educ. Behav.*, 2011.
- [13]. C. C. Chou, L. Block, and R. Jesness, “a Case study of Mobile Learning Pilot Project in K-12 schools,” *J. Educ. Technol. Dev. Exch.*, 2012.
- [14]. A. Sandybayev, “The Impact of E-Learning Technologies on Student’s Motivation: Student Centered Interaction in Business Education,” *Int. J. Res. Tour. Hosp.*, vol. 6, no. 1, pp. 16–24, 2020.