

The Development of Instruction on First Aid and Patient Transport by Using the Learning Center Technique of Grade 7 Students at Demonstration School of Suan Sunandha Rajabhat University

Arisa Sinthu, e-mail: arisa.si@ssru.ac.th
The Secondary Demonstration School,
Suan Sunandha Rajabhat University, Bangkok, Thailand
Konkamol Chuchoy, e-mail: kornkamol.ch@ssru.ac.th
Faculty of Education, Science Program,
Suan Sunandha Rajabhat University, Bangkok, Thailand

ABSTRACT

The purposes of this research were to 1) develop and examine the learning center entitled first aid and patient transport to meet the standard efficiency of 80/80, and 2) compare the students' academic achievement before and after learning through the learning center techniques. The samples, obtained by cluster random sampling, were 74 of Grade 9 students during the first semester of the academic year 2018. The research instruments were 6 questionnaires of 6 learning centers and the academic achievement test. The statistics used to analyze the data were E1/E2, mean, standard deviation, percentage and t-test. The findings were 1) The efficiency of the developed learning center entitled first aid and patient transport of grade 7 students had a value at 86.2/84.8 which was higher than the set value of 80/80, and 2) The average of an academic achievement result before using the learning center techniques of grade 7 students was 5 % ($\bar{x}=1.48$, S.D.=0.99). The average of an academic achievement result after using the learning center techniques of grade 7 students was 7 % ($\bar{x}=8.48$, S.D.=0.83).

Keywords: *First Aid, Patient Transport, Learning Center Technique*

INTRODUCTION

Nowadays, various knowledge advances widely and quickly. New technology has come to play a role in daily life to move society among rapid changes in information and knowledge causing the world competition very high by the knowledge of the people in the nation will affect the country's potential countries with high potential. For this reason, Thai society has reformed society in order to develop the knowledge and capability of the Thai people in the midst of such trend and changes. It is necessary to rely on the fundamentals of educational reform. When Thailand promulgated the National Education Act 1999, Chapter 1, Section 6, there are guidelines for educational management based on the principle that all learners are able to learn and develop themselves, and the learners are the most important. The educational process must encourage learners to develop naturally with their fullest potential, and must emphasize the importance of knowledge, morality, learning process. Various courses aim to develop a balance between knowledge, thinking, ability, virtue and social responsibility. Health Education subject is a study of quality of life. Taking care of themselves as well as avoiding various risk factors in society today, students are able to apply knowledge in Health Education to use in daily life. It is a course that focuses on the learners to develop behavior in knowledge, attitude, morality, values and practices for maintaining health, health promotion and sustainably development of life quality for individuals, families, and communities [7].

Health and Physical Education learning and teaching management for the secondary level nowadays, a variety of teaching styles were developed which results in both the teachers and the learners having to change the teaching and learning behavior [1]. Teachers of Health and Physical Education subjects for grade 7 students of the Demonstration School of Suan Sunandha Rajabhat University, experienced problems in teaching Health Education activities which were assessed based on student's academic performance in the previous academic year 2018. Student's achievement was not satisfactory at 60% which was lower than 70% of the standard criteria of the Health and Physical Education Learning Group. To solve the problem, the researcher studied the problems of teaching and learning management in the classrooms. It found that the students lacked enthusiasm in learning, bored in studying, lacked the support to work in group together, and students lacked participation in class.

From information, the researcher considered the learning center: First aid and moving patient for grade 7 students will help learners to have better knowledge, understanding, and an interesting in Health Education, and as a guideline to the development of teaching and learning in various subjects.

RESEARCH OBJECTIVES

1. To develop and examine the learning center entitled first aid and patient transport to meet the standard efficiency of 80/80
2. To compare the students' academic achievement before and after learning through the learning center techniques.

METHODOLOGY

The content of the lessons used in problem solving and students development. The contents were divided into 6 topics:

- Topic 1: Meaning and purpose
- Topic 2: First aid for fainting
- Topic 3: First aid, wound healing
- Topic 4: First aid. Strange things in the eyes, ears, nose and throat.
- Topic 5: First aid was stung by a poisonous animal
- Topic 6: Moving patients

Learning Center:

Problem solving and student development lacking of enthusiasm in learning, boring of studying, lacking of the support to work together as a group, and lacking of participation in learning and teaching management which affects the learning achievement of grade 7 students, the researchers have chosen to use learning management as a learning center to help and solve those problems [5-6]. The following are:

1) The aim of learning management as a learning center:

Learning center is a teaching method that emphasizes the importance of students or focuses to learners and uses learning management techniques. Using multimedia and group processes is important [2]. There is an atmosphere in the classroom as a source of education for students. Students are able to study for self-knowledge by learning from the teaching program which is provided in the form of a teaching kit [10]. Students can find learning experiences by completing all activities in every center under the supervision of a teacher who acts as a coordinator of learning management like a learning center with important objectives as follows [3]:

- (1) To encourage learners to seek knowledge by themselves.
- (2) To practice working as a group.
- (3) To train responsibility, working according to own expertise, interesting and abilities.

2) Components of a learning center:

The learning center consists of 4 important components including teacher's role, learners' role, teaching package, and classroom management which has the essence of each component as follows:

2.1) The teacher's role:

The teacher's role is reduced in this learning center. Learner-centered is focused for the learning center, and the instructor has the following roles:

- (1) Being a learning director
- (2) Being a coordinator of teaching and learning activities
- (3) Record the development of each student
- (4) Prepare learning materials, and prepare additional activities related to the

changing teaching and learning conditions

2.2) Learners' roles:

The learners' role is very important because it is learner-centered. If learners have the right roles, teaching will be more effective. The learners will have the following roles:

- (1) Understand about their action in each learning center
- (2) Follow the activities specified in the learning center
- (3) Study all activities
- (4) Cooperate with groups in activities

2.3) Teaching kit

The teaching kit is a system for bringing stories that are consistent with the subject matter taught in each unit to be taught in a learning center. Teaching kits are considered an important component which consists of the aim, the content and all the materials as well as various activities that have been organized in the teaching box for students to study from all of this experience more effectively [9]. The important principles and theories in the production of teaching kits are multimedia and the usage of system analysis methods. The components of the teaching kits are as follows.

- (1) A manual for teachers and for learners
- (2) Orders to set up instructional guidelines
- (3) Content of the lesson is organized in various media such as slides, tapes, etc.
- (4) Learning activities is an activity for students to report or research from the

previous lesson

- (5) Assessment is a test that involves the content of that lesson.

2.4) Classroom management

Classroom-centered classes can be organized in normal classes. It changes the normal class to the learning center for students to practice activities by organizing a table into groups which are usually arranged in groups of 4-6. It is depended on the content that is divided into episodes and the students have to be divided to equal the number of episodes of the content in each group. There will be different content, teaching media and activities [8]. Students in the school will take turns to learn and complete all activities in each center. (There will be another center called a special center or reserve center for groups that study faster than other groups). Students will study by consulting in groups; each group has 1 leader to coordinate between students' group and teacher.

2.5) Learning management procedures of the learning center:

2.5.1 Preparation (for teachers)

- (1) Study teaching guidelines and details in every learning center as well as study the answer key card in advance
- (2) Explore and examine the completion of learning media
- (3) Arrange the classroom appropriately according to the classroom map
- (4) Divide students into 4 groups consisting of each group of talented, medium, and

weak students

- (5) Prepare paper for writing answers at every center

2.5.2 Teaching (for students)

- (1) Let the students of each divided group go the learning center 1 - 4
- (2) The group leader reads the instruction card, and the group members learn the instructions together
- (3) The group leader keep the answer key card first, and then the group members follow the sequence of instructions specified in the order card. After the group members have completed the activity, the group leader can read the answers to the group members.
- (4) When each group finished the learning center completed within the specified time, they have to move to the next center following the arrow of the map in No.1.3 every center. The activity finishes after every group finishes every learning center.

2.5.3 Conclusion

Checking student's responses begins when the students hand-in the answer sheet to the teacher. The teacher immediately checks the accuracy of all groups of students to correct the errors or any areas that students do not understand to explain further after all groups of students have finished in all learning centers so that students get the right concepts based on the content.

2.4) Benefits of the learning center

Advantages:

- (1) Students are involved in learning activities by developing according to the steps of the learning process.
- (2) Encourage students to be self-centered learning
- (3) Students have the opportunity to exchange experiences with each other.
- (4) Students have the opportunity to apply knowledge to use in daily life.

Limitations:

The learning center arrangement of each unit in the learning center must have the complete components as follows:

- (1) The order card may be a single card or the same number of cards equal to the number of members in the group. The instruction card will tell how to study the content in sequence.
- (2) Learning materials in the room must be consistent with the content of the unit such as pictures, video, computer lessons, word cards, posters, audio recordings, slides, etc.
- (3) Quizzes for each unit content
- (4) Materials and materials for learners, such as audio-visual aids, paper, pencil, and pen, according to the number of students
- (5) While students are studying and doing unit activities in each learning center, the teacher will take care and give advice and help according to the program of study.

PROCEDURE AND RESEARCH MATERIALS

The research materials for this study consist of the tools as follows:

- 1) Learning center entitled "First aid and patients transport".
- 2) A test for "First aid and patients Transport" used to test the grade 7 students

In the development process to solve problems by the learning center on First Aid and Patient Transport of grade 7 students of the Demonstration School of Suan Sunandha Rajabhat University, the researchers have defined the research into 5 steps as follows:

Step1: Planning and studying details of content, sample documents and related research, then collecting data to build a learning center on "First aid and patients Transport"

Step2: The creating and development of the learning center on "First aid and patients Transport" for grade 7 students together with the building of assessment tools which is for evaluation before and after (Pre-test and Post-test)

Step3: Inspection and improvement the learning center on "First aid and patients Transport" for grade 7 students, and sending the tools to experts to check for appropriate accuracy and related to the indicators and objectives.

Step4: Experimental learning management by using the learning center on "First aid and patients Transport" of grade 7 students, and then comparing the results before and after using the learning center by computer program.

Step5: Analyzing the data obtained from the experiment of using learning center on "First aid and patients Transport" of grade 7 students.

RESULTS AND DISCUSSIONS

1. The efficiency of the developed learning center entitled first aid and patient transport of grade 7 students had a value at 86.2/84.8 which was higher than the set value of 80/80. It shows in Figure 1.

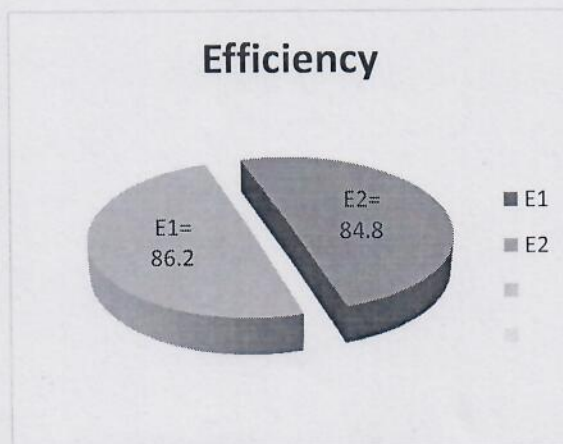


Figure 1: Result of the efficiency of the developed learning center.

2. The average of an academic achievement result before using the learning center techniques of grade 7 students was 5 % ($\bar{x}=1.48$, S.D.=0.99). The average of an academic achievement result after using the learning center techniques of grade 7 students was 7% ($\bar{x}=8.48$, S.D.= 0.83). It shows in Figure 2.

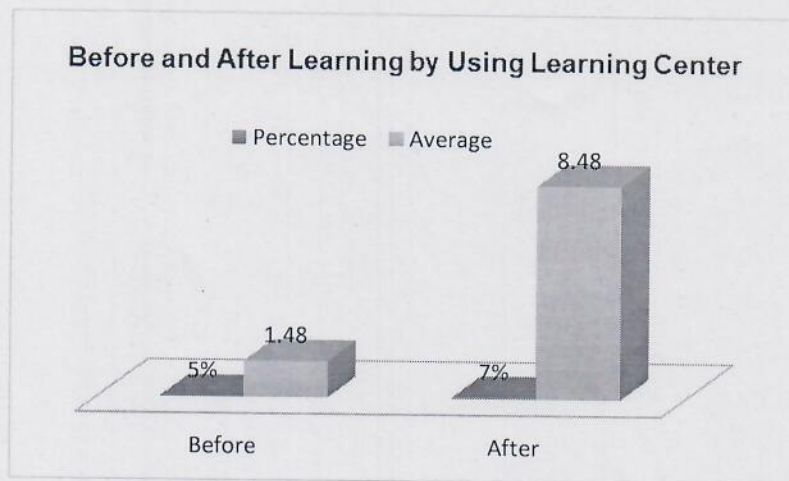


Figure 2: Result of the average of an academic achievement before and after study.

CONCLUSIONS

From the implementation of the development of learning outcomes by the Learning Center on the topic "First aid and patients Transport" of grade 7 students of the Demonstration School of Suan Sunandha Rajabhat University are as follows:

1. Average of the scores of practice exercises and activities in the learning center on the topic "First aid and patients Transport" of grade 7 students was 8.62 or 86.2%.

2. The average score of the achievement test on the topic "First aid and patients Transport" of grade 7 students was 8.48 or 84.8 %.

3. From no.1, the average of the scores of practice exercises and activities in the learning center on the topic "First aid and patients Transport" of grade 7 students was 86.2%, and the average scores of the achievement test on the topic "First aid and patients Transport" of grade 7 students was 84.8 %, therefore, the efficiency of the learning center was 86.2/84.8.

4. Before using the Learning Center on the topic "First aid and patients Transport" of grade 7 students, students got 5 maximum scores and 0 minimum score and the average was $\bar{x}=1.48$, S.D.=0.99. After using the Learning Center on the topic "First aid and patients Transport", students got 10 maximum scores and 7 minimum score and the average was $\bar{x}=8.48$, S.D.= 0.83. It found that after using the Learning Center on the topic "First aid and patients Transport" was in good level. the Learning Center on the topic "First aid and patients Transport" should be improved for the better efficiency. Teachers can develop learning centers and apply in other subjects so that students at other levels can develop critical thinking skills [4].

5. There should be supported research and development of learning centers to be used as a source of learning and for being as a good tool for learning and teaching [11].

ACKNOWLEDGEMENTS

The researchers are very grateful to those experts for dedicating their precious time to examine and review research instruments, provide information, advice, consultancy, opinions, and suggest some good techniques. The researchers gratitude to Suan Sunandha Rajabhat University for granting 2019 funding support. We are thankful to grade 7 students at the Demonstration School of Suan Sunandha Rajabhat University to devote times for learning and cooperate to do activities successfully. The appreciation goes to the school supports, teachers, staff of the school, and colleagues who give this chance to work with together. The integrated use of learning center can affect positive results and lead to the improvement of health education achievement of grade 7 students. Learning center can be able to adapt in education, traveling and everyday life, encourages students to learn how to protect themselves, develops their basic knowledge of first aids uses, and helps them apply in health education. Learning center can help teachers of health education to be successful teacher as a professional in their careers.

REFERENCES

- [1] Chittima Hemkittiwat (1976). **A comparative study of the teaching results in science on plants and plant propagation in Mattayomsuksa 6 using program lessons and regular teaching.** Master of Education Thesis (Biology), Srinakharinwirot University, Prasarnmit.
- [2] Farmer Field. (1979). **Educational Technology.** Bangkok. Siamese Alphabet Printing.
- [3] Kanchana Honors. (1981). **Educational innovation.** Bangkok: Department of Curriculum and Instruction Faculty of Education Srinakharinwirot University Prasarnmit.
- [4] Nimit Manphao. (1996). **Creating ready-made lessons in Thai language. Adverb According to the curriculum of Mathayomsuksa 2.** Master's thesis in education. Srinakharinwirot University Prasarnmit.
- [5] Noppakun Siriwann et al. (1994). **Needs for development of teaching and learning in agricultural subjects of teachers in the secondary and elementary schools Grounds, metropolitan areas and metropolitan areas.** Research report. Bangkok: King Mongkut's Institute of Technology Ladkrabang.
- [6] Manop Chai Direk. (1976). **A comparative study of mathematics teaching results on sets and Relationships for 1st year students, Srinakharinwirot University, Prasarnmit, using ready-made lessons with normal teaching.** Master of Education Thesis Srinakharinwirot University Prasarnmit.
- [7] Ministry of Education. (1999). **National Education Act B.E.1999.** Bangkok: Shipping and Delivery Center.
- [8] Prapasiri Chaipong. (1997). **Computer-assisted instruction on Planting roses.** Master of Science Thesis. Agricultural Education Graduate school King Mongkut's Institute of Technology Ladkrabang
- [9] Sangthang Thai. (2000). **Programmed lessons presented with a slide on" Gardening "at the upper secondary level.** Master of Science. Agricultural Education Graduate school King Mongkut's Institute of Technology Ladkrabang.
- [10] Somporn Naksuwan. (1979). **The Construction of the Thai Language Program Lessons on Lannanam for Certificate in Education.** Master of Education Thesis Graduate school Chulalongkorn University.