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Learning Coupled with Project Based Learning

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Learning Activities Set using Cooperative Learning Coupled with Project Based Learning

N. Nigrommunin, T. Tanitteerapan, and K. Tunsalakul

*¹Affiliation of first author, Address, Country¹Department of Electrical Technology Education,
Faculty of Industrial Education and Technology,
King Mongkut's University of Technology Thonburi, Bangkok, Thailand*

Abstract

The purpose of this research was to create a learning activity set using a cooperative learning model along with project-style learning. And to study the learning achievement of learners after using a series of learning activities To develop knowledge skills and develop knowledge skills such as communication skills initiative initiatives in information, media and technology, leadership, and social responsibility. The sample used in the research was 12 students in Mathayom Suksa 6, Tha Mai School. "Poonsawat Ratmukul" and used the data collection method by observation. Taking the test evaluation of workpieces, the results of the research showed that the learning activity set using a collaborative learning model coupled with project-based learning was effective and usable. On the academic achievement of the learners, it was found that the students had higher scores on the post-study test than before. And from observations including the evaluation form of the workpiece, the learner's score is very good.

Keywords: Learning activity series, Collaborative learning, Project-Based Learning

1. Introduction

At present, the world situation is changing rapidly. The world society will be more closely linked. The development of technology is changing rapidly and will greatly affect social life and economic activity.

Therefore, the development of science, technology, research and development, innovation including the development of people as a whole to become complete people of all ages who can manage changes in the living environment well by enhancing the quality of education, learning, skill development.

As well as promoting the role of social

institutions in promoting good people, discipline, good values and social responsibility [1] and because the world is changing rapidly in every area. Therefore, it is important for learners. In addition to the subject matter, another important thing is skills for living, namely learning and innovation.

Information, media, and technology skills, including life and professional skills, however, the subject matter is also important, but students have to study themselves. Where teachers are responsible for designing learning And facilitate learning for students to learn from hands-on learning [2].

Therefore, learning management is important to help develop learners. Through interaction with teachers, learners and the environment How much a learner can learn depends on four elements: maturity and student readiness. The difficulty of the lesson teaching activities and environment including teaching materials like a series of learning activities, which the activity set is an educational innovation. That gathers materials, processes, and learning activities to be a medium between teachers and learners to create learning for learners according to the purpose of efficiency [3].

From the above reasons, the development of the process Teaching methods suitable for current learners. With an emphasis on learning management processes that allow learners to pass thinking processes, problem-solving, and application of knowledge, and is a teaching and learning that allows students to participate in learning.

The process of teaching activities emphasizes the process of creating situations for learners to read, speak, listen, think, focus on advanced thinking skills.

It is an activity that allows students to integrate information, news, information, and principles into conceptual creation. For learners to build knowledge and organize their own learning systems To involve the students in teaching and learning Knowledge has been created. Building a mutual relationship and



cooperation rather than competition including allowing learners to learn shared responsibility work discipline and division of responsibility [4] through a teamwork process or cooperative learning.

It is a learning activity technique that allows students to learn together as a group.

Each group consists of members with different knowledge and abilities. Each person is truly involved in learning. And in the success of the group [5] in addition to the development of a learning activity model teaching materials also play an important role in learners' learning. Because the media is a channel for making teachers teaching to learners. And make the learner learn according to the purpose [6].

Besides the media and the teaching and learning process, the lesson or content is also important. This is because the content is what it wants students to learn the skills and abilities they want to have. Including the experience that you want to gain.

As a result, the development and creation of a series of learning activities focused on students' learning through searching, finding, solving problems, and through hands-on practice, planning, analysis, synthesis, and group work will encourage each learner. Truly involved in the birth of an exchange of ideas share resources encourage each other and help each other.

In which smart people help the weaker, in which the media used is a real device. In order for learners to learn through practice trials to make it easier for learners to understand lessons. By the content used is a course in the vocational subject group as most of the courses will help develop learners to have the knowledge, understanding, and basic skills necessary for life. And be aware of the changes be able to apply knowledge about life, career, and technology to use in their work with creativity and see the direction of the profession, love to work, and have a positive attitude towards work. Able to live in society sufficiently and happily because the education management must adhere to the principle that all learners have the ability to learn and develop themselves. And considered the students to be most important. The educational management process must encourage learners to develop naturally and to their full potential [7].

2. Learning activities set

Activities have different names such as instruction set, instruction set, learning set, self-study setting. The activity package is an

educational innovation.

It is an innovation that teachers use in teaching that focuses on the learners, in which students study and use various media in the created activity set which will contain the topics to be studied teaching methods and activities, materials, equipment, measurement, and evaluation.

And the process of various activities [8] to mediate between teachers and learners. To create learning for learners according to the purpose of efficiency, the

hallmark of the learning activity series is that it serves the objectives of the basic education curriculum.

Which emphasizes the training of thinking process skills, situation management, and application of knowledge to prevent and solve problems. Making it possible to solve educational problems related to teaching and learning.

It is an activity for learners to learn from real experiences. Practice being able to think, do, seek, pursue, continue to learn, combine various learning topics. Proportionately and well cultivate virtues, wholesome values, and desirable traits [9].

The principles for creating a learning activity set are as follows.

1. Determine the category, content, and experience. May be defined as a subject or an interdisciplinary integration as appropriate.

2. Set teaching units, by dividing the course content into teaching units so that the instructor can pass knowledge to students within 1 week or complete it in one lesson, perhaps 1-2 hours depending on the subject matter or grade level.

3. Define a subject, the instructor should define topics that will teach the learners what experiences in each teaching will be provided. By considering the content and learning activities in that content together

4. Determine the concept, consensus, and principles for formulating this concept and principle. Must be consistent with the teaching unit and subject, summarizing concepts, themes, and key principles to guide the consistent presentation of the content to be taught. By considering that the subject matter is important or what that the learner will have to learn or take place after learning.

5. Set objectives, in the production of an instruction set, objectives should be aligned with the subject, with a general objective first. Then write it as a behavioral objective In order to know how the students should behave after studying the subject.

6. Set learning activities, in determining learning activities Should be considered in line with behavioral objectives Because the learning activities



that the students will have to engage in Must be able to make the students learn And achieve the objectives set As a guideline for the selection, production, and use of teaching materials All activities that the learner does, such as answering questions, following instructions, playing games, etc.

7. The assessment form should be evaluated to meet the defined behavioral objectives. Using a quiz And use a criterion-based approach, so that the teacher will know that after teaching and learning activities.

Learners have achieved learning behavior according to the objectives set or not.

8. Select and produce teaching materials. In the

production of this teaching kit, all materials, materials, and methods used by teachers are classified as teaching materials. When producing media for each subject They should be classified into categories. And placed in a prepared envelope or box before testing for efficacy At this stage, the nature of the content and the learner characteristics. What kind of media or learning activities will be most relevant and allow learners to achieve their learning objectives?

9. Test the performance of the tutorial set once the tutorial has been created. The teaching series should be tested for effectiveness. Take the teaching kit to trial. To see how the set of teaching can enable learners to achieve the purpose of learning. When a flaw is found, it must be corrected until the teaching can achieve the intended purpose. The creator should set the criteria according to the principle that Learning is a process To help students change teaching behavior, teaching is completed, there is a need to

10. Using the tutorial series After creating a tutorial and looking for performance value, it can be modified according to the set criteria. Teachers can then lead students to teach the students according to the purpose of use, such as a lecture teaching series. Individual teaching series and teaching sets for group activities and can be used at all levels such as kindergarten, primary education, secondary and higher education, with the steps to use.

3. Cooperative teaching

Cooperative learning is a learning activity technique that allows students to learn together in small groups, each group consisting of members with different abilities. Each person is truly involved in learning. And in the success of the group

Wherein,

the group will exchange ideas Share resources Encourage each other Smart people will help the younger. Group members are not only responsible for their own academic performance. But must be shared responsibility for the learning of all group members. A person's success is the success of a group. The differences in each format lie primarily in the techniques of study [5], their content, and the methods of reinforcement and reward [14].

4. Results

This research, the mosquito net focuses on creating a learning activity set using a collaborative learning model along with project-style learning. And study academic achievement to develop knowledge skills related to electrician work which has suitable courses which are illumination.

The analysis of the core curriculum of basic education in 2008 and the analysis of the school curriculum Tha Mai School "Poonsawat Ratnukul" by when content related to Type and principle of operation

and connecting to the current light bulbs The device used to control the opening and turn off the electric bulb including the application of non-microcontroller devices and to develop emotional and social skills to provide learners with the skills they need to maintain their current life. Initiative initiatives in information, media and technology, leadership, and social responsibility. The sample used in the research was 12 students in Mathayom Suksa 6, Tha Mai School. "Poonsawat Ratnukul" and used the data collection method by observation. Taking the test Evaluation of workpieces From looking at the efficiency of the tools used to collect the data, it was found that efficiency and usability. As well as the results from data collection and analysis, it was found that students have higher scores on the post-test than before. And from observations including the evaluation form of the work, it was found that the students had a very good score. Therefore, the learning activity is set using a cooperative learning model in conjunction with project-style learning. Able to develop skills in knowledge and develop emotional skills, and the society of the students.



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