THE DEVELOPMENT OF A SET OF AGRICULTURAL LEARNING ACTIVITIES ON GROWING VEGETABLES USED IN DAILY LIFE FOR PRATHOMSUKSA 4 STUDENTS, DEMONSTRATION SCHOOL OF SUAN SUNANDHA RAJABHAT UNIVERSITY

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ABSTRACT

The objectives of this research were 1) to develop an agricultural learning activity on growing vegetables used in daily life of Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University with efficiency passing the criteria, 2) to study the value of The Index Of Consistency of learning activities in agricultural subjects of Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University. The sample used Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University, academic year 2022, 102 students, which was obtained by Purposive sampling; The research tools consisted of 3 agricultural learning management plans on growing vegetables used in daily life; Statistics used in the analysis were the effectiveness of the E1/E2 lesson plans, and the Index of Consistency (IOC).

Research results

The research results showed that the development of learning activities in agriculture subjects on growing vegetables used in daily life of Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University, interested in cooperation in planting vegetables, the efficiency of which was 87.06/95.14, which passed the specified criteria and had the Index of Consistency of the agricultural learning management plan on growing vegetables used in daily life was at a level greater than 0.50, indicating that all levels could be used for teaching.

Keywords: agricultural learning activities, growing vegetables used in daily life, Prathomsuksa 4 students

INTRODUCTION

Basic Education Core Curriculum 2008 has set a vision and principles of education management to aim at developing all learners, who are the strength of the nation, to be human beings with balance in terms of physical, knowledge, morality; Be Thai citizens and global citizens, uphold the democratic monarchy; have basic knowledge and skills, including attitudes necessary for education, career, and lifelong education; It focuses mainly on learners based on the belief that everyone can learn and develop themselves to their full potential.

Learning Management about occupational subjects, divided into household work, agricultural work, mechanic work, and invention work in agriculture; Refers to the cultivation of various crops, including animal husbandry and fisheries. Food is the most important factor and necessity for human beings in life because food contains nutrients that are essential to the body, helping to nourish the body, creating grow and make the body healthy and complete live long until the end of life. Bureau of Nutrition, Department of Health, Ministry of Public Health has established guidelines for healthy eating; The 9 Commandments of Nutrition 1) Eat food from all five food groups, always take care of body weight, 2) Eat rice as the main food, 3) Eat more vegetables and fruits regularly, 4) Eat fish and lean meat, eggs, and legumes on a regular basis, 5) age-appropriate drinking of milk, 6) eating moderately fatty foods, 7) Avoid eating very sweet and salty foods,8) eat clean food without contaminants, 9) abstain or drink alcohol. Therefore, humans must receive complete nutrition, by eating food from the five food groups, in proportion adequate, which will affect development, physically, intellectually, and mentally; at the same time, if one of the nutrients is missing, it will affect the development of the brain, and the intelligence level of the students. In the five main food groups, vegetables are food plants that Thai people prefer to eat, because they are valuable. Food in vitamins and minerals that are highly beneficial to the body, but nowadays, vegetable consumption often chooses to eat beautiful vegetables, without traces of the destruction of worms and insect pests, causing farmers who grow vegetables to use chemicals to get rid of insects. Therefore, growing organic vegetables, by bringing together many methods of preventing and eliminating pests, is to replace or reduce the amount of chemicals used less, for the safety of farmers, consumers, and the environment (Aphisara, 2013).

The instructor therefore organizes teaching and learning activities in the group of occupational learning, agricultural subjects; Planting vegetables in a kitchen garden in everyday life of Prathomsuksa 4 students which provides teaching that focuses on students to be practical, allowing students to practice skills to learn from direct experience, obtained from real practice, learn to observe, and be able to apply knowledge, skills that have been applied in daily life; Problems with teaching that must focus on practice, currently teachers use methods of teaching by demonstrating and lecturing, learning from pictures, and teaching materials, learning to prepare materials used in growing vegetables, using the location of vegetable plots, types of vegetables, benefits for durable learning, therefore, five concepts of cooperative learning are obtained, consisting of 1) Learning requires interdependence: assuming that everyone is equally important. each other, and must rely on each other for mutual success, 2) Good Learning Requires Face-to-face: Interacting to exchange ideas, information, and learning, 3) Collaborative Learning requires Social skills: especially collaboration skills, 4) collaborative learning should analyze group processes used in work, 5) learning if learners have the opportunity to learn collaboratively, besides will help learners to learn more broadly, and deeply, can also help develop learners more socially and emotionally; Including having the opportunity to practice, develop skills, processes That is necessary for living life (Tissana Khammanee2007).

And hands-on learning concepts, to solve the problem of vegetable gardening skills of students, and to solve the problem of some students who have problems and still lack knowledge of vegetable gardening; by providing materials that Used to grow vegetables and

use the place to make vegetable plots within the Demonstration school, so that students can develop in a better way, so that students can enjoy and enjoy the real practice, which will result in the achievement of skills. Students' careers, skills in a better way, and have a positive attitude towards academic careers and apply their knowledge and abilities to be used as a foundation for academic career studies in other learning units and at higher levels.

OBJECTIVES OF THE RESEARCH

1. To study the Index of Consistency of agricultural learning activities on growing vegetables used in daily life of Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University.
2. To study the efficiency of agricultural learning activities on growing vegetables used in daily life of Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University.

RESEARCH METHODOLOGY

In this research, the researcher used Pre-experimental design, One-Shot Case Study, which is a quantitative data collection (Creswell & Creswell, 2018), using the Index of Consistency (IOC), and find the efficiency (E1/E2) of learning activities about growing vegetables used in daily life.

1. Target group

Target group of Prathomsuksa 4 students of Demonstration School of Suan Sunandha Rajabhat University, Academic Year 2022, 102 students; The sub-target group of this research, 35 Prathomsuksa 4/1 students, was obtained by Purposive sampling.

2. Research tools

1) The researcher used the research tools namely 3 agricultural learning management plans on growing vegetables used in daily life, and a questionnaire for evaluating the consistency of agricultural learning activities on growing vegetables used in daily life; Statistics used for the analysis were the efficiency of learning activities E1/E2, and the Index Of Consistency (IOC).

2) Assessment form for consistency of agricultural learning activities on growing vegetables used in daily life; divided into 2 parts as follows:

- Part 1: There is a 3-level estimation model, in which each number shows a different meaning, namely 1 means appropriate, 0 means not sure, and - 1 means no improvement, according to Chotika Phasiphon (2015: 97).
- Part 2: It is a recommendation about an agricultural learning management plan on growing vegetables used in daily life, evaluated by experts.

3) Achievement test for agricultural work on growing vegetables used in daily life.

To create the test: the researcher performed as follows: 1) Prepare a leaflet on growing vegetables used in daily life consumption, 2) Types of materials and tools used to grow vegetables, 3) Planting vegetables using the header such as onions, shallots; planting vegetables

for cooking spicy dishes such as spicy salad, papaya salad, larb, spicy salad, tom yum paste, 4) the instructor explains the process of planting a vegetable garden, 5) taking care of the roots, adding Soil, pest control, and tillage, plant feeding by fertilization. 6) All learning steps are recorded and assessed.

3. Data Collection

3.1 Consistency assessment form of agricultural learning activities on growing vegetables used in daily life per 3 experts.

3.1.1 Agricultural learning management plan on growing vegetables used in daily life

3.1.2 The researcher collects data on the effectiveness of learning activities during learning, through scoring activity sheets from all 3 learning management plans, using the data to calculate the efficiency of the learning management process. (E1); after the sub-target groups had completed all three learning activities; the researcher collected post-learning performance data through the learning management (E2).

3.2 Achievement test in agricultural subjects on planting vegetables used in daily life, is a multiple-choice test, Type of choice: 4 options, 20 items, to bring to Prathomsuksa 4 students to use in the learning achievement test, before and after learning ,using a set of learning activities.

3.3 The use of materials for growing vegetables in the kitchen garden that are used in the actual practice.

3.4 Student's reaction, interested in the action, fun, excited about the action, making more and more efforts in agriculture.

4. Data analysis

In this research, the researcher analyzed the data as follows.

Part 1: Index of Consistency of Learning Activities, Agricultural work on growing vegetables used in daily life**.**

Table 1: Analyze the effectiveness of the agricultural learning activity set on growing vegetables used in daily life of Prathomsuksa 4 students, achieving the specified criteria of 80/80by using formulas E1/E2.

(N= 35 people)

Number of students	Process efficiency (E1)	Outcome Efficiency (E2)
35	87.06	95.14

From Table 4.1, it was found that the efficiency of learning management with a learning management plan using agricultural subjects on growing vegetables used in daily life, Prathomsuksa 4 students, Demonstration School of Suan Sunandha Rajabhat University; Criterion efficiency was 87.06/95.14.

Part 2: Analyzing the efficiency of the learning achievement scale before and after learning, using the t-test (Dependent Samples)

Testing	$\overline{X}$	S.D.	$\overline{D}$	t
Before	3.60	0.91	5.49	28.95
After	9.09	0.85		

From Table 4.2, it was found that the performance index of learning in agricultural subjects from the scores of the pre-learning and post-learning learning tests; The Mean of teaching and learning on growing vegetables used in daily life of Prathomsuksa 4 students, before learning were equal to = 3.60, S.D. = 0.91, and after learning = 9.09, S.D. = 0.85, and When comparing between pre- and post-test scores, it was found that students' post-test scores were significantly higher than before by 0.05.

SUMMARY AND DISCUSSION

When solving problems by using practical methods on growing vegetables used in daily life, Prathomsuksa 4 students that still lacks basic cultivation knowledge, analytical thinking is very useful to researchers and students who have a lot of problems; And the researcher found that when solving the problems that arise with students' learning at the point, they will improve their learning in agriculture and other subjects; it is equal to promoting, supporting, helping students. There is natural self-development and full potential. By comparing the scores recorded on the criteria and averaging the student's progress in developing vegetable gardening for each time, it can be seen that the Mean increases; There is better achievement, skill development is increased, and students enjoy each practice, in line with Hathaikan Samwanhan (2006) who developed an integrated learning model by using learning resources Royal bowls for students studying in Matthamyomsuksa 2, by examining the Index of Consistency for components of the learning management plan, learning objectives, content, learning activities, media, and evaluation measurements between 0.67-1.00, which is suitable for use in teaching and learning.

SUGGESTION

1. Teachers should apply the learning management model on growing vegetables that was used in daily life in the past and adapt it to teaching students at other levels.
2. Teachers should take into account the duration of each learning activity and take into account the students, there is some flexibility in the study time, and the teacher should plan to manage the time with the student according to all learning activities; Suggestions for further research should be to study the quality of learning management in growing vegetables used in daily life, together with other teaching methods such as cooperative teaching. Teaching with 5E or 7E inquiry techniques or other teaching techniques.

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