CHALLENGES, BENEFITS, AND INSTRUCTIONAL BEST PRACTICES OF BLENDED LEARNING

(Tantangan, Manfaat, dan Praktik Instruksional Terbaik *Blended Learning*)

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ABSTRACT

In technology based era nowadays, blended learning appears as an option to run interactive and meaningful learning atmosphere by combining virtual and traditional learning settings. There have been numerous studies conducted regarding to the implementation of blended learning activities. Many researchers suggested that blended learning methods are effective in facilitating the process of effective online learning. However, teachers and students may encounter some difficulties in adjusting blended learning due to their unfamiliarity of new learning system that require them to fully understand it. In line with the application of the blended learning in teaching and learning contexts, this paper provides descriptive qualitative research of the relevant literature that aimed to present three points in relation to challenges, benefits, and instructional best practices of blended learning in teaching and learning. The findings indicate that the implementation of blended learning can be a challenge for teachers if they are not supported by self-confidence, competence, and adequate accessibility to technology resources. However, blended learning instruction provides positive benefits for both teachers and students, such as pedagogy improvements and easy access to knowledge. Hence, some efforts need to be considered by teachers to have effective course design and provide active learning approaches in both face to face and virtual learning environments.

Keywords: *Blended Learning, Benefits, Challenges, Instructional Practices*

INTRODUCTION

In technology based era nowadays, teachers are required to integrate information and communication technology in teaching and learning contexts as an effort to run more effective and meaningful learning experiences for students. As the result, online instruction becomes widely adopted by many schools. A series of names addressed in relation to online education; Web Based Training (WBT), Web Based Learning (WBL), E-Learning, Learning Management System (LMS), Learning Content Management System (LCMS), Virtual Learning Environment (VLE), Managed Learning Environment (MLE), and Blended Learning (BL), Drotárová (2016).

One of the most prevalent online instruction is called blended learning, combining traditional classroom methods with virtual learning activities, (Kabassi *et al.,* (2016); Drotárová et al.,(2016)). Wu and Wenyu (2013) mentioned some alternative names of blended learning, such as mixed learning, hybrid learning, and blended e-learning. Then, McGee (2014) stated that blended learning involves students do learning activities in a classroom and expand their learning activities through online activities. In other words, blended learning can be simply defined as integrating of both face to face and online learning activities which are designed to reach particular learning objectives, for example; when taking a course, students do not only follow the learning activities in a traditional classroom setting, but they also need to participate in online course activities which had been designed to enrich their knowledge and also learning experiences.

Based on the definitions above, there are two important points that have to be concerned in conducting blended learning; activities in traditional classroom setting and online classroom. It means that all activities that students have to do in both of the classes have to run in line. The instructions given in both of the classes should support one another. Online technology is not only a supplement in blended learning, it has roles as essential part in the course, while it does not merely

about using the technology or running online course, but teachers have to be skill full to facilitate the students in both of the classes, (Ghazizadeh and Hamidreza, (2017); Vaughan, (2007)). In this case, teachers need to fully understand about principals of implementing blended learning activities. They do not only need to know what blended learning is, but they have to know very well what they have to do to run effective blended learning, what the benefits of the activities are, and what the challenges that the teachers and students may encounter when running blended learning system.

Blended learning has been increasingly adopted in various levels of educational system in which characterized by the integration of ICT (Information and Communication Technology) in teaching and learning activities, Duhaney (2012). The existence of the blended learning can be a medium for the use of ICT or online learning and face-to-face meetings in which both of the systems have to run together to support the students' performances in learning. As stated by McGee (2014), blended learning courses depend on technology for purposeful interaction in which the technology used relies on the learning objectives.

There have been numerous studies investigating about blended learning application in teaching and learning situations (Vaughan (2007); Ayala (2009); Lim and Micheal (2009); Azaiza (2010); Shroff, et al (2010); Tucker and Laurie (2010); Napier (2011); O'Connor, et al (2011); McGee and Reis (2012); Duhaney (2012); Wu and Wenyu (2013); McGee (2014); Megeid (2014); Kabassi, et al (2016); Drotárová (2016); Ghazizadeh, et al (2017); Margolis, et al (2017)). Researches indicated that blended learning had been widely implemented in various learning contexts with comprehensive explanation about the essence of working on blended learning.

Although there have been many studies discussed about blended learning in many fields of interest, this paper was written to review some related literature of blended learning in teaching and learning contexts.

METODHOLOGY

This study worked on descriptive qualitative research of blended learning literature that aimed to present three points in relation to challenges, benefits, and instructional best practices of blended learning in teaching and learning. The literature selected in this paper focused on published papers of blended learning in 2010-2017, which was collected from Pro-Quest and Engage based on some criteria; a. research question addressed in the study must relate to blended learning approach, b. types of studies (qualitative, quantitative, or mixed methods), c. key words refer to blended learning and educational technology, d. content area mostly discusses about blended learning, and e. key findings are about blended learning application, benefits, and challenges. As there were numerous studies found based on the criteria, some of them were randomly selected to be reviewed. Lists of research's titles selected in this study are presented in the following;

1. An Investigation on Individual Students' Receptions of Interest Utilizing a Blended Learning Approach, Shroff, et al (2010).
2. Blended Learning: issues, benefits, and challenges, O'Connor, et al. (2011)
3. Blended Course Design: A Synthesis of Best Practices, McGee and Reis (2012).
4. Blended Learning and Teacher Preparation Program, Duhaney (2012).
5. An Emperical Investigation of the Critical Factors affecting Students' Satisfaction in EFL Blended Learning, Wu and Wenyu (2013).

6. Blended Course Design: Where is the Pedagogy?, McGee (2014).
7. E-learning Versus Blended Learning in Accounting Courses, Megeid (2014).
8. Evaluating Learning Management System for Blended Learning in Greek Higher Education, Kabassi, et al (2016).
9. The Possibilities of Using Blended Learning in Fire Safety Education, Drotárová (2016).
10. Barrirers to Implementation of Information and communication Technology (ICT) in Public Sudanese Secondary Schools: Teacher's Prospective, Elemam (2016).
11. Examining current beliefs, practices and barriers about technology integration: A case study, Hsu (2016).
12. The Effect of Blended Learning on EFL Learners' Reading Proficiency, Ghazizadeh, et al (2017).
13. Best Practices for Use of Blended Learning, Margolis, et al (2017),

After collecting the set of articles, they were analyzed by referring to Gay and Airasian (2000) that worked on some steps; data managing, reading, describing, classifying, interpreting, and representing. The description about the results is presented in the following information:

Results

This section attempts to present review results of blended learning studies in relation to challenges, benefits, and instructional best practices. **Challenges in Blended Learning**

Blended learning courses closely connected to online learning system in which the use of technology and internet access become very essential. According to Elemam (2016), some barriers such as lack of financial support, insufficient existence of technology devices, low internet connectivity, inadequate technical support, and lack of time are commonly encountered by teachers and students when working with technology. In this case, the teachers might also face the prevalent problems in blended learning instruction.

To successfully run blended learning instruction, teachers have to be skillful in utilizing technology. It has correlation with their beliefs in integrating technology that will help them to guide the students in learning practices. Miller et al., (2003) in Hsu (2016) state that there are three components about teachers' beliefs about technology integration; pedagogical beliefs, self-efficacy beliefs, and beliefs of perceive value of technology. The three components have essential roles toward the use of technology by the teachers.

Hsu (2016) stated that pedagogical beliefs relate to the teachers' belief about the role of technology as a tool to engage students in enhancing their knowledge. Then, self-efficacy belief is confidence regarding to technology use. It is main predictor of the teachers' technology integration in the classroom. Furthermore, beliefs about the value of technology in students' learning connect to the teachers' positive and negative points of view in term of technology deployment.

In addition, students need to be supported to involve in the courses by providing sufficient technology products, particularly about internet connection. The students also have to be familiar with the technology that they will work with. It is in line with McGee (2014) who said that students' readiness in technology will influence their success in following rich technology courses. It means that some problems encountered by the students in term of technology utilization can affect the quality of the blended learning.

Further, O'Connor, et al. (2011), after examining three cases in relation to the use of blended learning in teaching and learning context, blended learning cannot be automatically successful because there must be integration of online aspects of the curriculum with the face-to-face elements

in which there must be well-designed instructions.

The last but not least, Drotárová, et al. (2016) mentioned some problems that might appear in blended learning application, for examples; dependence on technology and insufficient learning with e-learning process. Although technology has rapidly developed, a few numbers of students who are reluctant to use technology can still be found. This matter can be caused by the lack of competence in utilizing the technology and limited opportunity to perform on the technology. Sometimes, teacher may get hindrance in designing sufficient learning content in face to face meeting and online learning because they do not have enough time to prepare the course.

Benefits of Blended Learning

Duhaney (2012) states that blended learning approach can be a medium in significant use of ICT products in which teachers and students do not only use the technology, but also integrate it in teaching and learning activities as complement that will enhance the quality of learning process in both face to face and online learning. Duhaney (2012) adds that the blended learning can create students-centered environment that will encourage them to participate actively in learning. The students who are known as the digital native of technology will get more interested in learning because they have to work with the technology that they usually find in their daily activities. The use of appropriate technology will guide the students to have new learning experience, compared to traditional learning method.

According to Wu and Wenyu (2013), due to the existence of blended learning, many colleges and universities have been working on it as it is widely known as effective method in teaching and learning practices. Wu and Wenyu (2013) in their study about an empirical investigation of the critical factors affecting students' satisfaction in EFL

blended learning by involving 360 undergraduates and postgraduates of non-English major in Dalian University of Technology in China, they found that most of the students showed positive responses towards the EFL blended learning model, they were interested in the learning process due to some influential factors, such as learning climate, enjoyment, usefulness, system functionally, social interaction, content feature, and performance expectation.

In addition, McGee (2014) said that blended learning can provide the students to involve in active learning because the students can work independently or collaboratively in the learning process and complete projects outside the classroom. Basically, active learning requires students to be self-regulated, disciplined, and motivated to work independently with limited direction from teacher. In this case, active learning principles can be run well in blended learning since well preparation is needed in both of the learning systems.

Drotárová, et al. (2016) in a study about "The Possibilities of Using Blended Learning in Fire Safety Education" noticed that blended learning provides some advantages; reducing face to face contacts, optimizing education and training, cutting financial cost, saving time, independent learning. Even though there is no fix number of meetings to do face to face and online learning systems in blended learning, both of them mainly to expand the students' knowledge and learning experiences. Hence, in particular conditions, online learning can be supplementary for face to face contacts. Then, in fire safety education context, the blended learning can facilitate to optimize theoretical understanding through e-learning and provide practical training in the work environment. Besides that, a amount of budget for training can be reduced since part of courses can be individually completed by the students. E-learning program can also shorten training session that allows the participants to get

more practical exercises, physical training, and modeling. The last but not least, the learning participants can learn quickly as they need because they do not have limited duration for learning.

Ghazizadeh (2017) in his study about "The Effect of Blended Learning on EFL Learners' Reading Proficiency", worked on quasi-experimental research design which involved sixty intermediate-level Iranian EFL learners were randomly assigned into two groups; control and experimental groups. The blended learning instruction was run in the experimental group, while another group just received conventional instruction. Both of the groups were tested for their reading skill before and after treatment. Finally, the result of the tests showed that there was positive impact of the blended learning on reading proficiency of Iranian EFL learners. Ghazizadeh (2017) depicted that blended learning can accelerate the learners' reading practices either in the classroom or out of the class. Hence, the learners' learning opportunities can be maximized based on the learners' favor to learn. The learning system also trained the learners to be independent and responsible by giving more tasks to them through the online learning system. The last but not least, the learners enjoyed their learning process through the technology utilization that make them more motivated and interested in the language learning process. Ghazizadeh (2017) also stated that his research finding was in line with the previous blended learning studies conducted by Al-Jafr (2007), Ameri-Golestan (2014), and Kazo and Demirkol (2014).

Best Practices of Blended Learning

In a study conducted by McGee and Reis (2012), there are some principals regarding to the effective practices of blended learning; design process, pedagogical strategies, classroom and online technology deployment, assessment strategies, course implementation, and students' readiness.

a. Design Process

Learning activities that will be conducted in blended learning instructions need to be well prepared by clearly defining course objectives before coming up with the course activities, assignments, and assessment. The learning objectives become essential as they will affect learning process, pedagogy, time allocation, and interactions. The successful blended learning courses are characterized by the integration of online and face-to-face learning components, they are; course materials for discussion and teachers' feedback on students' progress in which the points have to be counted to design the course.

b. Pedagogical Strategies

Pedagogical strategies relate to strategies used by teachers to support the acquisition of knowledge of the students. The teachers are required to apply interesting strategies within a blended delivery method to encourage them to participate actively in blended courses, such as assigning students to complete some online tutorial activities by sharing their learning experiences in the online course, delivering their idea about what they have learned in both face to face and online courses.

c. Classroom and Online Technology Deployment

The use of technology in blended learning courses is essential as it can enhance the teaching and learning instructions. There are numerous technology products that can be deployed, but the teachers are required to consider pedagogical benefits when utilizing the technology devices. In addition, it is also important to work on technology's devices or programs that the students have already been familiar with because it will influence

their motivation to participate in the courses.

d. Assessment Strategies

Assessment in teaching and learning process is also core component either in classroom learning activities or blended learning settings. Even though the assessment procedure in blended and traditional learning systems is not significantly different, the teachers have to be careful in constructing the assessment components, such as types of assessment, instrument of the assessment, and criteria of assessment.

e. Course Implementation

Blended learning implementation can encourage students to be independent learners when clear instruction, manageable assignments, and relevant activities are prepared to support the students to involve in the learning system. Then, providing regular course evaluation can enhance the quality of the courses.

f. Students' Readiness

Before applying the blended learning systems, teachers need to ensure that the students have been familiar with the technology devices that they will use during the instruction. Besides that the students have to know what the outcomes of the learning activities that they have to acquire and what they have to do to be successfully in achieving the outcomes. Hence, pre-course activities need to be conducted.

Duhaney (2012) adds that working on web 2.0 technology in blended learning approach can facilitate interactive learning activities in which the learning participants of web 2.0 can work collaboratively to enhance their knowledge by sharing information, editing, giving comments, and communicating among others. Teachers need to know what Web 2.0 and how to integrate it in their learning activities. Web 2.0 is known as interactive technology such as blog, wiki, blog, twitter, facebook, youtube, or potcast in which users can collaborate and interact with each others. Even though, there have been many people familiar with the technology of web 2.0, they may not necessarily know how to work successfully with the technology in teaching and learning contexts. Hence, teachers need to enhance their knowledge how to integrate the web 2.0 tools in their blended learning activities. In this case, preparation program to successfully run blended learning approach needs to be given to the teachers as an effort to enhance their knowledge and skill as professional teachers.

As there are face to face meetings and online learning activities in blended learning, Both of them have to be run effectively to expand students' learning experiences. McGee (2014) states that face to face meetings in blended learning activities are conducted for some purposes, such as introducing to content course, preparation for online learning, clarifying students' understanding, and building connection among students. Hence, online learning activities can be more challenging than face to face meetings as specific strategies are required. There are four common applications for online activities; processing content, discussing, working in groups, completing assessment, McGee (2014). In processing content, the students can involve in their online learning by reading discussion and presentation. In this phase, teachers can provide some quizzes to encourage the students to read the lesson content and show their understanding about it. Afterwards, as the most common online activity, discussion can facilitate the students to complete their reading assignments, teamwork activities, and enhance their comprehension. Online group activities can be done to connect the students and produce their projects collaboratively. This activity work on two strategies applied; let the students to completely work online and present the project in the class or set the students to

work collaboratively in classroom setting and finish the project in online system. Furthermore, in giving online assessment, teachers need to set up some rules to avoid cheating among students and conduct objective assessment. Here, the teachers can provide some questions and randomly give them. Besides that, the teacher can assign the students to submit the task in different formats.

Drotárová, et al. (2016) structured five ways in proceeding blending learning; (1) face-to-face learning, followed by e-learning, and exam in the classroom, (2) e-learning, followed by face-to-face learning, and exam in the classroom, (3) e-learning and face to face learning run in parallel, and followed by exam in the classroom, (4) Face-to-face, followed by online test, and exam in the classroom, (5) face-to-face learning and online testing run in parallel, and followed by final exam. The detail description about the process can be seen in the following figure:
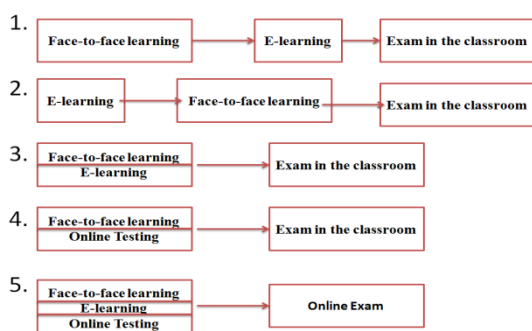

Figure1. Five Possible Ways of Working on Blended Learning
Adopted from Drotárová, et al. (2016)

CONCLUSION
In short, blended learning instruction is one of the most prevalent learning approaches in technology based era nowadays. Blended learning presents integration of face-to-face learning and online learning systems which are designed to expand the students' knowledge and learning experiences. In relation to the application of blended learning, some hindrances are encountered by teachers and students.

Commonly, the problems relate to teachers and students' barriers when working with Information and Communication Technology (ICT), such as lack of self-confidence, lack of competence, inadequate accessibility to technology resources, lack of financial support, low internet connectivity, and lack of time. In particular, teachers get difficulty in integrating online aspects of the curriculum with the face-to-face elements in which need to be carefully constructed. However, blended learning can give benefits for both teachers and students; creating students-centered environment, providing the students to involve in active learning, reducing face to face contacts, optimizing education and training, cutting financial cost, saving time, becoming independent learners. To achieve all the benefits, the teachers are required to fully understand about the learning approach and some principals regarding to the effective practices of blended learning; design process, pedagogical strategies, classroom and online technology deployment, assessment strategies, course implementation, and students' readiness.

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