

**THE DEVELOPMENT OF KINDERGARTEN STUDENTS' ATTITUDE
APPLYING FLIPPED CLASSROOM CONCEPT IN COVID-19 SITUATION**

Assawin Janwan¹, Adelina Ayu Lestary², Wanida Simpol³

¹ Ban Tadkha School, Nong Hin, Loei 42190, Thailand

² Adelina Ayu Lestary, Universitas Muhammadiyah Gresik, East Java 61121, Indonesia

**³ Wanida Simpol, Loei Primary Educational Service Area Office 2, Wangsaphung, Loei 42130,
Thailand**

ABSTRACT

This research was collaboratively conducted with Indonesian students aimed to 1) develop and evaluate the efficiency of Flipped Classroom management, 2) investigate the efficiency of Flipped Classroom management, 3) Study the positive attitude of kindergarten students applying flipped classroom concept and 4) Study the parents' satisfaction. The target groups consisted of 17 kindergarten students learning by using Flipped Classroom lesson plans in Covid-19 situation. The Flipped Classroom lesson plans for teaching in Covid - 19 situation in the 1st semester of Academic year 2021 were used for teaching from June to October 2021. The research tools were Flipped Classroom lesson plans consisted of 4 plans for 4 weeks and assessment form. The data was analyzed using descriptive statistics including frequency, percentage, mean, standard deviation, index of efficiency, effectiveness index and relative gain scores.

The results of the research were as follows. 1) For the evaluation of the use of Flipped Classroom lesson plans for kindergarten 1 students, each of the lesson plans was average scored 3.7 – 4.3. Overall, the lesson plans were average scored at high level ($\bar{x}=4.0$, S.D.=0.93), the efficiency index (E1/E2) was 62.25/82.83 which was lower than the criteria. 2) The index of efficiency of Flipped Classroom lesson plans was 0.5454, and the students' improvement increased 54.54 percent. 3) The students' attitude for learning with flipped classroom lesson plans was highly effective ($\bar{x}=9.94$, SD = 0.51) and 4) Parents' satisfaction after using flipped classroom with kindergarten students was highly satisfying ($\bar{x}=2.32$, SD = 0.66)

Keywords: attitude of learning, Flipped Classroom, COVID-19

1. INTRODUCTION

Early childhood education management is important for laying the foundation for human resource development in order to develop a quality person according to the desirable characteristics of the nation. educational management process Providing an appropriate environment and experience for early childhood will enhance cognitive development and further development of cognitive learning. This requires cooperation from all parties involved in early childhood development to cooperate in developing early childhood education as well. This will result in a quality population that will eventually grow as a power for the country's development.

In organizing learning experiences in early childhood According to the Early Childhood Education Curriculum, B.E. 2560, it is said that activities are organized in the form of integration through play. Actions from a wide variety of direct experiences create knowledge, skills, morals, ethics, as well as development in physical, emotional, social, and intellectual aspects, under the principle of emphasizing children. meet the needs, interests, differences between individuals and the social context in which the child lives arrange for children to develop by focusing on the learning process and the development of children Manage development assessment as an ongoing process. and is part of the experience as well as bring the evaluation results to continually develop children for parents, families, communities, and all parties involved. participate in child development.

From the 2017 Early Childhood Education Curriculum Handbook for children aged 3-6 years, we have outlined guidelines for organizing important cognitive experiences to promote positive attitudes towards early childhood learning. This consists of 1) exploring things and learning resources around them by exploring, observing, and recording things found both in the classroom and outside the classroom, such as exploring the objects in the room. Explore the toys in the experience corner. Explore playgrounds Explore the snacks and food sold in schools or communities. Explore living and non-living things in schools, homes or communities and other learning resources. 2) Asking questions about interests. by asking questions based on stories you listen to or interesting subjects such as which character do you like the most, the scene, the sequence of events problem and solution Ask questions based on observations, surveys, or activities. 3) Knowledge quest to find answers to questions by identifying or selecting questions that can be answered. Work with teachers and peers in planning and conducting surveys, collecting, and recording data in different ways. and presenting and communicating the findings in response to the questions set. 4) Participating in collecting data and presenting information from various forms of knowledge-seeking by collecting data through various methods such as observation using Sensory or simple tools such as a magnifying glass and a simple two-arm scale. A device to measure length or measure, survey, classify, compare, conduct simple experiments, search for information, inquire knowledgeable

people, and record information by various methods such as drawing, marking, photographing, video recording, attaching real samples to paper. Present information in various formats, such as narrating or annotating a drawing. or saved photos Role play, imitate behavior. or make a model of what was observed.

From the epidemic situation of Coronavirus Disease 2019 (COVID-19), which is an infectious disease caused by sputum droplets from coughing. As a result, the infected person has symptoms of fever, cough and difficulty breathing. Complications include pain and swelling. and has spread widely and rapidly affecting lifestyles around the world including in Thailand, which has been operating for 2 years, affecting the way of life, economy, society, including teaching and learning in the education system According to the announcement of Loei Province on surveillance measures Prevention and control of Coronavirus Disease 2019 (COVID-19) has ordered all schools in Loei province to refrain from teaching on-site. Ban Tadkha School has therefore changed the teaching style. Encourage all teachers to have innovations in educational management. Teaching and learning management is developed jointly through the Professional Learning Community (PLC), promoting the On-Line, On-Hand, On-Demand education management model, using various applications to manage. Learn such as Google Classroom, Google Meet, Line Meeting, Facebook, Zoom and other applications to participate in teaching and learning. to facilitate the child's continuous learning process for children at the early childhood education level Especially at the Kindergarten 1 level that parents have brought into the school education system for the first time. and are not familiar with the teaching style in schools and style of home learning Schools and teachers are aware of the concerns of parents towards their children. especially in early childhood in terms of socializing, not playing with friends in the same age group. Another concern for parents is the learning development of children. delay learning and difficulty in procuring activities or adjust the role of helping to practice learning skills for children. Therefore, class teachers need to find ways to manage education under the epidemic situation of the corona virus 2019 (COVID-19) to promote development in all 4 areas. to children continuously in addition, to promote good learning attitudes for children in kindergarten 1 as well.

Chanisara Methaphatharahiran (2017), p. 20, said that Flipped Classroom is a teaching model that changes the traditional teaching from a teacher to a knowledge transfer. to the children in front of the class as a child, they must learn from outside the classroom by themselves. through the technology media created by the teacher Then the teacher will bring what the children have learned to organize activities together in the classroom. by giving advice and asking questions for children to work together to solve problems exchange ideas cause interactions between teachers and children The key to organizing an inverted classroom learning activity lies in “Reversing from the teacher and teaching of the teacher Be a learner and learner's learning.” Using videos and videos It's just a teaching medium. Teachers may have teaching

materials. Or other activities that provide knowledge suitable for teaching by assigning students to prepare at home before attending classes. In order to make the most of the time in the classroom for the students in these teaching styles, the teacher must act as the teaching designer. change Serve as a consultant to advise students and be able to assess whether learners have improved their learning over traditional learning.

From the reasons and importance mentioned above as a kindergarten 1 teacher at Ban Tadkha School, Nong Hin District, Loei Province, the researcher was interested in studying the promotion of good attitudes towards learning among kindergarten 1 students by using a pedagogical teaching method. Using flipped classroom under the situation of the corona virus 2019 (COVID-19) as a guideline for developing and applying in effective learning management.

2. METHODS

Researching The Development of positive attitude of learning for kindergarten 1 students applying flipped classroom concept in COVID-19 situation. The researcher proceeded with the following steps:

1. Target group
2. Research tools
3. Creation and quality of tools
4. Data collection
5. Data manipulation and data analysis
6. Data analysis

2.1 Participants

The target group of this research consisted of 17 students of kindergarten 1, Ban Tadkha School, Nong Hin District, Loei Province, Loei Primary Educational Service Area Office 2, who were studying in the semester 1 of the academic year 2021, using a purposive sampling method for selecting the samples.

2.2 Measures

The research tools were:

1. Flipped Classroom lesson plans for kindergarten 1 students: 4 lesson plans, 4 weeks (Semester 1/2021).

1. Unit: You can do it 1 Lesson plan
2. Unit: Foods and nutrition 1 Lesson plan
3. Unit: Playground 1 Lesson plan
4. Unit: Our Community 1 Lesson Plan

2. The assessment form to study the students' attitude for learning with flipped classroom lesson plans

3. The assessment form to study parents' satisfaction after using flipped classroom with kindergarten students

2.3 Procedure and design

Procedure and design were one group pretest and posttest design. Learning units 1-3 were used to create a learning activity plans for data collection. The lesson plans were constructed through 6 stages as follows.

Before teaching

Stage 1: Plan. Teachers designed lesson plans by identifying teaching objectives, selecting teaching media and supplementary activities which are appropriate for the learner's ages, classrooms, and the school contexts.

Stage 2: Warm-up. Teachers record and prepare video for teaching. Teachers may record their own teaching or using other videos in which the content contained all learning indicators.

Stage 3: Share. Teachers share teaching videos to students and explain about the content of the video to be taught the classroom (at this stage, the teachers may create an activity or give out a pre-class quiz for students to try before teaching in the classroom).

In classroom

Stage 4: Knowledge Sharing. This stage is an exchanging of knowledge to promote interaction in classroom. Teachers extend the students opportunity to discuss, exchange and ask questions based on the content they have already studied from the video in order to develop analytical thinking and communicating skill.

Stage 5: Group work. Students are divided into groups to achieve the results as planned. Dividing students into groups, students can work together on the topic assigned by the teachers or help each other choose a topic to work on to develop creative and collaborative skills (in the meantime, teachers can observe to assess students during presentations. Teachers may assign to do exercises or worksheets.)

Stage 6: Discussion. Students return in group again for group work presentation. It is a platform provided for all classmates to share opinions and ask questions.

After teaching

Review teaching to find out whether the designed lesson plans, videos, and materials included in the plans are effective or not, how effective the lesson plans are, and how are the results of the assessment and the evaluation of teachers' teaching as well.

Review the lesson plans after using for teaching, including teaching media and learning activities to find out how much the students understand the lessons.

Revise the lesson plans in case there are number of students remain questioned about the content. Teachers need to revise the lesson plans in order to enhance the students' better understanding.

Repeat if the teaching outcome is effective. Teachers repeat using the effective lesson

plans and provide students with challenging activities so that students can use their advance level skills

2.4 Data analysis

1. Part 1: The evaluation results of using flipped classroom management lesson plans for kindergarten 1 students.

2. Part 2: The results of the review of the effectiveness of the flipped classroom lesson plans for kindergarten students.

3. Part 3: The results of the study the students' attitude for learning with flipped classroom lesson plans in the situation of COVID-19.

4. Part 4. The results of the study Parents' satisfaction after using flipped classroom with kindergarten students in the situation of COVID-19.

According to the study of the problem conditions and the database to encourage the good attitude of learning with the flipped classroom concept of kindergarten 1 students of Ban Tadkha School. The researcher studied how to apply the concept of Flipped Classroom to improve the good attitude of learning for students to successfully achieve learning objectives. Finally, the researcher designed the lesson plans consisted of 4 plans for 4 weeks (Semester 1/2021).

- 1. Unit: You can do it 1 Lesson plan
- 2. Unit: Foods and nutrition 1 Lesson plan
- 3. Unit: Playground 1 Lesson plan
- 4. Unit: Our Community 1 Lesson Plan

3. Results

Data analysis results

Part 1 the results of the Flipped Classroom Management Plans for Kindergarten 1 students evaluated by 3 experts.

Table 1 Assessment results of the Flipped Classroom Learning Management Plan for Kindergarten 1 students by 3 experts.

Lesson plan	Mean	Standard Deviation (S.D)	Meaning
1	4.33	0.58	High quality and appropriateness
2	4.00	1.00	High quality and appropriateness
3	3.67	1.15	High quality and appropriateness
4	4.00	1.00	High quality and

			appropriateness
Overall	4.00	0.93	High quality and appropriateness

According to Table 1, the results of using Flipped Classroom lesson plans for kindergarten 1 students evaluated by experts were averagely scored from 3.67 – 4.33, the overall mean score was 4.00, and standard deviation was 0.93. For the efficiency of the Flipped Classroom lesson plans for kindergarten 1 students, it was found that the quality and appropriateness of each lesson plan was scored from the high to the highest level, and the overall assessment results of all lesson plans was at the high level ($\bar{x} = 4.00$, $SD = 0.93$).

Part 2 the effectiveness of the Flipped Classroom lesson plans for kindergarten 1 students comparing with the 75/75 criteria.

Activities/score	Full score	Average Score	Percentage
Activity 1	3	1.88	62.75
Activity 2	3	2.18	72.55
Activity 3	3	1.71	56.86
Activity 4	3	1.71	56.86
Average Score		7.47	62.25
E1			62.25
Attitude	12	9.94	82.83
E2			82.83

Table 2 the evaluation results showed the efficiency processes of the Flipped lesson plans for kindergarten 1 students was (E1) of 62.25 and the effectiveness of the lesson plans (E2) was 82.83. Consequently, the efficiency of the lesson plans development (E1/E2) was 62.35/82.83 which is lower than the preset criteria of 75/75

Table 3 the effectiveness index of the flipped classroom lesson plans for kindergarten 1 students (N = 17)

Total score of Activities (12)	Total score of positive attitudes of learning (12)	Effectiveness Index (E.I.)
127	169	0.5454

From Table 3, it was found that the effectiveness index of the flipped classroom lesson plans for kindergarten 1 students (N=17), as overall, was averagely 0.5454. It is indicated that the Flipped Classroom lesson plans designed by the researcher increased the student achievement by 54.54%.

Part 3 The results of the study the students' attitude for learning with flipped classroom lesson plans in the situation of COVID-19.

Table 4 the result of study the students' attitude for learning with flipped classroom lesson plans in the situation of COVID-19

Student Number	Full Score	Total Score	Average
1	12	11	2.75
2	12	10	2.50
3	12	12	3.00
4	12	9	2.25
5	12	11	2.75
6	12	9	2.25
7	12	9	2.25
8	12	10	2.50
9	12	9	2.25
10	12	9	2.25
11	12	8	2.00
12	12	10	2.50
13	12	9	2.25
14	12	12	3.00
15	12	10	2.50
16	12	11	2.75
17	12	10	2.50
Total Average			2.49
S.D.			0.51

From table 4, it was found that the result of study the students' attitude for learning with flipped classroom lesson plans in the situation of COVID-19 was highly effective ($\bar{x} = 2.49$, $SD = 0.51$)

Part 4. The results of the study Parents' satisfaction after using flipped classroom with kindergarten students in the situation of COVID-19.

Table 5 the result of study parents' satisfaction after using flipped classroom with kindergarten students

Students' Parent Number	Full Score	Total Score	Average
1	30	24	2.40
2	30	22	2.20
3	30	26	2.60
4	30	21	2.10
5	30	21	2.10
6	30	20	2.00
7	30	19	1.90
8	30	21	2.10
9	30	23	2.30
10	30	29	2.90
11	30	26	2.60
12	30	27	2.70
13	30	21	2.10
14	30	21	2.10
15	30	23	2.30
16	30	24	2.40
17	30	26	2.60
Total Average			2.32
S.D.			0.66

From table 5, it was found that the result of study parents' satisfaction after using flipped classroom with kindergarten students was highly satisfying ($\bar{x} = 2.32$, $SD = 0.66$)

3. DISCUSSION

1. The results of using Flipped Classroom lesson plans for kindergarten 1 students evaluated by experts were averagely scored from 3.67 – 4.33, the overall mean score was 4.00, and standard deviation was 0.93. For the efficiency of the Flipped Classroom lesson plans for kindergarten 1 students, it was found that the quality and appropriateness of each lesson plan was scored from the high to the highest level, and the overall assessment results of all lesson plans was at the high level ($\bar{x} = 4.00$, $SD = 0.93$). the efficiency processes of the Flipped lesson plans for kindergarten 1 students were (E1) of 62.25 and the effectiveness of the lesson plans (E2) was 82.83. Consequently, the efficiency of the lesson plans development (E1/E2) was 62.35/82.83 which is lower than the preset criteria of 75/75. It is possible that because the researcher had studied about concept of the flipped classroom learning management and designed the learning activities based on the 6-stage process by applying the concept of the

flipped classroom that focuses on enhancing the students' ability to construct the knowledge to be connected and integrated with the meaning of the body of knowledge for learners to understand. Moreover, the students had the opportunity to use analytical thinking to link the events with the prior knowledge to understand and create new knowledge, as well as apply new knowledge to understand other problem situations in the form of expanding or applying knowledge. Especially, it is important that teachers need to monitor the progress of normal students that whether they understand well before beginning the new lesson which consistent with Bergmann and Sams (2012).

2. The results of the study of the effectiveness index of the Flipped Classroom lesson plans for kindergarten 1 students (N=17) revealed that the overall average effectiveness index was 0.5454. This means that the Flipped Classroom lesson plans improved the students' learning achievement 54.54 percent higher.

3. that the result of study the students' attitude for learning with flipped classroom lesson plans in the situation of COVID-19 was highly effective ($\bar{x} = 2.49$, $SD = 0.51$)

4. the result of result of study parents' satisfaction after using flipped classroom with kindergarten students was highly satisfying ($\bar{x} = 2.32$, $SD = 0.66$)

This research is suitable for teachers who interested in teaching kindergarten students under situation of Covid-19. The limitation of this research is time of parents to spend with their children to teach them at home and the limitation of devices were not sufficient for each students.

4. CONCLUSION

This research is suitable for teachers who interested in teaching kindergarten students under situation of Covid-19. The limitation of this research is time of parents to spend with their children to teach them at home and the limitation of devices were not sufficient for each students.

The results of using Flipped Classroom lesson plans for kindergarten 1 students evaluated by experts were averagely scored from 3.67 – 4.33, the overall mean score was 4.00, and standard deviation was 0.93. For the efficiency of the Flipped Classroom lesson plans for kindergarten 1 students, it was found that the quality and appropriateness of each lesson plan was scored from the high to the highest level, and the overall assessment results of all lesson plans was at the high level ($\bar{x} = 4.00$, $SD = 0.93$). the efficiency processes of the Flipped lesson plans for kindergarten 1 students were (E1) of 62.25 and the effectiveness of the lesson plans (E2) was 82.83. Consequently, the efficiency of the lesson plans development (E1/E2) was 62.35/82.83 which is lower than the preset criteria of 75/75. It is possible that because the researcher had studied about concept of the flipped classroom learning management and designed the learning activities based on the 6-stage process by applying the concept of the flipped classroom that focuses on enhancing the students' ability to construct the knowledge to be connected and integrated with the meaning of the body of knowledge for learners to understand. Moreover, the students had the opportunity to use analytical thinking to link the events with the prior

knowledge to understand and create new knowledge, as well as apply new knowledge to understand other problem situations in the form of expanding or applying knowledge

Acknowledgements

To be successfully complete, this research was funded by the project of the Research Grant for New Scholars. I do appreciate and would like to extend deeply thanks to Loei Primary Educational Service Area Office 2. Thank you Dr. Wanida Simpol, the research advisor and Dr. Nanthana Sarakitjanont for giving me suggestions, ideas, as well as guiding me to get through obstacles and difficulties in conducting research.

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