Blended Learning: Unveiling its Potential in One ASEAN Classroom Setting

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Abstract – *Blended learning is a mixed learning that combines several different delivery methods such as self-directed learning and web based discovering that incorporates a portion of the accommodations of online courses without the entire loss of face to face contact. This study aims to provide a discussion of the various potential of blended learning in the context of one ASEAN classroom setting. The present study used a pre-test post-test quasi-experimental design to determine the effect of blended learning approach among graduate students' academic performance. Findings revealed that the graduate students' academic performance was greatly influenced by the use of blended learning approach. Evidence is provided to suggest that blended learning is potentially meaningful when utilized as medium of instruction to enhance both the viability and productivity of significant learning outcomes. This study recommends the use of blended learning approach in teaching among graduate school students.*

Keywords – *Blended learning, academic performance, ASEAN classroom setting*

INTRODUCTION

In the course of the past years, an expanding number of courses in the graduate studies such as educational management, and various courses across other state colleges and universities, have fused online and or blended learning course segments. These range from completely online courses to courses that are essential up close and personal with extremely minor online components.

Specifically, noteworthy are courses that receive a mixed learning outline, where some course components are directed in a customary classroom setting while other course components are conveyed online [1]. Blended learning is a mixed learning that combines several different delivery methods such as self-paced learning and web based discovering that incorporates a portion of the accommodations of online courses.

Despite the fact that the method of reasoning for giving mixed or blended learning encounters may change generally from other schools and colleges, from an educating and learning point of view a basic inquiry is whether such plans are compelling at conveying course substance, given the move from all the more emphatically classroom-based conveyance positions, regardless of whether mixed taking in approaches vary from more customary classroom conveyance designs as far as the learning results among graduate students accomplish because of the course. Furthermore, it is likewise imperative to look at how graduate students encounter the mixed adapting course and their input on its adequacy.

While there is a generally substantial writing on adequacy of completely online course conveyance, less examinations have analysed the mixed learning approach. This is especially valid for graduate students, as a great part of the literature has concentrated on undergrad instruction.

Logical contentions for mixed or blended learning have concentrated on the way that distinctive learning assignments are normally suited to specific conveyance modalities, with a mixing of modalities taking into consideration a "match" between learning undertaking and conveyance mode [2]. Further, contentions have been made that "arranging for" face to face class time by moving instructive, address introduction online takes into account more prominent commitment in dynamic learning [3].

In the Philippines, as one of the ASEAN members, the use of blended learning is evidently practiced among graduate courses. According to Powell et al. [4], blended learning is a combination of traditional face to-face schooling and online instruction, but the online component must deliver personalized, differentiated instruction for a group of learners.

While there are solid academic contentions for a mixed learning approach, the experimental writing on relative viability were evident on self-paced or blended approach.

Few investigations inferred that a mixed or blended is more successful [5], numerous studies discovered without distinctions of the results over the identified instruction methods. Various research findings recommend the availability and adequacy of various strategies will rely upon its standard results, whether on the web or individual conveyance techniques with proportionate for bring down abilities while other learners were more settled with blended approaches.

Unveiling blended discoveries with its benefits of a mixed approach compared with conventional arrangement among graduate students were the purpose of this study.

It is within this context that the researcher prompted to investigate the potential of blended learning approach among graduate students.

OBJECTIVES OF THE STUDY

The main objective of this present study is to investigate the effectiveness of blended learning approach among graduate students' academic performance. Specifically, it aims to determine the level of academic performance of control and experimental group in pre-test and post-test; determine if there is significant difference on academic performance in pre-test and post-test of control and experimental group and determine if there is a significant difference in the mean gain performance in pre-test and post-test of control and experimental group.

Null Hypotheses

The following hypotheses were tested at the .05 level of significance:

Ho 1. There is no significant difference on academic performance in pre-test and post-test of control and experimental group.

Ho 2. There is no significant difference in the mean gain performance in pre-test and post-test of control and experimental group.

MATERIALS AND METHODS

Research Design

This study utilizes a quasi-experimental, non-equivalent control group design to examine the effects of transitioning from a more "traditional" classroom model to a blended classroom model on graduate students' academic performance.

Subjects of the Study

Research subjects were forty (40) graduate students enrolled in 2nd semester 2017-18 of a masters-level course on educational management (twenty (20) students in the blended learning approach and were classified as the experimental group and twenty (20) students in the "traditional" method and were classified as control group).

Research Instrument

A validated researcher made instrument were used to measure the graduate students' performance. It consisted of fifty items multiple choice test about the various principles of management. The researcher used a numerous decision test with four choices for the subjects to browse. The improvement of the execution test takes after specific stages: These are: 1) arranging; 2) setting up the test things; 3) experimenting with the test things; and 4) assessing the instrument [6].

Validity of the Instrument

To establish the validity of the research Instrument, the researcher utilizes content and face validation. In developing this test, the researcher constructs the test things in light of the course syllabus, educator's guide, reference books and manuals utilized for this subject. Jury approval was utilized as a part of this investigation. Specialists in the field were solicited to assess each from the things in the test, regardless of whether things reflect what it plans to quantify. The jury approval demonstrates that created test is legitimate to a high degree with the mean of 3.83.

The Dry Run Phase

In the Dry Run Phase 30 educational management students from the other group were ask for the dry run. In the conduct of the dry run, graduate students who have taken principles of management as a subject were provided with survey where they are told to choose the letter that represents their best answer.

Reliability of the Instrument

KR 21 was used to test reliability. The results obtained was 0.74 which denotes that items are reliable to a high degree.

Data Gathering Procedure

The subject falls on the cognate/ elective course including topics on principles of management. Moreover, it attracts a quite numerous number of

educational management students usually teachers from public elementary and secondary school.

In the control group, the subject was presented through the usual classroom teaching techniques. Respondents were asked to complete the assigned topics each week (typically 1–2 research topics), while other topics were presented through lecture discussion. Time management likewise included dynamic learning exercises, including little gathering work and class academic exchanges. Roughly 60% was lecture based, and 40% including dynamic exercises.

In experimental group, all class activities were pre-arranged and pre-recorded and posted online so that students can view ahead before the weeks scheduled classroom meetings. Completely (about 80% of class time) gave to dynamic learning and or blended approaches. Face to face contact just occurred when there were important issues and ideas to clear up.

Further, course objectives, topics were similar for both control and experimental group. The key changes from conventional to mixed, at that point, were: an) introduction of subjects and address parts online instead of in class; and b) given the move to online address introduction, liberating of in class time for additional top to bottom, dynamic learning commitment with the course ideas.

Data Analysis Procedure

For level of performance of graduate students in pre-test and post-test, mean was used.

For comparison of pre-test and post-test performance, paired samples t-test, was used.

For comparison of pre-test and post-test performance of control and experimental group, independent samples t-test was used.

For comparison of mean gains of experimental and control group, independent samples t-test was used.

Data was computed using a Window-based SPSS 17.0 version.

Scoring Interpretation

To describe the academic performance of the graduate students, the score with its interpretation below was used.

Score Ranges	Interpretation
41-50	Very High
31-40	High
21-30	Average
11-20	Low
1-10	Very Low

RESULTS AND DISCUSSION

Table 1. Level of Academic Performance of Control and Experimental Group in Pre-test

Groups	SD	Mean	Interpretation
Control	8.68	19.35	Low
Experimental	8.61	19.05	Low

Reflected in the table are the level of academic performance of the control and experimental groups. It is noted that before the experiment the control group obtain a mean score of 19.35 while the experimental group obtained 19.05 which are all verbally described as low. This means that the control and experimental groups have the same level of performance before the start of experiment.

This finding affirmed the results of the study conducted by Hinkhouse, [7]. On Investigating Blended learning in the Classroom, in which it shows that both treatment and control group have the same scores in pretest conducted.

Table 2.Level of Academic Performance of Control and Experimental Groups in Post-test

Groups	SD	Mean	Interpretation
Control	3.30	21.93	Average
Experimental	1.74	37.02	High

Increase of performance in both control and experimental grouped were observed after the experiment. The mean scores achieved by the control group increases from 19.35 to 21.93 which means that student participants in control group increases their performance from low to average level. On the other hand, students under experimental group increases their performance from mean score of 19.05 to 37.02 which mean that student participants in the experimental group had increased their performance from low to high. This implies that the use of blended learning approach greatly affects the graduate students' academic performance.

This finding affirms the study conducted by Hadad, [8], the high PC skills and certainty is a precursor factor for mixed learning adequacy as substantiated by this investigation discovers students sure and sufficiently capable for the viability of mixed learning.

Table 3 presents the differences of academic performance in Pre-test between Control and Experimental Groups.

Table 3. Differences of Academic Performance in Pre-test between Control and Experimental Groups

SV	SD	Mean	DF	P	Interpretation
Control	4.24	17.35	38	.746	Not
Experimental	8.61	18.05			Significant

Computed t of -.326 and its probability value of .746 at .05 level of significance is interpreted that there is no significant difference on the pre-test performance in academic performance of student participants in control and experimental groups. Null hypothesis claiming that there is no significant difference on the academic performance of MAED students in pre-test is not rejected. This means that before the experiment the participating groups have the same level of performance.

Table 4. Differences of Academic Performance in Post-test of Control and Experimental Groups

SV	SD	Mean	DF	P	Interpretation
Control	3.30	20.95	38	.000	Highly
Experimental	1.74	39.00			Significant

Computed t of -21.617 and its probability value of .000 at .05 level of significance in the post-test indicate that there is a highly significant difference exist between the post-test scores of students in the experimental and control groups. A null hypothesis claiming that there is no significant difference on the post-test performance of participants in control and experimental groups is therefore rejected. This means that the post-test performance of students subjected to blended learning instruction is significantly higher than those subjected to commonly practice instructional method. Blended learning or self-paced learning encompasses the students' availability to various learning resources. The use of this approach could greatly influence the graduate student academic performance.

These discoveries exhibit the potential advantage of coordinating computerized direction into an educational programs using a mixed learning approach for low SES and ELL understudies and fortify past reports indicating advantages of PC helped guideline for ELL understudies [9].

Table 5 presents the differences of academic performance in pre-test and post-test of Control Group.

Table 5. Differences of Academic Performance in Pre-test and Post-test of Control Group

SV	SD	Mean	DF	P	Interpretation
Pre-test	4.24	17.35	19	.000	Highly
Post-test	3.30	20.95			Significant

Computed t of -4.396 and its probability value of .000 at .05 level of significance is interpreted that there is a highly significant difference exist between the pre-test and post-test performance of students in the control group. Null hypothesis claiming that there is no significant difference on the performance of pupils in pre-test and post-test of control group is therefore rejected. This means that the students subjected to commonly practice instructional methods had significantly increases their performance.

The findings affirmed by the study conducted by Chang et al. [10], they found out that there were noteworthy contrasts on self-appraisal scores between the two groups; and there was additionally a critical distinction on self-evaluation scores for the test assemble when the mixed e-learning.

Table 6. Differences of Academic Performance in Pre-test and Post-test of Experimental Groups

SV	SD	Mean	DF	P	Interpretation
Pre-test	8.61	18.05	19	.000	Highly
Post-test	1.74	39.00			Significant

There was a statistically significant increase in student performance under the blended learning approach as shown in the computed t of-12.308 and its probability value of .000 at .05 level of significance is interpreted that there is a significant difference exist between the pre-test and post-test scores of pupils in the experimental group. Null hypothesis claiming that there is no significant difference on the performance of students in pre-test and post-test is therefore rejected. This means that the used of blended learning had significantly increases the performance of graduate students.

Table 7. Differences of the Gain Performance of Pre-test and Post-test of Experimental and Control Group

SV	SD	Mean	DF	P	Interpretation
Pre-test	3.66	3.600	38	.000	Highly
Post-test	7.61	20.95			Significant

Computed t of -9.185 and its probability value of .000 at .05 level of significance in the gain performance

of experimental and control groups is interpreted that there is a highly significant difference exist between the performance of students in the experimental and control groups. Null hypotheses claiming that there is no significant difference on the gain of scores of pre-test and post-test of experimental and control groups is therefore rejected.

This finding was negated by the study of Pereira et al., [11], which they found no significant difference in satisfaction of blended learning compared to achievement and satisfaction in blended learning formats; yet, they found a significant difference in achievements scores, with higher achievement scores found in the blended learners. With this mixed support in the literature, the authors believe the achievement and satisfaction is dependent on the quality of the online and classroom design.

CONCLUSION AND RECOMMENDATION

A successful mixed or blended learning condition is important in designing creative instructive methodologies using innovation in teaching and learning. Shifting introduction of course content from a customary way to deal with a blended learning approach, while keeping the scholarly substance and course assessment predictable, prompt an expansion among graduate students learning as evidenced by the result. Additionally, graduate students' criticism about the approach was exceptionally positive and they overwhelmingly favored the blended learning approach to deal with a more conventional course structure. Very much actualized mixed learning methodologies or blended learning approach may have solid potential for enhancing the learning results among graduate studies.

This study recommends that teachers must utilized blended learning in teaching graduate students. Colleges and different organizations of learning should keep on emphasizing mixed learning approaches through establishment of learning administration frameworks alongside solid web to empower successful learning through innovation. This study also recommends to use other variables such as profile variables for further study.

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