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**The Development Of Learning Achievements On Science Class, Matter 1, Life
And The Process Of Life Subject: The Existence Of The Species Of The
Organism Of Pathomsuksa 5 Students In Ban Non Chad School Using The 5 Es
Of Inquiry-Based Learning**

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The Development Of Learning Achievements On Science Class, Matter 1, Life And The Process Of Life Subject: The Existence Of The Species Of The Organism Of Pathomsuksa 5 Students In Ban Non Chad School Using The 5 Es Of Inquiry-Based Learning

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Abstract

The purposes of this study were: to develop the activity plan of the 5 Es of inquiry-Based Learning to be a good level of quality with efficiency attained the criteria at 80/80 and to study students' achievement of the activity plan of the 5 Es of inquiry-Based Learning, and to study students' satisfaction with learning according to the inward learning plan of the 5 Es of inquiry-Based Learning

The sample consisted of 7 Pathomsuksa 5 students in Ban Non Chad School by purposive sampling. The instruments used in this study consisted of lesson plans 14 lessons and pretest-posttest multiple choices 30 questions with difficulty (P) from 0.40 to 0.85 and classification authority (B) from 0.20 to 0.80 and confidence value of 0.99, and as a measure of satisfaction after the use of the learning management plan. It has a confidence value equal to 0.94. The statistics that use performance analysis, effectiveness Index, test results before and after class and learning persistence average, percentage.

The findings of this research were as follows:

1. The lesson plan of the 5 Es of inquiry-Based Learning was effective at 83.18/81.82, which was higher than attained the criteria at 80/80
2. The Effectiveness Index of the 5 Es of inquiry-Based Learning was 0.84, indicating that students had progressed after studying the 5 Es of inquiry-Based Learning of 84%.
3. Satisfied students studying with the 5 Es of inquiry-Based Learning and the list are at the most satisfying level.

1. Introduction

Background of the study

According to the National Education Act 1999 and amended (No. 2) Section 2002, Section 22 states that education management must be based on the principle that all learners can learn and develop themselves and be considered the most important learners. The most important course is that the education process must encourage students to develop naturally and to their full potential. Section 23 of the Science Learning section requires both knowledge, skills, and scientific attitudes, as well as knowledge and cognition to use and maintain sustainable natural resources and the environment. Section 24, learning management must align content and activities by the interests and aptitudes of the learner. It takes into account the differences between individuals, practicing thinking process skills, managing. The company has been working to prevent and solve problems. Organize activities for learners to learn from practicality, able to think, love to read, and continue to learn, which combines the learning subjects appropriately and balanced, and cultivate values. Good morality and desirable attributes (Department of Education, 2002) help to develop the characteristics of the Thai people who are desirable: good, good, and happy. In terms of basic education courses, B.E. 2008. It is a country curriculum that aims to improve the quality of learners to be good people. It has a good quality of life, competitiveness especially increased student potential. Able to live happily based on Thai ness and internationality (Department of Education, 2008)

Science is an important role in today's and future societies because science is relevant to everyone's lives. Both in their daily life and various professions. The tools, appliances, and products that people use to facilitate their lives and work are the results of scientific knowledge combined with creativity and other sciences. Science enables people to develop rational and rational ways of thinking, thinking, analyzing, understanding, criticism, and skills in the search for knowledge. Have the ability to solve problems systematically. Can make decisions using a variety of information. As a result, science is the culture of the modern world, which is a knowledge-based society, so everyone needs to be developed to know science (Scientific Literacy for All). To have knowledge and understanding, The natural world and man-made technology. Knowledge of science is not only used to improve the quality of life. It also provides people with an accurate understanding of the benefits of care as well as the sustainable and sustainable and sustainable development of the environment and natural resources. Knowledge of science enhances economic development capacity able to compete with the international community and live happily together in the global society (Department of Education, 2002). Learning science offers a variety of ways to seek knowledge. Science teaching must be focused on improving mental integrity, physical, intellectual, and social, self-reliant, collaborate creatively with others.

The majority of the scientific inquiry is observed, explore review systematic research and data retrieval has created new knowledge at all times. Such knowledge and processes have been passed on for a long time and continuously. Therefore, it is said that science is the result of enhancing a person's knowledge. Communication of information dissemination to rationalized analytical thinking, thus increasing scientific knowledge and resulting in people in society. Study, search for knowledge, and know the use of scientific knowledge under the scope of virtue. Therefore, learning management in the school is one of the management processes provided by teachers. Therefore, it must be consistent with the needs of the learner according to the differences between the individuals by allowing the learner to participate and practical practice has developed an analytical thought process. Study, research experiment, and seek self-knowledge according to your aptitude, interests in a variety of process methods, and resources. Connecting real life both in the classroom and outside the classroom (Department of Education, 2001)

Based on the results of the 2009 Ban Noncha Buddhist School Curriculum in The Science Learning of Pathomsuksa 5 students. The researcher has organized learning for students and improved the way learning activities are organized. However, the teaching of the science strands in which the

study organizes learning activities has not been as successful as it should be. In other words, the achievement of the science learning strand is relatively low. As can be seen from the evaluation report of Ban Wang Muang School. The achievement of the science learning strand of Pathomsuksa 5 students, organism, and the process of living. As a result, the achievement score was lower than other units, with students who did not qualify for 46.67% in the 2011 academic year.

2. Research objectives:

1.1 To develop an effective in quest learning the 5 Es of inquiry-Based Learning based on criteria 80/80.

1.2 To study the achievements learned by the 5 Es of inquiry-Based Learning

1.3 To study students' satisfaction with learning according to the inward learning plan the 5 Es of inquiry-Based Learning.

3. Research Hypothesis

1. Pathomsuksa 5 students at Ban Nonchad School achieved higher science academic achievement when using the 5 Es of inquiry-Based Learning plan.

4. The conceptual framework for education

Independent variable:

The 5 Es of inquiry-Based Learning plan, Science Learning Group, matter 1, Life and Life Process, Subject: the existence of living organisms, Pathomsuksa 5

Dependent variable

1. Effective learning management plan based on 80/80 criteria
2. Student Achievement
3. Class Satisfaction

5. Related Research

The study studied literature and related research as follows:

1. Ban Non Chad Buddhist School Curriculum 2009 according to The Core Curriculum for Basic Education B.E. 2008
2. Scientific process skills
3. Teaching the pursuit of knowledge according to the learning cycle pattern.
4. Learning Management Plan
5. Finding the effectiveness of the learning management plan
6. Class Satisfaction
7. Related Research
8. Conceptual framework in education

6. Research Methodology

In this study, the researchers did the experiment and take time to teach at a time 1 hour, total 14 hours, the duration of the first semester of the 2020 academic year, the steps of study were as follows:

1. Orientation clarifies the instructional agreement.
2. Pre-test using the achievement test. Science Learning Strand, matter 1, Life and Life Process, subject: the existence of living organisms of Pathomsuksa 5 that the researchers created. Test before experimenting to determine the basics of original knowledge.
3. Conduct learning activities. The study organized self-learning activities according to the plan of 5 Es of inquiry-Based Learning a group of matter 1 life-learning subjects, and the process of life. About the existence of living organisms Pathomsuksa 5, which takes 14 hours of instruction
4. Post-test after the learning activities with the in-successor learning plan (5 Es) science learning strand, matter 1, life and the process of life. About the existence of living organisms Pathomsuksa 5 using achievement test 30 pre-school tests and students to do a measure of satisfaction.
5. Data Analysis

This study conducted the following data analysis:

1. Analyze the effectiveness of the successor learning plan (5Es)
2. Compare the test results before and after class using the learning plan (5 Es) and using dependent t-test
3. Analyze the Effectiveness index of the Inergle Learning Plan (5Es)
4. Analyze the satisfaction of learning activities according to the inward learning plan (5Es) as a Likert's rating scale, setting the feedback level to 5 levels using average (\bar{x}) and standard deviation (S.D.). and applied to the following criteria:
 - Average 4.51 – 5.00 means the most satisfied.
 - Average 3.51 – 4.50 means very satisfied.
 - Average 2.51 – 3.50 means moderate satisfaction.
 - Average 1.51 – 2.50 means less satisfaction.
 - Average 1.00 – 1.50 means minimal satisfaction.

7. Results

The results from the study are as follows:

1. The learning plan (5Es) efficiency is 83.18/81.82. This is higher than the threshold set to 80/80.
2. The Ineglerian Learning Plan Effectiveness Index 5 Es of inquiry-Based Learning is 0.8361, indicating that students have progressed after studying 84 percent of the learning plan (5E) and the results of comparing pre-school test scores with post-school. According to the plan for the 5 Es of inquiry-Based Learning, the points are scored after the implementation of the event plan. 5 Es of inquiry-Based Learning is higher than before the plan.
3. Satisfied students studying with 5 Es of inquiry-Based Learning plan and the list are at the most satisfying level.

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