

The Development of Learning Activities on Natural Resources and Environmental Management for 1st Year Students Faculty of Liberal Arts and Science Social Development and Environment Nakhon Phanom University

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Abstract: This research aimed to develop learning activities on natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University and to comparing their knowledge and awareness after learning. The sample composed of 34 students, as a 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University which have been selected by a purposive sampling technique. The research design was just one group pre-and post-test. The data collection was analyzed by percentage usage and t-test. The study results are as following: The learning activities on natural resources and environment management for 1st year students was rated as a high efficiency. The 1st year students had knowledge and awareness on natural resources and environmental management after learning was rated higher than before learning ($p < 0.05$).

Key words: Natural resource, environment, management, learning activities, knowledge, awareness

INTRODUCTION

The development of natural resource and environment capitals in rural communities have been carried out, since the past in such a way to wake become for production, community infra-structure and consumption to fulfill as human needs as demands. The fulfillment of human needs had been so limitless that they affect economy, society at large and environment. They have also created hardships in their living and livelihood, such as problems of environmental pollution, problems of moral deterioration and other social problem. These problems affect people's life quality and more severe living hardships, suitability of occupation and income, low mental health people in the country, as a whole have to become economical and patient for these prevailing economic situations (Songkasri *et al.*, 2009).

Natural resource and environmental management is increasingly concerned with issues of allocation and governance. The benefits provided by the environment are not equally distributed between nations or between groups within nations. The environmental justice literature, also clearly demonstrates that the environmental costs of socioeconomic development tend to fall on poorer nations and classes in society. It would, therefore seem appropriate that social justice research play a significant role in providing guidance for policy formulation and its implementation (Sailabat *et al.*, 2012).

Environmental education is the learning processes which encourage the learners to have an awareness,

understanding, concerning and valuing the natural environment. Regarding the learning process, everybody has an opportunity to improve their knowledge, attitude and decision making skill which may changing their attitude and behavior in term of improving and protecting the environment. In order to improve learners abilities regarding critical thinking, the learning and teaching process of environmental education would concern on practicing and learning activities related to learners experienced (Singseewo *et al.*, 2009).

Learning activity, as considered in the framework of the general activity approach is a special kind of human activity whose main objective is the acquisition of knowledge, skills and competencies produced by society in the process of history by means of special learning actions taken upon learning objects in accordance with their substance and structure (Davydov, 1982). It is important to distinguish this specific meaning of the term from its nonspecific, widespread use.

This research purposes were to develop learning activities on natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University to comparing their knowledge and awareness after learning.

The research's purposes:

- To develop learning activities on natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University

- To compare knowledge and awareness on natural resources and environmental management of 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University before and after learning

Hypothesis:

- The learning activities on natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University has rated as high efficiency
- The 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University had knowledge and awareness on natural resources and environmental management after learning were higher than before learning

MATERIALS AND METHODS

This research was an quasi-experimental one with the one group pre-and post-test design. Sample as 34 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University which have been selected by a purposive sampling technique. Research instrument, including the following:

The learning activities on natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University.

The test of knowledge and awareness on natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University. Data collection, there was the step as follows:

- Step 1: Collecting pre-training data from the sample by the test of knowledge and awareness on natural resources and environmental management of 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University
- Step 2: Collecting the immediate post-training data from the same sample by the same instruments, namely the tests of knowledge awareness and skill on environment and resource management
- Step 3: Analyzing data by statistical, percentage and t-test

RESULTS AND DISCUSSION

The 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University had knowledge on natural resources and environmental management during the learning and after learning in very high level of >80% (Table 1).

The 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University had knowledge and awareness on natural resources and environmental management after learning were higher than before learning (Table 2).

The 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University had knowledge on natural resources and environmental management during the learning and after learning in very high level of >80%. This shows that the developed learning activities has made, the students efficiently received knowledge and experiences about natural resources and environmental management which is accorded to Panngoen *et al.* (2010) who found that the 2nd level students had a knowledge about forestry resource during the learning and after learning in very high level of over 80%. This shows that the developed learning activities has made, the 2nd level students efficiently received knowledge and experiences about forestry resource.

The 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University had knowledge and awareness on natural resources and environmental management after learning were higher than before learning with statistically significant difference at the level of 0.05 which shows that the developed learning activities making more knowledge and awareness receiving for the students which relating to the natural resources and environmental management directly to the activities target which is accorded to the Sailabat *et al.* (2012) research who found that the sub-district administration organization members

Table 1: Efficiency of learning activities on natural resources and environmental management (E1/E2 = 81.29/82.71)

Efficiency	\bar{x}	SD	Percentage
Process (E1)	18.62	0.21	81.29
Achievement (E2)	20.68	0.78	82.71

Table 2: Compare knowledge and awareness on natural resources and environmental management before and after learning

Achievements	Before		After		t	p-value
	\bar{x}	SD	\bar{x}	SD		
Knowledge	7.44	0.46	23.20	0.35	-40.17	0.000
Awareness	2.10	0.17	4.63	0.16	-69.04	0.000

significance level at 0.05

knowledge and awareness on environment and resource management after training was rated higher than before training ($p < 0.05$).

CONCLUSION

From this research, the learning activities about natural resources and environmental management for 1st year students, Faculty of Liberal Arts and Science, Social Development and Environment Nakhon Phanom University was rated, as a high efficiency and they also had knowledge and awareness about natural resources and environmental management after learning were higher than learning by normally method from the study was giving beneficially to the natural resources and environmental management in higher education in the future.

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