Effectiveness of Participatory Learning Technology Management towards Student Behavior in the New Normal of College of Allied Health Sciences, Suan Sunandha Rajabhat University

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Abstract

This research aimed to 1. study the pattern of participatory learning management in the new normal and 2. compare the learning behavior before and after implementing the participatory learning management. The sample group was 11 students using purposive sampling. Data was gathered by using the questionnaire divided into 3 parts; Part 1 – General information; gender, year of study, and grade point average (GPA) using percentage; Part 2 – Learning behavior before and after implementing the participatory learning management in the blended learning management; and Part 3 – Satisfaction towards the participatory learning management in the blended learning management.

The findings of general information of 11 respondents revealed that; most of them were female (9, 81.81%) and male (2, 18.19%); all of them were in the fourth year of study (11, 100.00%); GPA of 3.01 - 3.25 (1, 9.10%), 3.26 - 3.50 (6, 54.54%), and 3.51 - 3.75 (4, 36.36%), respectively.

The blended learning management developed the learning behavior in knowledge and understanding at a significant level of 0.05. The students who attended the participatory learning management received a higher score which is consistent with the hypothesis. The blended learning management responded to the new normal by using technology.

Keywords: Participatory Learning Management, Blended Learning, Learning Behavior, New Normal

Introduction

Due to the effect of the COVID-19 pandemic on a change in the learning management responding to the new normal, the College of Allied Health Sciences emphasized 3 patterns of blended learning management as follows;

1. Online: In an earlier period, the full online platform is implemented that challenged both lecturers and students as it is new learning management by using either package software or videoconferencing but there are some issues including

incompatible devices, internet system error, or internet speed that could not support this new learning management.

2. On-demand: A solution for their internet system error by learning management on the lecturer's website; video clips, course materials, exercises, assignments, and class attendance checking, for facilitating their learning, reducing risks, and supporting the learning management quality by curriculum standard.

3. On-site: A solution for their practical period by learning management measures of determining a work group in small sizes.

Designing the learning management being consistent with the new normal as the priority is blended learning management (Wijarn Panich, 2012), consisting of various learning platforms aimed to achieve the learning goals and develop 21st-century skills by using both on-site and online activities with flexibility responding to the learner differences in their interests and competencies.

National Education Act of B.E. 2542 (1999), Section 24 stated that educational institutions should conduct the learning process management (Government Gazette, 1999: 13) as follows;

1. Providing the contents and activities are consistent with the learner's differences in their interests and competencies.

2. Providing training in thinking skills, scenario management skills, and problem-solving skills.

3. Providing lifelong learning activities for the learner. Additionally, the Constitution of Thailand 2007 (B.E. 2550), Chapter 5, Section 80 stated that the government should determine the

educational policy on quality development and educational standard at all levels being consistent with the economic and social changes, also determine the national education plan for developing the quality of teachers and academic staff responding to the global changes. Practically, the learning process management is rather difficult due to the learner differences in their interests and competencies including other issues that affect education; games, entertainment venues, luxury goods consumption, especially their lower learning achievement. From the issue mentioned, lower learning achievement indicated the educational quality and learner quality as they are the key resources of national social, economic, and political development. Consequently, educational institutions, teachers, and relevant persons should cooperate in developing the learning quality for the learner's achievement. Education is the learning process by disseminating, practicing, training, cultural succession, creativity, academic progress, and creating knowledge from environmental, social, learning, and supporting factors management continuously (Ministry of Education, 2002: 2). In consequence, the 8th National Educational Development Plan stated that "Education emphasized the physical, mental, and social balance" determining the characteristics of open-minded, good vision, self-disciplined, needed knowledge and skills for globalization, and being consistent with the learner needs on self-learning and lifelong learning (Rung Kaewdang,1998: 62).

Active learning is the educational innovation that the higher educational institutions are interested in, along with the

educational reform policy under the National Education Act of B.E. 2 5 4 2 (1999) which emphasized learner-centered. Both active learning and child center are based on the constructivism theory as self-learning is receiving new knowledge from various sources; lecturers, classmates, and the environment, by participating in those activities, combining with their existing knowledge, creating their concepts, implementing knowledge and skill training, and presenting to the group for verifying the accurate knowledge. Consequently, the educational institution should emphasize the learning management quality by using active learning with the learners (Tuen Thongkaew, 2003).

In consequence, the researcher studied Participatory Learning Management towards Student Behavior in the New Normal of College of Allied Health Sciences, Suan Sunandha Rajabhat University as a guideline for developing the learning management quality for the lecturers and department heads to improve their learning management system and curriculum development.

Objectives

1 . To study the pattern of participatory learning management in the new normal.

2. To compare the learning behavior before and after implementing participatory learning management.

Research Methodology

This research is quasi-experiment research aimed to study and compare learning behavior by using participatory learning management and normal learning management as follows;

Population and sample group

44 students of the Medical and Public Health Secretary Program of College of Allied Health Sciences, Suan Sunandha Rajabhat University

(1) Selection criteria

- The students of the Medical and Public Health Secretary Program

- The students who are willing to participate in this research project

(2) Exclusion criteria

- The students who are not willing to participate in this research project

Research instrument

Tools for conducting research and tools for gathering data

a. Tools for conducting research;

1 . Guideline for participatory learning management in blended learning management.

2. Teaching by using a guideline for participatory learning management throughout the semester.

b. Tools for gathering data: student behavior assessment

Data analysis

1 . Data was analyzed by using descriptive statistics; frequency, percentage, and mean to illustrate the personal information.

2 . Compare the learning behavior before and after implementing participatory learning management.

3 . Compare the satisfaction before and after implementing participatory learning management in blended learning management.

This research was conducted by using the absolute criteria as follows;

The average value of 4.50 – 5.00 means the highest level of opinion.

The average value of 3.50 – 4.49 means a high level of opinion.

The average value of 2.50 – 3.49 means a moderate level of opinion.

The average value of 1.50 – 2.49 means a low level of opinion.

The average value of 1.00 – 1.49 means the lowest level of opinion.

At a significant level of 0.05

Validation

The researcher proposed the draft questionnaire be proofed by 3 experts for finding the index of item objective congruence (IOC) by the value of 0.05 or above, then conducted a try-out with 15 similar sample groups for finding the reliability by using Cronbach's alpha coefficient which the value was 0.78. Finally, the revised version will be implemented with the real sample groups.

Data gathering

Data was gathered by using the questionnaire with the sample group.

Results

This research is quasi-experiment research aimed to study and compare the learning behavior by using participatory learning management and normal learning management divided into 3 parts as follows;

Part 1 – General information; gender, year of study, and grade point average (GPA) using percentage

Table 1: Number and percentage of the respondents divided by gender (n = 11)

Gender	Number (person)	Percentage (%)
Female	9	83.3
Male	2	16.7
Total	**11**	**100.0**

Table 2: Number and percentage of the respondents divided by the year of study

Year of study	Number (person)	Percentage (%)
1	0	0
2	0	0
3	0	0
4	11	100
Total	**11**	**100.0**

Table 3: Number and percentage of the respondents divided by the grade point average (GPA)

Grade point average (GPA)	Number (person)	Percentage (%)
3.76 - 4.00	0	0
3.51 - 3.75	4	36.36

3.26 - 3.50	6	54.54
3.01 - 3.25	1	9.10
Total	**11**	**100.0**

The findings of general information of 11 respondents revealed that; most of them were female (9, 81.81%) and male (2, 18.19%); all of them were in the fourth year of study (11, 100.00%); GPA of 3.01 - 3.25 (1, 9.10%), 3.26 - 3.50 (6, 54.54%), and 3.51 - 3.75 (4, 36.36%), respectively.

Part 2 – Learning behavior before and after implementing the participatory learning management in the blended learning management

Table 4: Mean, standard deviation (S.D.), t-test, and significance of the learning behavior

Learning behavior	Before		After		t	Sig.
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
On-time class attendance (either online, on-site, or on-demand)	3.91	0.701	4.36	0.505	1.84	0.05
On-time assignment submission on the website	3.64	0.505	4.55	0.522	4.30	0.00
Further inquiry or study in case of confusion in the content	3.27	0.467	4.27	0.467	5.24	0.00
Further study and review on the website	3.36	0.505	4.36	0.505	3.71	0.00
Stay focused while attending the class (either online, on-site, or on-demand)	3.82	0.405	4.82	0.405	7.42	0.00
Set the study as the priority even if there is something that happens	3.55	0.820	4.00	0.632	2.89	0.01
Further study on the lecturer's website	3.73	0.647	4.55	0.522	2.76	0.01
Stay focused while attending the class (either online or on-site)	3.82	0.603	4.64	0.505	3.11	0.01
Activity participation with both lecturer and classmates	3.73	0.467	4.73	0.467	4.28	0.00
Giving comments in the class	3.91	0.539	4.36	0.674	1.84	0.05
Further study without feeling bored	3.64	0.674	4.73	0.467	3.83	0.00
Planning for the final examination	4.00	0.775	4.55	0.522	1.94	0.04
Stay focused on preparing for the final examination	3.45	0.522	4.45	0.522	7.42	0.00
Stay focused while doing the final examination	3.55	0.688	4.18	0.405	4.18	0.00
Total	**3.67**	**0.594**	**4.47**	**0.509**	**3.91**	**0.01**

The findings of the learning behavior before and after implementing the participatory learning management in the blended learning management revealed that before implementing the participatory learning management, the average was 3.67 (S.D.=0.594) and after implementing the participatory learning management, the average was 4.47 (S.D.=0.509) with a t-test value of 3.91 and a significant level of 0.01. The students who attended the participatory learning management received a higher score and achieved the objectives of both theoretical and practical behaviors, and the learning achievement after implementing the participatory learning management was higher by the curriculum standard criteria at a significant level of 0.05.

Part 3 – Satisfaction toward the participatory learning management in the blended learning management

Table 5: Mean, standard deviation (S.D.), t-test, and significance of the satisfaction towards the participatory learning management in the blended learning management

Participatory learning management	Before		After		t	Sig.
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
Learning environment	**3.32**	**0.481**	**4.53**	**0.519**	**7.72**	**0.00**
The learning environment affects student participation in the class	3.27	0.467	4.55	0.522	9.04	0.00
The learning environment affects student responsibility towards themselves and the group	3.36	0.505	4.45	0.522	12.00	0.00
The learning environment affects student enthusiasm in both theoretical and practical activity	3.45	0.522	4.64	0.505	6.50	0.00
The learning environment affects student creativity	3.36	0.505	4.45	0.522	4.35	0.00
The learning environment affects student analysis, synthesis, and implementation	3.18	0.405	4.55	0.522	6.71	0.00
Learning activity	**3.42**	**0.541**	**4.75**	**0.407**	**7.09**	**0.00**
Learning activity promotes student sharing of knowledge, idea, and decision-making	3.55	0.688	4.82	0.405	4.67	0.00
Learning activity promotes student creativity and self-confidence	3.27	0.467	4.91	0.302	10.76	0.00
Learning activity promotes student analysis, synthesis, and implementation	3.45	0.522	4.45	0.522	3.71	0.00
Learning activity promotes student sharing of idea	3.36	0.505	4.91	0.302	9.81	0.00

Learning activity promotes student's team working	3.45	0.522	4.64	0.505	6.50	0.00
Benefit of learning	**3.34**	**0.551**	**4.66**	**0.464**	**6.07**	**0.00**
Learning management promotes student's understanding of himself	3.18	0.405	4.45	0.522	6.53	0.00
Learning management promotes student's implementation	3.27	0.467	4.55	0.522	5.37	0.00
Learning management promotes student's thinking skill development	3.45	0.688	4.64	0.505	3.63	0.00
Learning management promotes student's rational decision-making	3.36	0.505	4.73	0.467	8.96	0.00
Learning management promotes student's understanding of classmates and team working	3.45	0.688	4.91	0.302	5.88	0.00
Total	**3.36**	**0.524**	**4.64**	**0.463**	**6.96**	**0.00**

The findings of satisfaction towards the participatory learning management in the blended learning management revealed that the overall satisfaction towards the participatory learning management in the blended learning management before conducting the activity was 3.36 (S.D.=0.524) and after conducting the activity was 4.64 (S.D.=0.463) with a t-test value of 6.96 and a significant level of 0.00. Considering each topic revealed that; *Learning environment* before conducting the activity was 3.32 (S.D.=0.481) and after conducting the activity was 4.53 (S.D.=0.519) with a t-test value of 7.72 and a significant level of 0.00; *Learning activity* before conducting activity was 3.42 (S.D.=0.541) and after conducting activity was 4.75 (S.D.=0.407) with a t-test value of 7.09 and a significant level of 0.00, and; *Benefit of learning* before conducting activity was 3.34 (S.D.=0.551) and after conducting activity was 4.66 (S.D.=0.464) with a t-test value of 6.07 and a significant level of 0.00. The students who attended the participatory learning management were satisfied with the activity at the high level of overall; learning environment, learning activity, and benefit of learning, which is consistent with the learning behavior at a significant level of 0.05.

Conclusion and Discussion

The findings of general information of 11 respondents revealed that; most of them were female (9, 81.81%) and male (2, 18.19%); all of them were in the fourth year of study (11, 100.00%); GPA of 3.01 - 3.25 (1, 9.10%), 3.26 - 3.50 (6, 54.54%), and 3.51 - 3.75   (4, 36.36%), respectively.

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The blended learning management developed the learning behavior in knowledge and understanding at a significant level of 0.05. The students who attended the participatory learning

management received a higher score which is consistent with the hypothesis. The blended learning management responded to the new normal by using technology.

The COVID-19 pandemic challenged the learning management in the new normal either using an online platform or using technology, but the educational system adaptation is challenged by the traditional learning management. Even if all could access the technology, it couldn't be assumed their knowledge and skill of them. Technology might not be the answer for all issues, but self-learning, a systematic linkage, and flexibility of various sciences would support any changes on this globe.

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