

Blended Learning: Overcome The Weaknesses Of E-Learning And Traditional Approach

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ABSTRACT

Current learning system usually uses the application of technology in its implementation, especially in higher education institution. Therefore, many learning strategies exist nowadays such as computer-based learning, web-based learning and others. E-learning is one of the web-based learning which is popular and it gains educators' and learners' attention due to its flexibility and other advantages. This particular system is used as a reason to replace the traditional approach that has been used for a long time ago. However, e-learning still has some weaknesses and they need to be overcome. Therefore, this paper work will discuss on blended learning. It is seen to be one of the learning environments that will overcome the weaknesses of e-learning and the traditional approach. Other than that, this paper also discusses about the criteria that should be paid attention in order to develop an effective blended learning environment. The implementation of blended learning also provides advantages of itself.

ABSTRAK

Sistem pembelajaran yang terdapat pada masa kini lebih kebiasaannya menggunakan aplikasi teknologi dalam pelaksanaannya, terutamanya pada peringkat institusi pengajian tinggi. Ekoran itu, muncul pelbagai strategi pembelajaran pada hari ini seperti pembelajaran berasaskan komputer, pembelajaran berasaskan web dan lain-lain. E-learning merupakan salah satu pembelajaran berasaskan web yang merupakan antara yang popular dan mendapat perhatian pengajar dan pelajar disebabkan kefleksibelan dan kelebihan yang lain. Kewujudan sistem ini adalah untuk menggantikan pembelajaran sedia ada iaitu pendekatan tradisional yang telah digunakan sejak sekian lama. Walaubagaimanapun, e-learning masih lagi mempunyai beberapa kelemahan yang perlu diatasi. Oleh sebab itu, kertas kerja ini membincangkan tentang 'blended learning'. Ia dapat dilihat sebagai salah satu persekitaran pembelajaran yang dapat mengatasi kekurangan e-learning dan juga pendekatan tradisional. Selain itu, turut dibincangkan dalam kertas kerja ini ialah apakah kriteria yang perlu diberi perhatian dalam membangunkan persekitaran 'blended learning' yang berkesan dan sesuai digunakan. Pelaksanaan persekitaran 'blended learning' ini juga mempunyai kelebihannya yang tersendiri.

Introduction

Nowadays, the implementation of information and communication technology (ICT) in education field is a very common phenomenon. Moreover this phenomenon is commonly seen in higher education or in the tertiary level. The introduction of ICT in education has made revolution in a way of how educators and teachers deliver learning contents and materials in order to achieve the learning objectives.

The purpose of introduction ICT in education is to offer enormous potential for educators and teachers to develop a better teaching and learning environment for their

learners (Lau et al, 2010). According to Ng (2008), technology is not only an add-tool in teaching and learning process but more on foster peer learning, so that learners may learn through a holistic approach in an experiential environment.

And now, the question here is how educators would use this chance to create a proper learning environment? What should be implemented in particular environment in order to achieve learning goals?

Background Of The Problem

The implementation of technology in education promotes the implementation of online learning. Other names given to this online learning are web-based learning, e learning and asynchronous learning networks (Dziuban et al, 2004). Clark & Mayer (2003) defined e-learning as a learning which is achieved via the usage of network, internet or even a computer.

Before the emergence of the e-learning since a few decades, educators and teachers usually use traditional approach for their teaching. In traditional instruction, students normally learn from the instructor-led approach or in other words instructor meets the learners in face to face meeting. However, the traditional approach still has some disadvantages in teaching and learning process.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Students are free to access the experts, involved in discussion and questions, social interaction and learn from others (Fatimah et al, 2008). • Social interaction is ensured in face to face education class where the students will need guidance for learning (Akkoyunlu & Soylu, 2006) 	<ul style="list-style-type: none"> • Contents learnt by students are easily forgotten. Jones (2002) stated that students can only remember 15% from the contents learnt after three weeks. • Face to face meeting only can be conducted in classroom or specific place or space. Therefore it is limited by space and time. (Pang, 2010)

Table 1: The advantages and disadvantages of traditional approach

E-learning had been used widely in teaching and learning process. Nowadays most of academic institutions or higher learning institutions uses e-learning in delivering contents and materials as well as for the communication or interaction purposes. Due to the great advantages of e-learning, it was accepted by educators and teachers to replace the traditional approach.

Although there are a lot of advantages of the introduction of e-learning, there are also some disadvantages of e-learning that had been identified. Its advantages and disadvantages are stated as follow:

Advantages	Disadvantages
<ul style="list-style-type: none"> • Flexible and accessible both in terms of time and place. • Accessible to a wider population. E-learners are able to learn and access materials when there are computers at anytime and anywhere. • E-learning promotes interaction among students since cultural diversity is practiced. • Material can be accessed frequently if something is forgotten. (Hameed et al, 2008) 	<ul style="list-style-type: none"> • E-learning does not encourage social interaction. A person who studies solely will require a great deal of motivation. • E-learners are required to have the computer and internet skills such as communicate, download, view and be tested. • 'Soft skills' cannot be taught via e-learning including the interpersonal skill, verbal skill, communication skill, initiative and leadership skill. • E-learners do not have the same opportunities to explain and clarify as in face to face interaction. (Hameed et al, 2008) • It is difficult to engage some students in productive and meaningful work in e-learning environment. (Jones, et al 2000)

Table 2: The advantages and disadvantages of e-learning

To overcome the disadvantages or the weaknesses for both e-learning and traditional approach, educators or teachers need to find the solution. At the same time, educators nowadays are challenged to create a learning environment to integrate traditional

and emergence of technology in order to balance various learning styles of their learners. (Fatimah et al, 2008).

Due to this concern, Lau et al (2010) from their research revealed that blended learning approach must be implemented in higher education.

What Is Blended Learning?

The advancement of technology and various learning strategies in education field had caused the emergence of variety of teaching approaches in educational technology. Currently we had recognised a lot of teaching approaches such as authentic learning, problem-based learning, personalized learning and blended learning. However this paper work will focus only on blended learning in our education nowadays.

Blended learning has been used and gained popularity in education and training for recent years. Blended learning, hybrid learning and mixed mode learning are the same things (Dziuban, et al, 2004), since different campus or institution used different terms. Blended learning does not have specific meaning to explain itself.

Moebis & Weibelzahl (2006) defined blended learning as the mixture of online and face to face meeting in one integrated learning activities. Blended learning also means using a variety of delivery methods which combining face to face meeting in traditional classroom with teaching online to achieve the course objectives (Akkoyunlu & Soyulu, 2006). While, Graham (2005) stated that, blended learning is an approach which integrates the face to face teaching and computer mediated instruction in a pedagogical environment.

Implementation Of Blended Learning Environment

Blended learning which can lead to the interaction between the educators and learners can be conducted in various methods. These are including asynchronous and synchronous chat and video conference where the both educators and learners can discuss scholarly (Hisham et al, 2006). Blended learning provides both types of interaction whether via online or face to face in one learning environment.

In teaching and learning process, providing an effective learning environment is an important thing in order to achieve learning goals and objectives. What is an effective learning environment? The term of 'effective learning environment' as defined by Harasim (1993) is where a learner involves in the process of interaction and discussion with learning experts and peers and construct their knowledge.

In order to implement effective blended learning environment in education, Oliver (2005) and his colleagues, provided three key elements as guidance for teachers and educators on how to design and develop blended learning. The elements suggested are:

- a) Learning tasks
- b) Learning resources
- c) Learning supports

a) Learning tasks

According to Oliver (2005), due to a strong learning design framework for e-learning and online applications in higher education, authentic learning is suitable to be used in blended learning environment. This statement can be supported by characteristics of authentic activity as suggested by Herrington et al (2003). These authors highlighted ten characteristics of authentic activities as follow:

- i. Have real-world relevance.
- ii. Provide the opportunity to reflect.
- iii. Provide the opportunity for students to collaborate.
- iv. Allow competing solutions and diverse outcomes.
- v. Are seamlessly integrated with assessment.
- vi. Can be integrated and applied across different subject areas and lead beyond domain-specific outcomes.
- vii. Are ill-defined, requiring students to define the tasks and subtasks needed to complete the activity.
- viii. Comprise complex tasks to be investigated by students over sustained period of time.
- ix. Provide the opportunity for students to examine the task from different perspectives, using a variety of resources.
- x. Create polished products valuable in their own right rather than as preparation for something else.

The usage of authentic task may challenge students to use, transform, apply and reinterpret information into various forms such as video, audio, text, graphics and others (Woo et al, 2007). Blended learning which provides online learning encourages students to discuss among peers and experts via online interaction. This technology allows students to interact asynchronously and synchronously which support collaborative learning (Schultz & Kim, 2008). From there, students can discuss, argue, negotiate, reflect, and construct their knowledge.

Furthermore, Jaworski (1994) stated that collaboration among peers can foster learning transfer because collaboration does not only help students learn the concepts under discussion but how these concepts are used in real-world contexts can be exemplified in authentic tasks. In addition, it is suitable to be implemented because according to Stage et al (1998), authentic tasks locate the learner in the context of reality since it is derived from social constructivist principles.

Nevertheless, communication via online is not enough for sharing information. Therefore, face to face discussion is needed to overcome the weaknesses of communication via online. As stated by Schultz & Kim (2008), the use of internet is not an effective delivery mean to share multimedia projects and variety of sources involving movies, sounds or animation. They claimed that, blended learning which includes face to face meeting and online interaction would be a good option to fulfil the need of different type of learning activities or contents.

b) Learning resources

The second element that must be considered in designing blended learning is the learning resources (Oliver, 2005). It is important to provide suitable resources which will be accessed by learners to have quality from content and course materials. Oliver had provided us some guidelines to be followed by educators and teachers to make sure resources that will be used in technology-facilitated and in conventional have the same quality. They are:

- i. Resources used support the planned learning.
- ii. Resources' scope
- iii. Resources used are suitable in current situation.
- iv. Media usage is appropriate
- v. Resources need to be relevance.

Therefore, to create an effective learning, the availability of contents and resources should be considered. This means that, courses, contents, feedback and other things are different components which involve in blended learning. (Hameed et al, 2008)

c) Learning Support

According to Oliver (2005), learning support is a need to support learners in the learning process. This statement is supported by Lau et al (2010) where in their research they admit that critical factors to ensure the successfulness of blended learning must be considered such as people, activities and support. Support can be in terms of peers, mentors, interaction with system and teachers. Hereby, Oliver provides some provision support mechanism for student in blended learning settings which are believed can contribute to the learning experiences:

- i. Communications and discussions occurred will allow higher order thinking and conceptual development which cannot be achieved in independent learning settings.
- ii. Students may consider the support as a scaffold in learning in order to undertake and complete their activities which might not be able to be done by themselves.
- iii. Learners will be encouraged and motivated to participate since they were established in a sense of community and belonging and involvement.

Benefits Of Blended Learning

The implementation of blended learning in education had shown the positive effects. According to Abraham (2007), recent research had successfully exposed the benefits of blended learning which are:

- a) Critical thinking can be fostered
- b) The effectiveness of online assessment system and computer tutorials will be encouraged.
- c) Students may have more control over their learning.

Research conducted by Fatimah et al (2008) had very a positive feedback from the respondents. The research was conducted to identify their perceptions towards blended learning in learning Mathematics in higher education in the topic of application of integration. Their perceptions towards blended learning approach are:

- a) Courseware used can make the learning process become easier.
- b) Method used allowed learners to learn the topic better compared to the usage of textbook.
- c) Important concepts can be visualised easier.
- d) Enhance the learners' abilities to analyze better.
- e) Appreciation on online integration can be promoted
- f) Mathematics will be learnt in interesting way.

In another research, the benefits of blended learning are discovered. They are stated as follow:

- a) Students' initiative and incentive in learning will be encouraged.
- b) Learners' abilities, skill and potential can be explored by educators (Lau et al, 2010)

Conclusion

In conclusion, it will be the educators' responsibility to create the best learning environment for their learners in order to achieve the learning goals and objectives. Blended learning environment is seen to be one of the best learning environments that can be implemented when its advantages are considered. However, other learning approaches should also be revised and considered to complement blended learning as well as to ensure the effectiveness of teaching and learning process.

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