

# Enhanced Blended Learning within Teaching and Learning

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#### Abstract

Blended learning is one of the teaching and learning approaches that benefit from the boundless opportunities of technology developments. Therefore, this study addresses the issue relating to the practicality of blended learning, its enhancement and formulates better concept teaching and learning process. This study also provides propositions at three levels: the university, faculty and individual to establish an enhanced blended learning approach. The results showed that the use of tutorial in online learning was more effective than faceto-face learning.

**Keywords**: Blended Learning, Teaching and Learning, Online Learning, Face-to-face Learning.

# Aprendizaje combinado y mejorado en la enseñanza y el aprendizaje

#### Resumen

El aprendizaje combinado es uno de los enfoques de enseñanza y aprendizaje que se benefician de las oportunidades ilimitadas de los desarrollos tecnológicos. Por lo tanto, este estudio aborda el problema relacionado con la practicidad del aprendizaje combinado, su mejora y formula un mejor proceso de enseñanza y aprendizaje de conceptos. Este estudio también proporciona proposiciones en tres niveles: universidad, facultad e individuo para establecer un enfoque de aprendizaje combinado mejorado. Los resultados mostraron que el uso del tutorial en el aprendizaje en línea fue más efectivo que el aprendizaje en persona.

**Palabras clave**: aprendizaje combinado, enseñanza y aprendizaje, aprendizaje en línea, aprendizaje presencial.

#### **1. INTRODUCTION**

Nowadays, teaching and learning process can be so demanding and challenging. Easy accessibility to the gadgets and the internet is common in students' life. They can retrieve information anytime and everywhere as they wish without their presence in the classroom. As such, traditional face-to-face learning may not be convenient and excite them. The use of the textbook and other supplemental materials used in F2F learning may not be attractive and effective enough to ensure their presence during lectures and tutorials. In a competitive educational environment where the universities are struggling in providing quality programmes and graduates, it is about time for the educators to explore alternative approaches in teaching and learning as to fulfil the accomplishment of those objectives. Unlike older generations, engaging young generations in the process of teaching and learning is very challenging. Thus, the use of technology probably could assist in holding their attention towards understanding the lessons and other assignments.

As internet technology is not an alien to the students, the positive outcomes in delivering the lessons through online-based learning would not be seen as difficult to achieve. However, there are some limitations throughout the teaching and learning process if it relies solely on online-based learning. A disrupt interaction between educators and students could be an issue as it among the important elements in teaching and learning process. Another disadvantage could be a difficulty to respond in quick about the students' enquiries as regards to the lessons and other disputes. Hence, the combination of two different approaches is recommended by blending the traditional face-to-face learning, assisted with the use of internet technology with an aim to improve students' learning process.

As a novel strategies, blended learning is a form of combination between the traditional learning such as face-to-face lectures and tutorials and the use of internet technology such as the online learning and computer-based learning; to create an innovative approach to increase students' success and quality graduates.

# 2. BACKGROUND OF STUDY

In recent years, the education landscape has changed from the traditional approach of teaching and learning to a more technologydriven approach in response to younger generations' demands. As the student success, retention, throughput and satisfaction have become substantial components in the universities' survival, the ignorance of present generations' demands could be a dangerous step to be taken. Numerous researchers have explored several approaches with the intention to promote the effective approach in teaching and learning so that it could assist the students in digesting the lessons excellently.

In the same vein, the practicality of materials used in onlinebased learning and face-to-face lectures and tutorials should also be examined whether it can fit with the blended learning approach. Physical textbooks and supplement materials may or may not be appropriate for certain blended learning. Hence the selection of appropriate materials is important to ensure the blended learning outcome can be achievable. Yusoff, Yusoff and Md Noh (2017) promoted for innovation and creativity in teaching and suggested for know-how when using platforms to enhance blended learning (Evtyugina et al., 2016). The approach taken here is suitable for the less proficient students who are not familiar with applying technology and gadgets.

Dakduk, Santaella-Banderali and van der Woude (2018) found that hedonic motivation, performance expectancy and effort expectancy are among factors contributing to the adoption of blended learning for senior and middle-level executives in short-term executive courses. Empirically, an appropriate learning material deployed in blended learning is paramount to determine the students' performance (Prinsloo & Rooyen, 2007; Marques et al., 2018). It is contended that the educators can use various forms of delivery between traditional and non-traditional instructional techniques, tools and approaches to enhance the students' learning process (Musawi, 2011; Bayat et al, 2014).

For instance, to ascertain the practicality of the materials used, an experiment has conducted by Halabi et al. (2010) between two groups of students to compare the effectiveness of materials used between face-to-face learning and computer-based learning. Each group of students was randomly being assigned to complete a tutorial work either using computer-based learning materials or face-to-face materials. The student performance in a test measured the effectiveness of both approaches. Based on the results, it was proven that the use of tutorial in online learning was more effective than faceto-face learning. This is correspondence with the results of in another country (Johson et al., 2009; Zare, 2015).

In line with the above, educators are expected to determine whether the existing materials used are appropriate when using internet technology. As the use of technology will increase the cost (Halabi et al., 2010), hence this study attempts to look into blended learning approaches to increase the effectiveness of teaching and learning.

# **3. OBJECTIVES**

The general aim of this study is to provide a relevant basis for universities, one that is enhanced in nature, to facilitate the preparation towards blended learning which has been highlighted in the selected literature. The objectives of this study are presented as follows:

- i) To identify the practicality of various approaches used in teaching and learning towards enhanced blended learning
- ii) To formulate a conceptual model of enhanced blended learning within the "Teaching and Learning (TnL)" fraternity (Yang et al., 2019; Soo et al., 2019).

# 4. METHODOLOGY AND FINDINGS

This study is based on a review of relevant literature on teaching and learning. Table 1 indicates the various materials used in teaching and learning based on 11 (eleven) prior studies, while Table 2 shows the summary of common approaches used based on the findings of Table 1. A proposed conceptual framework on teaching and learning is then presented in Figure 1, for a summary of the concept of enhanced blended learning.

|   | Sources               | Approaches in Teaching and      |  |  |  |  |
|---|-----------------------|---------------------------------|--|--|--|--|
|   |                       | Learning                        |  |  |  |  |
| 1 | Dakduk, S., Santalla- | hedonic motivation, performance |  |  |  |  |

|    | Banderali, Z. and van der  | expectancy and effort expectancy |  |  |  |  |
|----|----------------------------|----------------------------------|--|--|--|--|
|    | Woude, D. (2018)           |                                  |  |  |  |  |
| 2  | Yusoff, Yusoff and Mohd    | Videos for blended learning      |  |  |  |  |
|    | Noh (2017)                 |                                  |  |  |  |  |
| 3  | (Moskal, Dziuban, &        | Class Room                       |  |  |  |  |
|    | Hartman, 2013)             |                                  |  |  |  |  |
| 4  | (Musawi, 2011)             | Class Room and Computer Based    |  |  |  |  |
|    |                            | Learning                         |  |  |  |  |
| 5  |                            | Computer Base Learning & Face    |  |  |  |  |
|    | (Halabi et al., 2010)      | to Face                          |  |  |  |  |
|    |                            |                                  |  |  |  |  |
| 6  | (Johson et al., 2009)      | Textbook & Computer-based        |  |  |  |  |
|    |                            | learning                         |  |  |  |  |
| 7  | (Moustafa & Aljifri, 2009) | The traditional approach,        |  |  |  |  |
|    |                            | Cooperative learning approach &  |  |  |  |  |
|    |                            | Laptop based Approach            |  |  |  |  |
| 8  | (Prinsloo & Rooyen, 2007)  | Blended Learning                 |  |  |  |  |
| 9  | (Harwood, 2005)            | Textbook                         |  |  |  |  |
| 10 | (Wet & Niekerk, 2001)      | Computer Based Learning          |  |  |  |  |
| 11 | (Allwright, 1981)          | Textbook                         |  |  |  |  |
|    |                            |                                  |  |  |  |  |

Table 1: Teaching and Learning Approaches

Table 2 indicates that face-to-face learning is the most used approach, followed by online learning and blended learning.

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|      | et           | et           | (201 |      | al.          | (200   | Aljif | yen  | )            | Nik          | (1981 |
|      | al.,         | al.          | 3)   |      | (20          | 9)     | ri    | (200 |              | erk          | )     |
|      | (20          | (20          |      |      | 10)          |        | (200  | 7)   |              | (20          |       |
|      | 18)          | 17)          |      |      |              |        | 9)    |      |              | 01)          |       |
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| Lear |              |              |      |      |              |        |       |      |              |              |       |
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| Blen |              |              |      |      |              |        |       |      |              |              |       |
| ded  |              |              |      |      |              |        |       |      |              |              |       |
| Lear | $\checkmark$ | $\checkmark$ |      |      |              |        |       |      |              |              |       |
| ning |              |              |      |      |              |        |       |      |              |              |       |

Table 2: A summary of common approaches used in teaching and

learning

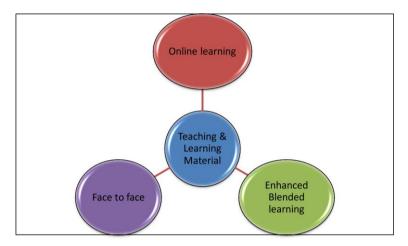


Figure 1: The Concept of Enhanced Blended Learning within Teaching and Learning

Figure 1 shows the conceptual model on the application of teaching and learning approached: face-to-face learning, online learning and enhanced blended learning.

Based on the proposed conceptual model, this study offers three propositions indicating expectations at the university, faculty and individual levels to ensure the practicality of the blended learning (Indriastuti, 2019).

# **Proposition 1: The University of**

i. Robust and Reliable Infrastructure

It is important to have a reliable and well-supported information technology infrastructures and other network services for the success of blended learning. Thus, the university should ensure the reliability and consistency of technical elements that are well-designed and fully supported. Before implementing blended learning, the organisation should ensure that they have sufficient resources in terms of academic resources, budgets, connectivity and ambience. Planning should be organised carefully with their vendors to deliver sufficient resources at the right time. The system should not fail; for instance, a backup plan is required to overcome problems during the critical period.

ii. Longitudinal Data Collection and Assessment

The data collection and assessment on the students' performance before and after the implementation of the blended learning are analysed so that the university has a proper track record for further improvement initiatives in blended learning. This record is important to ensure the right thing has been done so that the appropriate teaching and learning materials can be pre-determined in producing better results. The record can be utilised as a means to improve the students learning the process as well as when taking corrective actions when it is required.

iii) Proactive Policy Development in Supporting the Overall System

It is important for the university to develop a proactive policy which aligns with the institutional vision and mission. As such, the University's vision and mission are then translated into the best approach in teaching and learning: blended learning. Before the implementation of the blended learning, the university is suggested to conduct a dialogue with all resource persons involved in the blended learning programs comprising of lecturers, administrative staffs, technicians and students. The dialogue session can be seen as an initiative of institutional alignment in conveying the vision and mission to the respective parties. Any matter about the new policy is further deliberated, and the university's expectations should be communicated effectively.

#### **Proposition 2: The Faculty**

i. The resource person who is directly involved in blended learning should improve their skills first in internet technology and should be able to use the system well. He or she should be able to persuade both lecturers and students to use the same system for the success of blended learning.

ii. The lecturers should be encouraged to apply both traditional and recent technology in the teaching and learning process to ensure the system running smoothly. The lecturers should ensure full participation and interaction by the students while using blended learning. The students should be motivated to use and get themselves familiarised with the overall system.

iii. The lecturers should be engaged in discussions on important issues such as any copyright issue, accessibility of the technology and effective methods of assessment as well as any other issue about enhanced blended learning. In so doing, the transformation of traditional teaching and learning to enhanced blended learning is smooth.

### **Proposition 3: The Individual**

#### i. Self-Control

The blended learning is flexible learning which combines both

face-to-face and online learning. However, flexibility could demerit the benefits of blended learning as it could divert the focus of the students. Thus, it is the responsibility of the students to control themselves, able to manage time and prioritise the important tasks to ensure the implementation of blended learning is successful.

ii. Students' participation in blended learning is paramount for the success of the overall system implementation.

# **5. CONCLUSION**

Transforming Teaching and Learning provides many benefits to both educators and students. Blending the use of recent technology in traditional approaches i.e. face-to-face learning would benefit the teaching and learning environment. There will be challenges over time, but there is a need to establish an effective enhanced blended learning in the current education environment, at the cutting edge of technology. Therefore, support at all levels namely the University, Faculty and Students are needed to ensure blended learning could be enhanced and implemented successfully. It will be interesting to look at how blended learning will progress towards student-centred learning. The latter should be the outcome, moving away from handholding. Perhaps one day, classrooms might no longer be needed, as access widens to the population, with knowledge and certifications at hand remotely and technology-abled. Confirming for qualifications will still be needed for quality purposes by the regulators and councils concerned, nevertheless.

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Año 35, N° 20, (2019)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.

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