The Development of Learning Achievement and Self-Responsibility Behaviors on the South Africa continent Topic of Grade 9 students of Demonstration School of Suan Sunandha Rajabhat University by Using Google classroom along with Active Learning

Araya Pakla¹ and Sopaphan Vechakul²
Suan Sunandha Rajabhat University, Bangkok, Thailand
Araya.pa@ssru.ac.th, sopaphan.wa@ssru.ac.th

ABSTRACT

This experimental research aimed to develop learning achievement in South Africa by using Google classroom along with Active learning to compare the learning achievement of students on South Africa lesson. The data was collected before and after using the Google classroom with Active learning to learn of students' satisfaction toward the use of Google classroom along with Active learning and to develop self-responsibility in Social Studies subject on South Africa lesson by using Google classroom along with Active learning. The target group used in the research was 10 students of Mattayomsuksa 3, 2019 academic year, Demonstration School of Suan Sunandha Rajabhat University. The target group is chosen by purposive selection because the students did not pass the standard. The research instruments consisted of a lesson plans with the implementation of Google classroom teaching method with Active learning on South Africa lesson, pre-and-post achievement test, and satisfaction questionnaire on the use of Google classroom with Active learning and the student's responsibility behavior after using Google classroom. The content validity is checked by means of IOC (Item Objective Congruence Index). The means and standard deviation are used for the analysis and presentation of data. The study indicated that the learning achievement on South Africa's principles lesson by using Google classroom with Active learning, before learning the mean was at \vec{X} = 3.12 and the standard deviation was SD = 0.58. This is because the use of Google classroom with Active learning allowed students to research and practice together in finding answers on their own for activities in Google classroom. As a results, students had developed their learning potential effectively after students have studied by using Google classroom with Active learning. The students' learning achievement increased by comparison with the pre-test, the mean was $\bar{X} = 5.95$ and the standard deviation was SD = 0.69. The students were satisfied with the use of Google classroom with Active Learning. Overall, the average of X = 4.83 with the SD deviation = 0.28 and the result of the record of student's responsibility behavior after using Google classroom passed the evaluation of 95% meaning that most of the students had a total score between 6-10 points from all the 5 times of the assignments. Google classroom along with Active learning implementation are suitable for developing potentials of the learners. Google classroom can help developed students to improve themselves and encourage them to be more responsible for the tasks assigned. In this regard, active learning will increase the motivation for learning resulting in a better learning atmosphere so that students can understand the lesson easier and be more attentive which corresponds to the National Education Act 2010, Section 24 stating that teaching and learning must take into account on the differences between people, individual thinking process and their problem-solving management from real experiences in the teaching style that implements Active learning.

Keywords: South America, Google classroom, active Learning

Introduction

From the circumstances and environmental contexts affecting the education development of the country, the advancement of information and communication technology which has made leaps that affects the country's economy and society. The direction of national development according to the National Economic and Social Development Plan must create immunity in order for Thailand to keep up with changes in various situations in the future. The development of youth's potential is an important factor which is in accordance with the National Education Act, Section 28 stating that education must develop balance for people in knowledge, ability, virtue and social responsibility. The Next Generation Education requires a variety of teaching materials that are suitable for the ever-changing world and required to be proper for the new generation of students according to the 12th National Development Plan (2017-2021) increasing educational opportunities through technology.

After studying and investigating the problems in the classroom, it was found that the students had low achievement in social studies, South Africa lesson, because this topic has quite a lot of contents. Students must analyze the relationship between physical and social characteristics of South Africa. In addition, the load of contents had made the teaching so boating that it caused students to become uninterested in the topic and that the whole thing had eventually failed to attract students. Some students lacked of the responsibility for the work assigned to them. They failed to meet the given deadline. As a result, students have low academic performance in social studies. This is also because the old teaching style and the given tasks that had disappeared from time to time which are the main reason why students are not responsible for submitting their assigned work.

Ruksit Suttipong (2560) After the world has changed, the quality of individuals or human capital is crucial in 21st century. Therefore, to prepare Thai people for the future, the quality education system and teachers have an important factor in encouraging the learning of Thai learners. In addition, the change in paradigm of teachers needs to accompany with the changing generation in order to improve the quality of people to compete with others and meet the requirement of the country.

According to the aforementioned problems, the researcher saw the importance of knowledge on South Africa lesson that it is a basic knowledge for further education in the students' future in high school. South Africa is a country with diverse physicality and is one of the most important aspects of the world. Therefore, teaching and learning that is diverse and student-centered is important to learners and learning achievement of students. Technology is also an important part of students' development to learn quickly, conveniently and easily.

METHODOLOGY

The purposes of this research are studying the learning accomplishment of students in the chapter of South Africa continent by using Google classroom with Active learning in learning management, comparing the results of students in the South Africa continent by Google classroom with Active learning, and studying students' satisfaction of Google classroom with Active learning in the chapter of South Africa continent. The group of study is ten students in Matthayom 3/4, in 2019 school year of Demonstration School of Suan Sunandha Rajabhat University, Office of Education, in Bangkok by purposive selection. Researchers worked in three steps as the following: Step 1 is studied and searched about Active learning from the related reports by bringing variable teaching techniques to use and blending them for each student, which would encourage learners to adapt skills to use and can connect knowledge for solving problems in their daily lives. In addition, we studied the theories and principals for creating activity to google classroom, and brought google classroom creating classwork to use with Active learning, which was the emphasizing of the importance of students relating to Core Curriculum Basic Education 2008. Moreover, we brought learning tools and indicators to use and to be the frame concept in creating activity on google classroom of South Africa with Active learning.

Step 2 is developed Active learning and learning google classroom. In creating activity on google classroom, first step is making 3 sets of learning scheme, which were appropriate to the group of study and related to Active learning and google classroom. There are the processes of step 2: Studied the theories that relate to creating learning activities, and then adapted to use to create learning activities. Studied Core Curriculum Basic Education 2008 and Learning Management Manual in social study subject for the principals, course objectives, curriculum's structure, time management, contents and criteria to be the frame concept in making activity on google classroom. Next, analyzed Core Curriculum Basic Education 2008 and Learning Management Manual in social study subject of Matthayom 3 class for making activity google classroom on the topic South Africa. After that, brought activity google classroom to calculate for Item-Objective Congruence Index (IOC) with the inspection of three experts. Then, reviewed and corrected them. Finally, brought them to use with ten students in Matthayom 3/4 of Demonstration School of Suan Sunandha Rajabhat University by using two hour a week for three weeks, which is six hours total. Step 3 is evaluating and measuring students' learning results of South Africa continent of the Google classroom with Active learning. In the first step, researchers studied the related papers, and then built up the exams for evaluation, which had the contents about South Africa continent as the following; The physical aspects of South Africa, The economic, social, cultural and demographic aspects of South Africa. They are four-choice question exams with forty questions, inspected by Item-Objective Congruence Index (IOC) from three experts. Then, reviewed and corrected them. After that, brought them to use with the group of study. In creating survey of students' satisfaction in using google classroom, researchers studied related papers and techniques for creating questions to determine the contents of questions and satisfaction of google classroom. Then, made satisfaction questions, which had five rating scales. In each assignment, there were ten questions, inspected by Item-Objective Congruence Index (IOC) from three experts. Finally, brought them to use with ten students in Matthayom 3/4 of Demonstration School of Suan Sunandha Rajabhat University.

Results

The purpose of this research was to improve students' learning achievement on South African lesson by using Google classroom with Active Learning by comparing students' learning achievement both before and after learning by using Google classroom with Active learning, to also study students' satisfaction toward the use of Google classroom together with Active learning and to develop responsible behavior in the social studies on South Africa lesson using Google classroom with learning Active learning.

Table 1

(1) The average standard deviation of student learning achievement scores by using Google classroom together with Active learning

Students	Scores
	(40 Points)
Student 1	12
Student 2	15
Student 3	15
Student 4	11
Student 5	13
Student 6	12
Student 7	12
Student 8	12
Student 9	12
Student 10	11
×	3.12
S.D.	0.58

Table 1: It was found that all students had learning achievement scores after using Google classroom with the mean of 3.12 and the standard deviation of 0.58. Students had better achievement in South Africa lesson after using a set of activities and Active Learning.

Table 2

Comparing the mean and the standard deviations of students' learning achievement scores before and after using Google classroom individually.

Student	Pre-study	Post-study
	(40 Points)	(40 Points)
Student 1	12	24
Student 2	15	22
Student 3	15	26
Student 4	11	21
Student 5	13	21
Student 6	12	28
Student 7	12	22
Student 8	12	28
Student 9	12	25
Student 10	11	21
x x	3.12	5.95
S.D.	0.58	0.69

From the table 2, the learning achievement score of the post-study was $\bar{x} = 3.12$ with the standard deviation = 0.58 which is higher than the prestudy scores with the mean of $\bar{x} = 5.95$ and the standard deviation = 0.69.

Table 3

Mean and the standard deviation of students' satisfaction toward the use of Google classroom along with Active learning

List	×	S.D.	Meaning
1. Convenience on viewing previous teaching content	5	0	Great
2. Encourage students to get more involved in making comments on lessons via Google		0	Great
classroom			
3. Supporting students' organization of the given assignments	5	0	Great
4. Interesting use of Google classroom that can attract students' attention	5	0	Great
5. Help reduce the cost used on the assignments	4.33	0.57	Good
6. Making group collaboration possible via the use of Google classroom	4.67	0.57	Great
7. The Google classroom is accessible and can be conveniently connected to regardless of	5	0	Great
types of devices and places.			
8. Safe and environment-friendly	5	0	Great
9. Easy to use and help boost communication between teacher and students	5	0	Great
10. Suitable use of Google classroom for the learning and teaching	4.33	0.57	Good
Total	4.83	0.17	Great

From Table 3, it is found that the students are satisfied with the use of Google classroom along with Active learning which could be interpreted as being suitable in the highest level of $\bar{x} = 4.83$, S.D. = 0.17.

- (2) Results of students' responsible behavior observation after using Google classroom of Mathayomsuksa 3/4 students at Demonstration School, Suan Sunandha Rajabhat University
- (3) The responsible behavior after using Google classroom indicated students' improved punctuality and responsibility on the given tasks which was measured based on the students' work submission. The 95 percent of students passed the assessment with the total score ranging from 6-10 points from all 5 assignments. Therefore, after using Google classroom, students were more responsible on submitting their work passing the criteria set by the researcher.

Conclusion and Future Work

From the research, the problem was that the students did not pass the criteria in the social studies subject on South Africa lesson the most as the lesson comes with a variety of topics. Students must analyze the relationship between the physical and social characteristics of South Africa. In addition, teaching is not interesting and unable to attract learners. Students lacked responsibility for the work assigned to them. They failed to hand it work before the given deadline. As a result, students have low learning achievement in social studies.

The method to solve the low learning achievement problem by uisng Google classroom combined with Active learning in which the researchers developed the model to suit the condition of the discovered problems by designing activities in Google classroom along with the implementation of Active learning. It can be seen that such implementation can help improve the teaching as a mean to achieve better learning achievement of the students. This is in accordance with the research of Ziti Aiyah Putate and others (2018) which studied Google Classroom Application in Learning Development and Responsibilities Behaviors of Mathayom 1 Students, Room 10, Pattani Bejamarachuti School. The study found that after using Google Classroom, the mean of the post-study was significantly higher than before at the level of 0.5 and was in line with Mr. Surasak Thipphimolsuk's research which studied the use of Google Classroom in the development of teaching computer graphic course for student mathayomsuksa 5. The study found that after using Google Classroom the average scores after study is higher than before passing the set criteria by studying using Google classroom in combination with Active learning. It can be seen that the learning achievement can be improved as shown in the 40 items pre-test and post-test with 4 choices of the South Africa lesson. The reason is that learning management with the use of Google classroom combined with Active learning helps students to be able to learn by themselves via devices that can access the Google classroom which is in accordance with Yanada Siraphat Phada (2010) and Chaweewan Kaew Saiha (2010) stating that teaching by Active Learning to improve students' performance which is significantly higher than before learning at .05.

- (2) Regarding the satisfaction toward the use of Google classroom, it was found that the students were satisfied with the use of google classroom together with Active learning which is suitable at the highest level of $\bar{x} = 4.83$, SD = 0.17 which was consistent with the research of Sumana Sukaphan stating that the satisfaction toward teaching and learning with online classrooms via Google Classroom, students were more satisfied than online learning via website.
- (3) Regarding the responsible behavior of students after using Google classroom, it is found that students improved themselves and were responsible for the assignments and dateline of submission which is in line with Aiyah, Putate, and others (2018). The results of the student's responsible behavior assessment were at 96.88 percent with the raw score ranging between 4-6 points from 3 assignments and is in accordance with Piyamas Kaew-in Kha (2017) which found that students are satisfied with the work submission through the Google classroom system at the highest level.

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to Suan Sunandha Rajabhat University for invaluable help throughout this research.

REFERENCES

- [1] Ministry of Education (2008) Core Curriculum in the Social Studies Subjects. Religion and culture, The Teachers' Council of Lat Phrao, Bangkok.
- [2] Ministry of Education (2010), National Education Act in 1999 and additional corrections, No. 3, with the relevant ministerial regulations and the Education Act in 2002, Suviriyars, printing workshop of transferring and packaging institution, Bangkok.
- [3] See dtee ai-sór Bpoo dtè (2018) Google classroom Application in Learning development and Responsibilites Behaviors of Mathayom 1 students, Room 10. Pattani Benjamarachutit School
- [4] Patcharaporn Faimuewei (2014) Achievement and Satisfaction of students Exposed to Google Classroom in BNS 102: Culture and Health
- [5] Piyamas Kaew-in Kha (2017) Computer and Information for Work by using Google Classroom Students of the 1st Year Diploma in Information Technology Program
- [6] Sumana Sukaphan (2018) Comparing teaching teaching tenonation by Google Classroom and online courses on the teaching website
- [7] Romthanika Faimuenwai and Pritsana Rodsreeda () Learning Achievement and Students' Satisfaction toward Instruction via Google Classroom in the BNS 102 Course (Culture and Health)
- [8] Ruksit Suttipong (2017) A new paradigm in education and development of Thailand teachers in the digital age
- [9] Yananda Sirapattada (2010) Development of learning behaviors and learning results of students in Marketing principles subject by Active learning, Marketing Executive Department, Suan Sunandha Rajabhat University, Bangkok.
- [10] Surasak Tippimon (2017) The use Google Classroom in the development of teaching computer graphic course for student mathayomsuksa 5