THE IMPORTANCE OF MOBILE LEARNING (M-LEARNING) ACTIVITIES TO ENHANCE STUDENTS' LEARNING ENGAGEMENT IN INDONESIAN SECONDARY SCHOOLS

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Abstrak

M-learning telah dianggap sebagai metode yang berharga untuk meningkatkan berbagai praktik pembelajaran. Oleh karena itu, makalah ini secara kritis mengevaluasi penelitian-penelitian terdahulu sehubungan dengan pentingnya alat pembelajaran terkait untuk meningkatkan keterlibatan belajar siswa di sekolah menengah atas di Indonesia. Secara khusus, makalah ini mencoba untuk mengkaji bagaimana M-learning memberikan lebih banyak keuntungan daripada kerugian di kelas. Selain itu, penelitian ini juga membahas kemungkinan tantangan dalam pelaksanaan M-learning dan mengevaluasi kegiatan M-learning dalam proses pembelajaran. Pada akhirnya, makalah ini menyimpulkan bahwa M-learning memainkan peran penting untuk menawarkan berbagai manfaat bagi keterlibatan belajar siswa dalam konteks sekolah menengah atas di Indonesia. Misalnya, pengembangan kepribadian siswa, memicu siswa untuk bekerja secara kolaboratif dan memberikan pembelajaran yang fleksibel.

Kata Kunci: M-learning, Keterlibatan belajar siswa, sekolah menengah atas

Abstract

Mobile technologies have been considered a valuable tool to enhance various learning practices. Therefore, this paper critically evaluates existed literature reviews in regard to the importance of the related learning tool to increase students' learning engagement in Indonesian secondary schools. In particular, this paper attempts to examine how mobile learning activities provide more advantages instead of the disadvantages in the classroom. Furthermore, this research also discusses the possible challenges in the implementation of M-learning and evaluates M-learning activities in the learning process. Ultimately, the paper concludes that M-learning activities play essential roles to offer various benefits to students' learning engagement in the Indonesian secondary school context. For instance, developing students' personal development, triggering students to work collaboratively and providing flexible learning.

Keywords: M-learning, Students' learning engagement, secondary schools

Introduction

M-learning activity is a teaching strategy which improves pedagogical delivery by offering innovative and attractive learning process in classrooms. Moreover, Imtinan et al. (2012) reveal that M-

learning not only offers flexible and interactive learning but also provides portability, connectivity, context-sensitivity, and collaboration. These related benefits are important to boost students' learning improvement because of at some schools, such as Indonesia, educators often implement a teacher-centred approach in the classroom (Wang et al., 2009). To exemplify, based on my personal experience in my secondary degree, my teachers get used to implementing a lecturing technique instead of offering innovative learning in the classroom. They were likely to talk to the class and simply left the class after explaining the given materials. They often do not provide a chance for students to participate actively in the classroom. In contrast to the condition above, the Indonesian curriculum under the Regulation of the Ministry of Education and Culture Number 65/2013 concerning the Standard Process of Education in Elementary and Secondary School, mandates that educators must design a classroom activity which triggers students to participate actively in the class (Ministry of Education and Culture, 2013). Teachers are also required to give a lot of chances for pupils to establish their creativities in the learning process. Therefore, the paper aims to find out the advantages as well as the challenges of M-learning, and how teachers and students cope with the possible difficulties.

As stated at the beginning of this paper, the importance of M-learning is a primary concern to explain and discuss. This research proposes that M-learning activities may give three significant benefits to students regarding their engagements. First of all, The M-learning activity establishes students' personal development to participate actively and confidently in the learning process. Then, the related activity also encourages students to work in groups which increases their teamwork abilities. At last, M-learning activity offers a flexible learning process for pupils in the classroom. The related advantages will be scrutinised in the result and discussion part of the paper.

Research Method

This paper scrutinised existed literature reviews as the research method, in which some academic works relevant to the topic were critically selected. The literature was gathered from a bunch of resources, including articles from reputable academic journals, books, and others. Then, the selected literature was analysed and evaluated critically to find the required information. Lastly, the suitable information and evidence were used to foster sound arguments in the paper. Hence, the detailed discussion is elaborated below:

Results and Discussions
1. Fostering Students' Personal Development

Transforming students becomes active learners considered the first advantage of M-learning activities regarding students' personal development. In the teaching and learning process, teachers could encourage students to be an information seeker who interested in finding some information related to learning materials delivered by teachers. To support this argument, Delialioglu (2012) reveals that mobile technology is a tool which proposes active learning and triggers students to find information actively. For instance, teachers can post a learning clue regarding an upcoming topic that learners should comprehend (Delialioglu, 2012). Then, they are required to search and explore the given clue by using their gadgets (Delialioglu, 2012). In the next class activity, students have to present and deliver their arguments related to a topic that they learn previously (Delialioglu, 2012). Hence, the active learning process leads them being self-directed learners who actively search provided materials.

The second advantage of M-learning activities on students' personal development is to boost students' confidence. This occurs because M-learning activity provides interactive learning which triggers pupils' confidence. Therefore, students have been changed from passive learners to truly engaged learners (Wang et al., 2009). To exemplify, through online forum discussions such as Facebook and WhatsApp groups, teachers could create interactive learning atmospheres (Wang et al., 2009). The given process not only provides learning materials but also gives chances to students responding to the

given materials by expressing their ideas and asking questions (Wang et al., 2009). Hence, this condition would be beneficial for Indonesian students' characteristics because they have been categorised as a typically passive, shy and quiet learner who are afraid to express their opinion or idea in classrooms (Exley, 2005). Similarly, Markett et al. (2006) note that M-learning activities could assist quiet, shy and passive students to participate confidently in the learning process.

However, giving freedom to students using their mobile technologies in classrooms may ruin their attention. They might prefer to browse Facebook or play a game in classrooms. They will not pay attention and miss out a lot of valuable materials (Turkle, 2008) argues that engaging with technology gave rise to the reduced attention from learning activities. This occurs because students spend a lot of time online, having a chat with their friends from home rather than entirely involved with the learning materials provided by their teachers (Turkle, 2008). This condition will make them difficult to understand the learning materials. As a result, they will be failed to entirely involve with the given materials, and there will be a likelihood of their reducing scores in courses.

To cope with students' disengagement in classrooms, teachers can be creators for helping students who lose their concentration on the learning process. Similarly, Cowan and Butler (2013) notice that there are some possibilities for teachers to analyse various contradictions experienced by students in a range of stages in M-learning activities. As a consequence, the problem regarding students' disengagement could be anticipated by teachers' roles. Moreover, Johan et al. (2011) suggest that educators can utilise the potential of mobile tools by designing suitable tasks and activities to deal with learners' disengagement in the teaching and learning process. For instance, teachers could create a mobile-clue activity (Johan et al., 2011). In the related activity, the pupils turn their focus from the task device to the clue device for information (Johan et al., 2011). Then, the clue shows a piece of information on how some measurements could be done (Johan et al., 2011). Once they watch the clue, they continue with the activity (Johan et al., 2011). Hence, the positive impact of implementing this activity does not only help pupils to balance their focus on mobile devices but also assists them to engage with provided learning materials thoroughly.

2. Triggering Collaborative Learning

Besides establishing students' personal development, M-learning activities also allow students to collaborate in groups (Cobcroft et al., 2006). The primary benefit of working in groups is to develop their critical thinking skills (Hsu & Ching, 2013). For example, the facilitator can create group-work activities in online learning media, and students will be given a chance to questioning and responding the given materials each other (Hsu & Ching, 2013). They are also encouraged to participate by discussing and offering solutions with their team in online learning activities (Hwang et al., 2014). Looking at the Indonesian context, the related development is beneficial for pupils because Indonesian secondary students have been given little chance to participate in classrooms. As a result, many students cannot get sufficient chances to deliver and reflect their critical thinking skills during classroom activities. However, through online group activities facilitated by a mobile tool, pupils could express their critical thinking abilities. They will obtain feedback from their group work and revise what they have done (Sun et al., 2017). Consequently, this would enhance their critical thinking skills.

Another advantage of collaborating in M-learning activities is to enhance students' learning flow. Flow learning means to guide students step-by-step toward a more meaningful process and provide them with the form of appropriate learning stages. One visible example of the successful implementation of promoting the learning flow is that by adopting Teamwork as a Service (TaaS), which is supported by a cloud-hosting learning management systems (LMS) (Sun & Shen, 2014). LMS is web-based and backed by wireless networks such as Moodle, Blackboard, Docebo, and others (Sun & Shen, 2014). Sun and Shen (2014: 209) explain that "the primary principle of this innovative learning flow execution is that learners and teachers use cloud-hosting LMSs (Moodle) to process their daily

learning activity." The designed system has a function to create a flow-learning by receiving tasks of students' groups, monitoring group activities, evaluating groups' works and informing groups' results (Sun & Shen, 2014). As a result, students will be provided well-organized activities and tasks within group work which result in their rapid improvements toward learning materials. Moreover, Yin et al. (2013) note that students can absorb knowledge efficiently if they were given interactions and reflections into structured concepts.

Nevertheless, Chan et al. (2006) claim that techno-centric view as implied by the notion of M-learning could hinder collaborative learning. Moreover, simply belonging to a group does not always lead to the improvement of students' collaboration (Reychav & Wu, 2015). Team members should have the same purpose and entirely active in every single task given by their tutors to establish a positive atmosphere of a group environment. The related goal seems challenging to achieve because pupils that belong to the same group often have different learning styles, approaches, and purposes (Sun & Shen, 2014). For example, some students may understand learning materials by doing an observation, while others might comprehend provided materials with practice (Sun & Shen, 2014). Hence, this may hinder students' developments in group works and automatically affect the quality of their works or tasks.

To challenge those assumptions, Melero et al. (2015) argue that educators could create a game supported by various mobile technologies such as computer devices or cell phones to address different learning purposes. For instance, Dunleavy et al. (2009) created a collaborative game called *Alien Contact.* This game has inquiry-based augmented reality (AR) simulation which can be played on the computer. GPS technology is used to support the related game (Dunleavy et al., 2009). In this game, students are asked to work in groups to do several activities such as interviewing virtual characters collaboratively and solving questions or puzzles brought by the *Alien Contact* (Dunleavy et al., 2009). By implementing the related game, it can address different learning purposes and triggers students to collaborate with their teammates well. Moreover, familiarizing students with their group members could be stimulated by implementing M-learning activities because Mobile tool facilitates collaborative learning which provides more social interactions among pupils (Sun et al., 2017).

From those explanations, it can be stated that collaborative learning supported by M-learning activities is beneficial for students to engage in learning activities. The teamwork does not only develop their critical thinking skills but also enhance their learning flow. Moreover, working in a group also helps students to learn from their teammates' strengths and experiences, which resulted in their rapid improvements towards the learning process. As a consequence, the challenges in dividing pupils into group work such as the students' different learning approaches and purposes could be minimised by implementing well-organized M-learning activities.

3. Offering Flexible Learning

Providing flexible learning might be another positive outcome of M-learning implementation, supporting students' engagement in educational contexts. Mobile technologies can be used by many people anywhere and anytime (Khadage et al., 2015). To exemplify, the use of M-learning in the Podcast form, resulted in the flexible time in studying (Evans, 2008). Podcasting is the downloading series of video and audio broadcasts, comprising the file of learning materials (Evans, 2008). The data could be downloaded by using home computers and even mobile phones (Evans, 2008). By implementing the related activity, pupils can watch and listen to the given materials efficiently without taking a note which saves their time, indeed.

Another positive side of M-learning implementation regarding flexibility is that teachers could create after-class activities (Rambe & Bere, 2013). M-learning environment allows instructors to utilize their spare-time to share lesson materials (Virvou & Alepis, 2005). For instance, teachers could make online group activities on Facebook or WhatsApp and ask them about what they do not understand in the previous class activities. This development might be advantageous in Indonesian secondary contexts

because Indonesian high schools categorized as large size classes which consist of thirty-six students in one class (Ministry of Education & Culture, 2013). Harfitt (2012) notes that teachers worried about classroom management in larger classes, and they required additional time to fulfil various student needs. Hence, M-learning activities which provide flexibilities can be taken into consideration to deal with the related issue.

On the other hand, the existence of mobile technologies which support M-learning activities is not enough to deliver an effective learning activity. The practical implementation of M-learning activities needs completed infrastructures (Yusri & Goodwin, 2013). In other words, achieving the effectiveness of M-learning environments should be supported by enough technology facilities (Cobcroft et al., 2006). Perhaps the condition would be a big problem in Indonesia because some institutions in developing countries including Indonesia face similar issues of poor infrastructures concerning technology, particularly in rural areas (Luschei et al., 2008). Furthermore, another crucial thing to accomplish the well-organized implementation of M-learning is the availability of competent teachers. It would be a problem in the Indonesian context since Indonesian teachers do not get enough technology training (Yusri & Goodwin, 2013). The condition occurs due to lack of time, cost and opportunities (Yusri & Goodwin, 2013). Consequently, the successful implementation of M-learning activities could be impaired by the related problem.

To refute those arguments, Virvou and Alepis (2005) state that incomplete facilities such as lack of computer equipment will not be a big deal because both teachers and students could utilize their mobile devices to run M-learning activities. Handheld devices provide an additional essential asset of computer device because cell phones are very spread devices and easy to use (Morris et al., 2016). Schools are not required to purchase additional computer devices since teachers could find innovative learning activities by using mobile phones both inside and outside the classroom (Morris et al., 2016: 430). Moreover, Pruet et al. (2016) reveal that the availability of technology supported by mobile devices could be accessed easily even in schools located in rural areas. The related condition occurs because mobile devices have high rates of penetration, portability and information deliverability that empower interaction between educators and pupils even in underdeveloped areas (Pruet et al., 2016). Hence, it can be stated that the effective implementation of M-learning activities will not always rely on many good technological infrastructures. Moreover, Yusri and Goodwin (2013) reveal that the main priority in implementing M-learning is not about completing the technological devices but providing teachers with technological training as much as possible.

In brief, flexible learning activities not only assist pupils to be more receptive towards learning materials but also provide a lot of opportunities for educators to be creative teachers. The related phenomenon also helps teachers to treat learners who get various challenges in a classroom. The condition occurs because teachers have more chances to monitor their students in after-hours activity forms such as in online group discussions. The issues regarding the lack of facilities and distances could be anticipated as well by teachers due to the existence of mobile phones.

Conclusion
1. Summary

In conclusion, implementing mobile learning activities is considered an effective way to enhance pedagogical practices in Indonesian secondary schools. Looking at the finding of the essay in details, the essay shows that M-learning activities offer a lot of opportunities for students. For instance, triggering learners to be active and independent students who are interested in seeking information independently, encouraging them to adapt in collaborative works and providing learning flexibility both inside and outside the classroom.

However, it cannot be denied that every learning technique also has some weaknesses. In M-learning implementation, the possible drawbacks like the reducing attention of students in a classroom

and the students' different learning purposes are likely to happen. That is why educators are required to establish more detailed and well-organized learning process to deal with the related challenges. It means that teachers have to implement the learning activities appropriately based on the school environment and student needs. As a result, the apparent drawbacks of M-learning activities could be addressed effectively.

2. Recommendation

In the future investigation, teachers are suggested to implement M-learning activities effectively to increase students' engagement in the learning process. Then, researchers are hoped to investigate the implementation of M-learning in more details which can help educators to use the related activity appropriately in the classroom. More importantly, governments, policymakers and even societies must support and make concerted efforts to enhance the M-learning activity practices in the teaching and learning process.

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