A Strategy using Social Media to Increase Students Engagement in E-Learning for the Equivalency Education Program (E-LEEP)

Mesra Betty Yel¹, Sfenrianto Sfenrianto², Gunawan Wang³, Ahmad Nurul Fajar⁴

¹Faculty of Computer Science STIKOM CKI Jakarta, Indonesia
² 3 4 Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Jakarta, Indonesia 11480

¹Betty.mby@stikomcki.ac.id, ²sfenrianto@binus.edu, ³gwang@binus.edu, ⁴afajar@binus.edu

Abstract. Social media can be used to support learning activities in non-formal education. The utilization of social media by students can be seen as a strategy to improve the students’ engagement in e-Learning. It is an important goal for the e-Learning of non-formal education. This study aims to propose a strategy using social media to increase students engagement in E-Learning for the Equivalency Education Program (SosMed E-LEEP strategy). This strategy has several key components. These components are students, social media, E-LEEP, and Students Engagement. SosMed E-LEEP Strategy consists of sharing activities, getting information, discussing, and interacting with students and Tutor, and for learning purpose. Each of these strategic activities is expected to improve students engagement, namely: access to learning materials, forum discussion activities, and assignment uploading.

1. Introduction

Although informal, non-formal education in Indonesia still has structures and several levels, such as A package of the Equivalency Education Program (EEP) equivalent to primary school, B package of the EEP equivalent to middle school, and C package of the EEP equivalent to high school. Equivalency education program is unique because the time and the place to learn are more flexible compared to formal education. Thus, the implementation of EEP may use the support of e-Learning as a learning vessel for people who have limited time to conduct learning full time and face-to-face.

Equivalency education that is based on e-Learning will enable students from all region of Indonesia to get themselves their educational material, to do discussion between tutor and students, and to receive and send their homework. E-Learning widely helps in distributing materials to students, such as powerpoint slides, videos, and graphics [1]. In an effort to support equivalency education, the previous study has proposed E-Learning Model (E-LEEP) [2].

However, E-LEEP implementation will need some kind of strategy to increase students’ engagement. The success rate of e-Learning implementation depends on the students’ engagement [3] [4]. Students engagement increase in e-Learning can be done using a few strategies, such as gamification [5], forum discussion participation [6] [7], multimedia learning material [8], and much more.

According to the research result of “We Are Social and Hootsuite”, in January 2018, Indonesia has 130 million active social media users in all kinds of platform, involved in many such Facebook, Instagram, Twitter, and many others. The use of social media should be able to support E-LEEP to
increase the engagements of students from equivalency education in following online learning process. Social media provides technological advantage in communicating and establishing connection between tutors and students in e-Learning. Thus, this research proposes a strategy to utilize social media in increasing students engagement on e-Learning equivalency education in Indonesia.

2. Literature Review
E-Learning for equivalency education has given education access to without the limits of time and distance. Equivalency education tutors can give learning materials anywhere and anytime. The same thing applies to the students. They can study anywhere and anytime, whether it is for reviewing material, for enrichment, and even for evaluation. Tutor and students can communicate with each other through E-Learning. Students can benefit much from the use of e-Learning, such as comfort, cost-effective, deep learning, diverse learning and the freedom of speech [9].

In implementing e-Learning, it is important to pay attention to strategy so that students can get actively engaged in a learning process. Widely involved students on e-Learning is acknowledged as an important influence to learning achievement [10]. Recent research shows that students engagement on e-Learning environment brings impact on the success of the students’ study [11]. Students Engagement is when the students actively doing learning activity [12]. These factors are connected to the students’ participation in discussion, access toing the materials, and doing the homework that are given online [13] [14].

Social media can not only be used as a social platform, but it can also be used as a media to support online learning. On e-Learning, social media enables people to collaborate and share information in a set virtual community [15]. Social media strategy to participate in e-Learning has the purpose to get information for academic courses, share information, support studies, educational purpose, to interact with teachers, upload lectures, assignments, and quizzes [16]. Some studies have used social media such as Facebook to support learning using e-Learning [17] [18]. Therefore, strategy on using social media can be used to support e-Learning to increase students engagement.

3. SosMed E-LEEP Strategy
This study proposes SosMed E-LEEP Strategy which has the purpose to increase the engagements of students from A package, B package, C package equivalency education program on E-LEEP. Picture 1 explains the framework of SosMed E-LEEP Strategy that has four components, which are Students, Social Media, E-LEEP, and Students Engagement. The first component, the students, come from A package, B package, and C package that are users of social media such as Facebook, Twitter, Instagram, and many others. Social media component is used by the students to share and get information, discussion, interact with students and tutors and e-Learning purpose. E-LEEP component is e-Learning that supports learning process on A package, B package, and C package programs. Students engagement component is the activity to access to material, the involvement on discussion forum, and the homework submission on E-LEEP after using social media.

![Fig. 1. A Framework SosMed E-LEEP Strategy](image-url)
Involving students to use social media is the key. This is done by making them involved in access to learning, forum discussion activities, and assignment uploading on E-LEEP. To increase students’ engagement, the social media strategy that are ready to use is needed. Table 1-5 describes SosMed E-LEEP strategy for tutors of equivalency education A package, B package, and C package to help students learning online in an effort to increase their engagement.

Table 1. SosMed E-LEEP Strategy for Sharing

| Social Media     | Activities       | Students Engagement                 |
|------------------|------------------|-----------------------------------|
| Sharing          | Learning Material| Access to Learning Materials       |
|                  | References       | Forum Discussion Activities        |
|                  | Information sources| Assignment Uploading              |
|                  | Others knowledge |                                   |

Students of the equivalency education program is expected to share learning material, course references, study related information, and other knowledge through social media. Hopefully, these activities will increase students’ engagement which are reflected from access to learning materials, forum discussion activities, and assignment uploading on E-LEEP.

Table 2. SosMed E-LEEP Strategy for Get Information

| Social Media     | Activities       | Students Engagement                 |
|------------------|------------------|-----------------------------------|
| Get Information  | Assignment       | Access to Learning Materials       |
|                  | Information Courses| Forum Discussion Activities        |
|                  | Academic Courses | Assignment Uploading               |
|                  | Others information|                                   |

Students of the equivalency education program is expected to get information about assignment, information source, and other study related information through social media. Hopefully, these activities will increase students’ engagement which are reflected from access to learning materials, forum discussion activities, and assignment uploading on E-LEEP.

Table 3. SosMed E-LEEP Strategy for Discussion

| Social Media     | Activities       | Students Engagement                 |
|------------------|------------------|-----------------------------------|
| Discussions      | Learning Topic   | Access to Learning Materials       |
|                  | Assignment       | Forum Discussion Activities        |
|                  | Tutors           | Assignment Uploading               |
|                  | Others students  |                                   |

Students of the equivalency education program is expected to do discussion with tutors and other students with course related topic and assignment through social media. Hopefully, these activities will increase students’ engagement which are reflected from access to learning materials, forum discussion activities, and assignment uploading on E-LEEP.

Table 4. SosMed E-LEEP Strategy for Interact with Students and Tutors

| Social Media     | Activities       | Students Engagement                 |
|------------------|------------------|-----------------------------------|
| Interact with    | Tutors           | Access to Learning Materials       |
Students of the equivalency education program is expected to interact with students and tutors to increase the activities of learning process and tutoring between tutor and students through social media. Hopefully, these activities will increase students’ engagement which are reflected from access to learning materials, forum discussion activities, and assignment uploading on E-LEEP.

Table 5. SosMed E-LEEP Strategy for Learning Purpose

| Social Media   | Activities             | Students Engagement                  |
|---------------|------------------------|-------------------------------------|
| For learning purpose | Learning Material       | Access to Learning Materials         |
|               | References             | Forum Discussion Activities         |
|               | Information sources    | Assignment Uploading                |
|               | Others knowledge       |                                     |

Students of the equivalency education program is expected to share learning material, course references, study related information, and other knowledge through social media. Hopefully, these activities will increase students’ engagement which are reflected from access to learning materials, forum discussion activities, and assignment uploading on E-LEEP.

4. Conclusion
This study proposes a strategy to use social media to increase students’ engagement in E-LEEP (SosMed E-LEEP strategy). Students’ engagement has four components, which are students, social media, E-LEEP, and students’ engagement. Each component is dynamically connected with each other to support SosMed E-LEEP strategy, which are: sharing activities, getting information, discussion, tutors and students interaction, and learning purpose through social media. Hopefully, these activities will increase students’ engagement which are reflected from access to learning materials, forum discussion activities, and assignment uploading.

References

[1] Sehra S, Maghu S, and Bhardawaj A. 2014. Comparative analysis of E-learning and distance learning techniques. *International Journal of Information & Computation Technology*, 4(8), pp 823-828.

[2] Yel, Mesra Betty; Sfenrianto S 2017 E-Learning Model for Equivalency Education Program in Indonesia 2017 4th International Conference on Electrical Engineering, Computer Science and Informatics (EECSI) pp 683–7

[3] Gray J A, and DiLoreto M. 2016. The Effects of Students Engagement, Students Satisfaction, and Perceived Learning in Online Learning Environments. *International Journal of Educational Leadership Preparation*, 11(1), pp 1-20

[4] Williams D, and Whiting A. 2016. Exploring the Relationship between Students Engagement, Twitter, and a Learning Management System: A Study of Undergraduate Marketing Students. *International Journal of Teaching and Learning in Higher Education*, 28(3), pp 302-313

[5] Muntean, C I. 2011, October). Raising engagement in e-learning through gamification. In Proc. 6th International Conference on Virtual Learning ICVL (Vol. 1). 2011

[6] Mason, R. B. (2011). Students engagement with, and participation in, an e-forum. International Forum of Educational Technology & Society (IFETS).

[7] Ding, L., Kim, C., & Orey, M. (2017). Studies of students engagement in gamified online discussions. *Computers & Education, 115*, 126-142.
[8] Farhan, M., Aslam, M., Jabbar, S., & Khalid, S. (2018). Multimedia based qualitative assessment methodology in eLearning: students teacher engagement analysis. Multimedia Tools and Applications, 77(4), 4909-4923.

[9] Qureshi A. I, Ilyas K., Yasmin R, and Whitty, M. 2012. Challenges of implementing e-learning in a Pakistani university. Knowledge Management & E-Learning (KM&EL), 4(3), pp 310–324.

[10] Rashid T. and Asghar H M. 2016. Technology use, self-directed learning, students engagement and academic performance: Examining the interrelations. Computers in Human Behavior, 63, pp 604-612.

[11] Santosa P I. 2015. Students Engagement with Online Tutorial: A Perspective on Flow Theory. International Journal of Emerging Technologies in Learning (iJET), 10(1), pp. 60-67

[12] Liaw S S. 2008. Investigating students’ perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system. Computers & education, 51(2), pp. 864-873

[13] Sfenrianto, S., & Hasibuan, Z. A. (2017). Step-Function Approach for E-Learning Personalization. TELKOMNIKA (Telecommunication Computing Electronics and Control), 15(3), 1362-1367.

[14] Sfenrianto, Hasibuan ZA, Suhartanto H, Selviandro N. An Approach to Detect Learning Types Based on Triple-Factor In e-Learning Process. Journal of Next Generation Information Technology. 2014; 5(1)

[15] Irwin C, Ball L, Desbrow B, and Leveritt M. 2012. Students' perceptions of using Facebook as an interactive learning resource at university. Australasian Journal of Educational Technology, 28(7)

[16] Qureshi, I. A., Raza, H., & Whitty, M. (2015). Facebook as e-learning tool for higher education institutes. Knowledge Management & E-Learning: An International Journal (KM&EL), 6(4), 440-448.

[17] Meishar-Tal H, Kurtz G, and Pieterse E. 2012. Facebook groups as LMS: A case study. The International Review of Research in Open and Distributed Learning, 13(4), pp 33-48.

[18] Kocdar S, Karadeniz A, and Goksel N. 2018. Using Facebook for Leveraging Sense of Community in Self-Paced Open and Distance Learning Courses. International Journal of Emerging Technologies in Learning (iJET), 13(05), pp 100-116.