The Development of Environmental Recreation Camp Activities for Youth in Roi-Et Province of Thailand

Suwakhon Phakeewai & Prayoon Wongchantra

1Faculty of Environment and Resource Studies, Mahasarakham University, Maha Sarakham, Thailand
*Correspondence: Faculty of Environment and Resource Studies, Mahasarakham University, Maha Sarakham, Thailand. Tel: 66-816-000-180. E-mail: prayoon_nam@yahoo.co.th

Received: June 10, 2020 Accepted: July 10, 2020 Online Published: August 17, 2020
doi:10.5430/wje.v10n4p94 URL: https://doi.org/10.5430/wje.v10n4p94

Abstract

This research aims to develop the environmental recreation camp activity for youth in Roi-Et province of Thailand, to compare environmental knowledge, environmental attitudes before and after participating in the camp, as well as their participating in Environment Recreation camp activities during and after participating in the camp of youths with different gender and domicile, and to study the relationship between environmental knowledge, environmental attitudes and participation in environmental recreation camp activities. The data were collected though a survey with 40 youths from Phanom Phrai Wittayakarn School, Phanom Phrai District, Roi-Et Province. The research instruments was the manuals questionnaire measuring environmental knowledge, environmental attitudes and participation in environmental recreation camp activity. The data were analysed by using descriptive statistic and hypothesis testing by using t-test, One-way MANCOVA, One-way ANOVA and Correlation analysis. The results of this research indicated as below Environment Recreation Camp Activities for Youth in Roi-Et Province had effectively is 85.17/83.44 and an effectiveness index is 0.6117. After participating in environment recreation camp activities, youths had higher environmental knowledge and environmental attitudes than before participating in the camp. After participating in environment recreation camp activities, youth had higher participation in environment recreation camp activities than during participating in camp. The sample youths with different gender and domicile had no different environmental knowledge, environmental attitudes, and environmental participation. Environmental knowledge, environmental attitudes, and participation in environmental recreation camp activities were not correlated.

Keywords: environmental recreation camp, knowledge, attitude, participation

1. Introduction

The environment is something that has the physical and biological characteristics surrounding human beings, which are natural and man-made. The environment is divided into two categories: biotic environment and abiotic environment. Environment is important to the organism. The role of organisms in humans is three fold: the environment determines the population, environment determines living and the environment determines the occupation of the human. Humans are very important role in the organism by demonstrating human behavior in daily life affect to the environmental change (Adisak, 2011, p9). Economic advancement and advancement in technology, although it brings benefits to most people. It also affects the environment and society. Whether it is the difference between the rich and the poor in the country and inequalities between countries. Declining environmental degradation in developed and developing countries, these conditions are even caused by a few countries. But it affects all human beings. (Prayoon, 2015, p30) For Thailand, the overall environmental problem was the decrease of forest area, soil degradation, coastal resources, marine resources and fresh water. Reduction of biodiversity, air pollution and water pollution, toxic residues in food and the environment and the problem of municipal solid waste problems are different according to severity in each region of Thailand. (Office of the National Economic and Social Development Board, 2013, p70).

The study of environmental education is very important after studying and learning about the situation on this planet. In the mid-to late twentieth centuries, each international agency was aware of the environment and held meetings and discussed issues "The environment in the school curriculum". With this concept, the development of environmental
education in countries around the world. In 1975 was the importance of Thailand and developed into a school later. Academics at various educational institutions have studied. The results of the study will be accepted and disseminated to enable them to practice effectively in order to develop their knowledge. Understanding the natural environment. (Thakorn, 2016, p177-197). Environmental education is an educational process or a tool to change the person held by studying the relationship between humans and the environment. Environmental conservation development and the environment are happening to awareness, knowledge, attitude, skills, evaluation ability, and participation in solving natural and man-made environmental problems. (UNESCO as cited in Siwina, 2009, p1-2).

Environmental education in the school is about the development of "people" who are members of the society to be good citizens and play a role in bringing Thai society to sustainable development. Therefore, there is no denying that the stories in community schools, countries and societies are all related. (Department of Physical Education, 2012, p4)

And because the teaching and learning environment is focused on integrated teaching and learning. The benefits to the students. Often the teaching occurs outside the classroom by learning outside of this class itself. This allows learners to practice, link, and integrate what they have learned with the actual situation. Several research studies in England, Australia and the United States indicate that Off-campus teaching can encourage students to develop their knowledge. Additionally, students are more likely to memorize what they learn outside of the classroom than in the classroom. (Dillon, et al., 2006)

The recreation camp is a way to promote learning, attitudes and participation of youth. The value of the recreational camp. It really benefits the camp members. Help the camp members develop themselves. Adapting to other people. The development of the idea of living in a democratic style. Spending time to benefit. Know the plan development of physical health through sport and physical activity and creativity. The value of nature conservation and environmental recreation camp are important activities to help reduce problems to individuals, organizations, health systems, mental health, and the nation. Especially in the world of material prosperity, but the mental state is deteriorating. Therefore, it must find solutions to problems and recreational camps are activities that solve such problems as well. It can see from the value and the benefits of recreation. This is a great feature for campers. (Department of Physical Education, 2014, p48)

For these reasons, the researcher is interested in researching the development of recreational activities for youths. The research results will be useful for guiding the development of recreational activities for youth and to continue to develop in a sustainable future. In addition, to encourage young people to have the right knowledge and the environment. Have a good attitude towards the environment. Encourage youth to participate in environmental issues.

Objectives: This research aims to develop the environmental recreation camp activity for Youth in Roi-Et province, to compare environmental knowledge, environmental attitudes before and after participating in the camp, as will as well as their participating in environmental recreation camp activities during and after participating in the camp of youths with different gender and domicile, and to study the relationship between environmental knowledge, environmental attitudes and participation in environmental recreation camp activities.

2. Methods

2.1 Population and Samples

2.1.1 Population: students in senior high school in Phanom Phrai Wittayakarn School 945 people.

2.1.2 The sample were 40 students (11 males, 29 females) in high school from Phanom Phrai Witthayakarn School. The samples were selected by purposive sampling and voluntariness sampling from high school students of Phanom Phrai Witthayakarn School, candidate interested in participating in environmental recreation camp 40 people.

2.2 Tools and Research Tools Results

2.2.1 Transmission tool is the activity guide for the youth environmental recreation in Roi-Et province. The activity guide is created and submitted to the thesis supervisor for review and then improve upon the suggestions. The 5 experts’ people assessed the suitability of the activity. The results of this study were as follows for the youth of Roi-Et province and the experts have commented on the proposed activities at the most appropriate level. Can be used in the environment. The details are shown in Table 1.
Table 1. The Results of the Evaluation of the Recreation Camp Activities for Youth in Roi-Et Province

| Experts  | Score | \( \bar{x} \) | S.D. | Activities Suitability Level |
|----------|-------|---------------|------|-----------------------------|
| Expert 1 | 4.6   |               |      |                             |
| Expert 2 | 4.8   |               |      |                             |
| Expert 3 | 4.6   | 4.58          | 0.65 | Optimal Level               |
| Expert 4 | 4.4   |               |      |                             |
| Expert 5 | 4.5   |               |      |                             |
| Total    | 22.9  |               |      |                             |

2.2.2 Measurement tool is a questionnaire consisting of 3 sets.

Set 1. Environmental knowledge test

The researcher constructed a set of 4 multiple choice knowledge-based questionnaires. The correct answer is 1 point and wrong answer 0 points, 30 items. The measurement of the quality follows; for example

- Natural resources that have been depleted cannot be sufficiently replaced as follows;
  a. Soil, forest, wildlife, oil
  b. Soil, water, air, oil
  c. Soil, sunlight, water, air
  d. Soil, forest, wildlife, air

- Which of these are the components that live in the ecosystem?
  a. Manufacturers, consumers, biodegradants
  b. Manufacturers, predators, victims
  c. Consumers, biodegradable, biodegradable
  d. Nothing is correct

1) Take the test to 5 experts to determine the nature of the question, choice, consistency, and content validity. Calculate the index of congruency (IOC) values between 0.60-1.00 and take the questionnaire to improve according to expert advice.

2) Take a measure of environmental knowledge and try out with non-sample youth. The researcher applied the test to the youth in Roi-Et province. There were not sampled group 30 participants.

3) Take the environmental knowledge test to find the difficulty of the knowledge test. The difficulty of the test was from 0.20-0.85. It was found that all tests were difficult to find at the lowest level of 0.32 and highest level of 0.79.

4) Take the environmental knowledge test to determine the discrimination by applying the criteria high and low groups 25 percent. The questionnaire was tested with a value of 0.20 and above, which showed that all tests had the discrimination at the acceptable level. The discrimination ranged from 0.22 to 0.86.

5. Take the environmental knowledge test to find the whole reliability. Analyzed by using the Kuder-Richardson Method (KR-21) was found reliability (KR-21) 0.83.

Set 2. Environmental attitude test

The researcher was formulated environmental attitudes by 5 levels of rating scale in 20 items. The measurement of the quality follows; for example

| Items                                                                 | Strongly agree | Agree | Not sure | Disagree | Strongly disagree |
|------------------------------------------------------------------------|----------------|-------|----------|----------|-------------------|
| You think that doing conservation activities can increase your love   |                |       |          |          |                   |
|  and concern for natural resources and environment.                   |                |       |          |          |                   |
| You think that conserving natural resources and the environment is    |                |       |          |          |                   |
| a duty of everyone to do together.                                     |                |       |          |          |                   |

1) Take the test to 5 experts to determine the nature of the question, choice, consistency, and content validity. Calculate the index of congruency (IOC) values between 0.60-1.00 and take the questionnaire to improve according to expert advice.

2) Take a measure of environmental attitudes and try out with non-sample youth. The researcher applied the test to the youth in Roi-Et province. There were not sampled group 30 participants.
3) Take the environmental attitude measurement to find the reliability by the Cronbach Coefficient coefficient of $\alpha$ was 0.83.

Set 3. Participatory measurement of environmental recreation camps
The researcher constructed a model for participation in environmental recreation camp in 5 levels of rating scale in 32 items. The measurement of the quality follows; for example

| Items                                                                 | The most | More | Moderate | Little | Least |
|-----------------------------------------------------------------------|----------|------|----------|--------|-------|
| Students are interested in hiking activities to see the natural ecology. |          |      |          |        |       |
| Students can participate in choosing poems about their favorite environment. |          |      |          |        |       |

1) Take the test to 5 experts to determine the nature of the question, choice, consistency, and content validity. Calculate the index of congruency (IOC) values between 0.60-1.00 and take the questionnaire to improve according to expert advice.

2) Take a measure of participation in environmental recreation camp activities and try out with non-sample youth. The researcher applied the test to the youth in Roi-Et province. There were not sampled group 30 participants.

3) Take the participation in environmental recreation camp activities measurement to find the reliability by the Cronbach Coefficient coefficient of $\alpha$ was 0.81.

2.3 Data Collection and Measurement
The researcher collected data by organizing the activities of environmental recreation camp, according to the developer activity model, consisting of 8 activities: wildlife hiking activity, green poetry activity, these games are for the Environment (Snake power ladder game, Garbage separation game to reduce global warming, Life Pagoda game Bats My Friend, Water Conservation Games, Land-water-air games and Environmental jigsaw game), bonfire activity for environmental conservation, environment singing activity, watching movies of Sueb Nakasatien activity, drawing activities for nature conservation and these vocabularies for the environment. Data were collected by using questionnaire with 40 high school students from the Phanom Phrai Wittayakarn School who participated in environmental recreation camp in Phanom Phrai Wittayakarn School in 3 day and 2 night.

The statistics used in data analysis were percentage, frequency, mean, standard deviation to test the hypothesis by comparing environmental knowledge, environmental attitudes before and after participating in environmental recreation camp and comparative study of participation in environmental recreation camp activities during and after participating in environmental recreation camp using Paired t-test. Comparison of environmental knowledge and environmental attitudes after participating in environmental recreation camp of youths with different gender and domicile using One-way MANCOVA. Comparison of participation in environmental recreation camp activities after participating in environmental recreation camp of youths with different gender and domicile using One-way ANOVA. The relationship analysis of environmental knowledge, environmental attitudes and participation in environmental recreation camp activities using Correlation.

3. Results
The efficiency of the process (E1) is 85.17% and the efficiency of the result (E2) is 83.44%. Therefore, the activity of the environmental camp is 85.17/83.44. The effectiveness index (EI) of the recreational environment is 0.6117. The sample students progressed in learning 0.6117 details as shown in table 2 and table 3.

| Activity Efficiency         | Score | $\bar{x}$ | S.D. | Percentage |
|----------------------------|-------|-----------|------|------------|
| Process Efficiency (E1)    | 30    | 25.55     | 1.88 | 85.17      |
| Results Efficiency (E2)    | 30    | 24.23     | 2.20 | 83.44      |

Results Efficiency (E1/E2) = 85.17/83.44
Table 3. Effectiveness Index (EI) of the Environmental Recreation Camp Activities

| Total score of knowledge before doing the activity | Total score of knowledge after doing the activity | Number of participants | Total score of knowledge | Effectiveness Index (E.I.) |
|----------------------------------------------------|---------------------------------------------------|------------------------|--------------------------|--------------------------|
| 605                                                | 969                                               | 40                     | 30                       | 0.6117                   |

Comparison of mean scores, environmental knowledge and environmental attitudes before and after participating in the Environmental Recreation Camp Activities for Youth in Roi-Et Province. It was found that the level of environmental knowledge of the youth after participating in recreational activities higher than before participating in recreational activities statistically significant at .05. The level of environmental knowledge of the youth after participating in environmental recreation camps was at the highest level. The mean score was 24.23, with a score of 30 points. The mean score was 15.13, from the 30 points before joining the environmental recreation camp. The level of attitudes of the youth after participating in environmental recreation camps was at the highest level significant level .05. The average level of environmental attitudes of the youth after participating in environmental recreation camps was at the highest level of 4.55. The level of environmental attitudes of youth before participating in environmental recreation camps was a high level of 3.74. The details are shown in Table 4.

Table 4. Comparison of Mean Scores, Environmental Knowledge, and Environmental Attitudes before and after Participating in the Environmental Recreation Camp Activities for Youth in Roi-Et Province

| Variable                  | Before (N = 40) | After (N = 40) | t   | p   |
|---------------------------|-----------------|----------------|-----|-----|
| Environmental Knowledge   | 15.13 1.88      | 24.23 2.20     | -13.029 | 0.00* |
| Environmental Attitudes   | 3.74 0.14       | 4.55 0.65      | -5.107 | 0.00* |

*p < .05

Comparison of mean scores on participation in environmental recreation camp activities during and after participating in the Environmental Recreation Camp Activities for Youth in Roi-Et Province, it was found that the level of participation in the activities of the youth recreation camp after the participation in the activities more than during the activities of environmental recreation camps significant level .05. The level of participation in the activities of youth after the participation in the activities was at the highest level of 4.50 points. The level of environmental attitudes of youth before participating in environmental recreation camps was a high level of 3.66. The details are shown in Table 5.

Table 5. Comparison of Mean Scores on Participation in Environmental Recreation Camp Activities during and after Participating in the Environmental Recreation Camp Activities for Youth in Roi-Et Province

| Variable                                | Between (N = 40) | After (N = 40) | t   | p   |
|-----------------------------------------|------------------|----------------|-----|-----|
| Participating in the Environmental Recreation Camp Activities | 3.66 0.88        | 4.50 0.66      | -5.59 | 0.00* |

*p < .05

Comparison of environmental knowledge and environmental attitudes after participating in environmental recreation camp activities of youths with different gender, it was found that the youth’s different gender had environmental knowledge and environmental attitudes were not different. The details are shown in Table 6.
Table 6. Comparative Analysis of Environmental Knowledge and Environmental Attitudes after Participating in Environmental Recreation Camp Activities of Youths with Different Gender

| Variable                  | SS   | df | MS   | F    | p     | Partial Eta Squared |
|---------------------------|------|----|------|------|-------|--------------------|
| Environmental knowledge   | .495 | 1  | .495 | 3.690| .063  | .095               |
| Environmental attitudes   | .020 | 1  | .020 | .096 | .759  | .003               |

*p < .05

Comparison of environmental knowledge and environmental attitudes after participating in environmental recreation camp activities of youths with different domicile, it was found that the youths with different domicile had environmental knowledge and environmental attitudes were not different. The details are shown in Table 7.

Table 7. Comparative Analysis of Environmental Knowledge and Environmental Attitudes after Participating in Environmental Recreation Camp Activities of Youths with Different Domicile

| Variable                  | SS   | df | MS   | F    | p     | Partial Eta Squared |
|---------------------------|------|----|------|------|-------|--------------------|
| Environmental knowledge   | .056 | 1  | .056 | .414 | .524  | .012               |
| Environmental attitudes   | .001 | 1  | .001 | .003 | .955  | .000               |

*p < .05

Comparison of participation in environmental recreation camp activities after participating in environmental recreation camp activities of youths with different gender, it was found that youth with different gender had participation in environmental recreation camp activities were not different. The details are shown in Table 8.

Table 8. Comparative Analysis of Participation in Environmental Recreation Camp Activities after Participating in Environmental Recreation Camp Activities for Youths with Different Gender

| Variable sources          | SS   | df | MS   | F    | p     |
|---------------------------|------|----|------|------|-------|
| Between-Group             | .004 | 1  | .004 | .053 | .820  |
| Within-Group              | 2.771| 38 | .073 |
| Total                     | 2.775| 39 |      |

*p < .05

Comparison of participation in environmental recreation camp activities after participating in environmental recreation camp activities of youths with different gender classified by activities, it was found that the youth participate in a wildlife hiking activity and these vocabularies for the environment which difference statistically significant at the level of .05. The youth with different gender participated in green poetry activity, these games are for the Environment, a bonfire activity for environmental conservation, environment singing activity, watched movies of Sueb Nakasatien activity, drawing activities for nature conservation and the game activity for nature were not different. The details are
shown in Table 10.

**Table 10.** Comparison of Participation in Environmental Recreation Camp Activities after Participating in environmental Recreation Camp Activities of Youth with Different Gender Classified by Activities

| Variable                              | Samples group | N   | \( \bar{x} \) | S.D. | t    | p    |
|---------------------------------------|---------------|-----|---------------|------|------|------|
| Wildlife hiking activity              | Male          | 11  | 4.45         | 0.52 | -2.154 | .029* |
|                                       | Female        | 29  | 4.79         | 0.41 | -1.934 |      |
| Green poetry activity                 | Male          | 11  | 4.45         | 0.522 | -0.544 | .409 |
|                                       | Female        | 29  | 4.59         | 0.73  | -0.633 |      |
| These games are for the Environment  | Male          | 11  | 4.64         | 0.50  | -0.895 | .273 |
|                                       | Female        | 29  | 4.79         | 0.49  | -0.884 |      |
| Bonfire activity for environmental conservation | Male        | 11  | 4.64         | 0.50  | -0.759 | .193 |
|                                       | Female        | 29  | 4.76         | 0.44  | -0.710 |      |
| Environment singing activity          | Male          | 11  | 4.73         | 0.47  | -0.710 | .744 |
|                                       | Female        | 29  | 4.72         | 0.59  | -0.633 |      |
| Watching movies of Sueb Nakasatien activity | Male       | 11  | 4.55         | 0.52  | -1.066 | .132 |
|                                       | Female        | 29  | 4.72         | 0.45  | -1.000 |      |
| Drawing activities for nature conservation | Male        | 11  | 4.72         | 0.47  | -1.721 | .000*|
|                                       | Female        | 29  | 4.75         | 0.51  | -1.85  |      |
| these vocabularies for the environment | Male          | 11  | 4.45         | 0.69  | -1.447 | .021*|
|                                       | Female        | 29  | 4.72         | 0.45  | -1.624 |      |

* \( p < .05 \)

Comparison of participation in environmental recreation camp activities after participating in environmental recreation camp activities with different domicile (City and Rural), it was found that the youth participate in green poetry activity, this game activity for the nature and drawing activities for nature conservation. There was a statistically significant difference at the level of .05. The youth with different domicile participated in wildlife hiking activity, bonfire activity for environmental conservation, environment singing activity, watching movies of Sueb Nakasatien activity and these vocabularies for the environment were not different. The details are shown in Table 11.

**Table 11.** Comparison of Participation in Environmental Recreation Camp Activities after Participating in Environmental Recreation Camp Activities of Youth with Different Domicile Classified by Activity

| Variable                              | Samples group | N   | \( \bar{x} \) | S.D. | T    | p    |
|---------------------------------------|---------------|-----|---------------|------|------|------|
| Wildlife hiking activity              | City          | 14  | 4.71         | 0.47 | .141 | .776 |
|                                       | Rural         | 26  | 4.69         | 0.47 | .141 |      |
| Green poetry activity                 | City          | 14  | 4.79         | 0.43 | 1.650 | .003*|
|                                       | Rural         | 26  | 4.42         | 0.76 | 1.938 |      |
| These games are for the Environment  | City          | 14  | 4.92         | 0.27 | 1.721 | .000*|
|                                       | Rural         | 26  | 4.65         | 0.56 | 2.093 |      |
| Bonfire activity for environmental conservation | City        | 14  | 4.71         | 0.47 | -.109 | .831 |
|                                       | Rural         | 26  | 4.73         | 0.45 | -.107 |      |
| Environment singing activity          | City          | 14  | 4.79         | 0.43 | .504  | .237 |
|                                       | Rural         | 26  | 4.69         | 0.62 | .562  |      |
| Watching movies of Sueb Nakasatien activity | City       | 14  | 4.57         | 0.51 | -1.014 | .105 |
|                                       | Rural         | 26  | 4.73         | 0.45 | -0.975 |      |
| Drawing activities for nature conservation | City        | 14  | 4.86         | 0.36 | 1.008 | .038*|
|                                       | Rural         | 26  | 4.69         | 0.55 | 1.137 |      |
| these vocabularies for the environment | City          | 14  | 4.57         | 0.65 | -0.679 | .108 |
|                                       | Rural         | 26  | 4.69         | 0.47 | -0.617 |      |

* \( p < .05 \)

Analysis of the relationship of environmental knowledge environmental attitudes, participation in environmental recreation camp activities was found to be positive. Environmental knowledge and environmental attitudes,
participation in environmental recreation camp activities was not correlated. The details are shown in Table 12.

Table 12. The Relationship Analysis of Environmental Knowledge, Environmental Attitudes and Participation in Environmental Recreation Camp Activities

| Variable                      | Environmental Knowledge | Environmental Attitudes | Participating of Environmental Recreation Camp Activity |
|-------------------------------|-------------------------|-------------------------|--------------------------------------------------------|
| Environmental Knowledge       | r 1                     | -.092                   | .005                                                   |
| p                             |                         | .570                    | .975                                                   |
| N                             | 40                      | 40                      | 40                                                     |
| r                             | -.092                   | 1                       | .055                                                   |
| Environmental Attitudes       | p .570                  |                         | .737                                                   |
| N                             | 40                      | 40                      | 40                                                     |
| Participating of               | r -.005                 | .055                    | 1                                                      |
| Environmental Recreation      | p .975                  | .737                    |                                                         |
| N                             | 40                      | 40                      | 40                                                     |

p < .05

4. Discussion

The development of environmental recreation camp activities for youths in Roi-Et province to be efficiency and effectiveness. Evaluation of the suitability of the activity by questionnaire in 5 levels. The weighting score was 4.58. The manual was the most appropriate and evaluate the efficiency and effectiveness of environmental recreation camp activities. The efficiency was 85.17 / 83.44 and the effectiveness index was 0.6117, which corresponds to the article of Kiettisak, et al., (2016: 51-66). Development of training activities to promote vegetable conservation, watershed basin for the 2nd grade students in Srisongkram district, Nakhon Phanom province The efficiency of the study was 83.23 / 86.55 and the effectiveness was 0.6795, the article of Prayoon (2016: 13-22). The research studied the teaching of natural resources and environment in ASEAN by using the document for undergraduate students. The study indicated that the effectiveness of the document was 87.00/90.00, and the effectiveness of the doctrine was 0.667. After teaching, students had higher knowledge and attitudes toward natural resources and environment than before teaching significant at the level of .05. The article of Somyot et al., (2016: 171-187). A study on the development of a model of environmental education activities for the conservation and rehabilitation of forest resources for the youth of Kalasin province. The research found that the efficiency of the study was 87.54 / 85.22.

Young people were having environmental knowledge, environmental attitudes and participation in environmental recreation camp activities. There were higher than before participating in environmental recreation camp activities significant at the level of .05. The results of the research were consistent with the articles of Somyot et al., (2016: 171-187). A study on the development of environmental education activities for the conservation and rehabilitation of forest resources for youth in Kalasin province was conducted. The research found that activity model for environmental education camp for conservation and restoration of forest resources for youth in Kalasin province. There is knowledge, awareness and participation in conservation and restoration of forest resources. There was higher before participating activities significant at the level of .05. The article of Okrit et al., (2016: 209-223). There was studied the development of environmental protection camp activities using the environmental education process. The research found that after organizing environmental conservation camp using environmental education process and attitudes towards high environmental conservation. There was a statistically significant difference at the level of .05 and participated in youth camp activities for conservation. The environment is at the highest level. The article of Wannasakphijit et al., (2015: 209-221). A study on the development of environmental activities using the Green Poem method for undergraduate students in environmental studies. There are a total of 88 poems about environmental conservation. The tools used to organize green poetry activities for environmental conservation are very appropriate. After organizing green poetry activities for environmental conservation, it was found that students had average knowledge, attitude and skill in using poetry for environmental conservation. The results of this study are consistent with similar research findings, such as the article of Phipop et al., (2016: 125-138). The study development rally activity for conservation environment for teachers of social studies under the Office of Secondary Educational Service Area 27, Roi-Et province. The research found that after the rally for conservation activities, it was found that the social education teachers who participated in the activities had higher knowledge and attitude after activities than before the
activities at the significant at the level of .05 and the articles on Noppadon et al., (2016: 90-107). The development of music activities for environmental conservation for music teachers under the Office of Secondary Educational Service Area 27, Roi-Et Province. After organizing music activities for environmental conservation, musicians participating in the program had an average score of knowledge, attitude and writing skills in order to conserve the environment at the significant at the level of .05.

The youth overall gender was found to be different gender, environmental knowledge, environmental attitudes and participation in environmental recreation camp activities was not different. The study shows that different gender does not have the effect of educating the youth about the environment. Environmental attitudes, participation in environmental recreation camp activities varies, it may be based on other variables such as age, academic performance, etc., which require further study in the future. Ozgul, William and Hans (2004: 1527-1546) studied the environmental attitudes of 458 Turkish students aged 4 - 8 years. Education science score analyses the student's economic status and school location. It was found that gender and education levels of the youth were not significantly different. Students with high science scores have a positive attitude towards the environment and high income students with urban students have a higher positive attitude toward the environment than students in low income families and suburban residents.

The total number of youths classified by their domicile was found to be different among the youths with different domiciles. Environmental knowledge, environmental attitudes and participation in environmental recreation camp activities was not significantly different. It shows that the different domiciles of the youth living in the municipality and outside the municipality did not result in the knowledge of the youth. Environmental attitudes Participation in environmental camp activities varies because the youth study in the same school. Getting information on the environmental teaching consistent with the articles of Hsin-Ping and Larry (2005: 419-448). The comparison of behaviors, attitudes, emotions and knowledge that affect the environment between the 8th year students in Canada and Taiwan. Both countries have different traditions and cultures. Data analysis is based on statistics, t-statistics, and multiple regression analysis. The results of environmental studies of the two students shown there are not differences and multiple regression analyzes. The results of environmental studies of the two students, it does not matter whether it is within a group or between groups. In addition, the study found that television is the most influential source of environmental news for both groups and emotional variables. Practical and practical way to know the value of environmental protection was higher. Variation in teaching and learning achievement after training increased significantly at the level of .05.

The environmental knowledge, environmental attitudes and participation in environmental recreation camp activities were not correlated. It demonstrates that environmental knowledge is not an important part in making youth change their attitudes about the environment. It does not affect the youth participation in environmental camp activities. The three variables are not related. This is consistent with the concept. How do we decide on the environment? The Department of Environmental Quality Promotion (2015: 47-67). The studies found that knowledge is a factor within a person. The most researchers believe only a few environmental behaviors are directly related to environmental awareness and awareness. At least 80 percent of research, found that behavior as an environmental behavior and not as an environmental behavior. Cause of motivation is the situation and other internal factors. It is enough to conclude that environmental knowledge is not essential to environmental behavior, but it is clear that the people need basic knowledge about environmental issues. They need to know the behavior that makes them environmentally conscious at the conscious level and it is well known. The fact that one person has awareness or attitude or positive environmental consciousness. It does not mean that people. The behavior or action to the environment is always found that even if people have a positive attitude toward the environment, but it may not show behavior or any action. In a way that is beneficial to the environment. There are also many other factors that have both positive and negative effects on behaviors, degree or level of attitudes or awareness that are different in each person.

Acknowledgement

This research was accomplished with kindness and assistance from Assoc. Prof. Prayoon Wongchantra, Chairman of the Thesis Committee, Dr. Churairat Kurukort, Chairman of the Examination Committee and Asst. Prof. Dr. Adisak Singsiwo, Dr. Namthip Kamrae and Asst. Prof. Chaithat Chansamut, the Examination Committee and lecturer in Environmental Education program. Thank you Dr. Saard Khanasar for helping to organize the environmental recreation and collected information for this research. And thank you family for support throughout.
References
Adisak Singseewo. (2011). *Foundations of Environmental Education*. Mahasarakham University.

Department of Environmental Quality Promotion (2012). *Eco-school for Sustainable Development*. Bangkok.

Department of Environmental Quality Promotion (2015). *How people decide for the environment*. Bangkok.

Department of Physical Education. (2014). *Use of recreation to develop children's minds during adolescence*. Bangkok.

Dillon, J., Rickinson, M., Teamey, K., Morris, M., Choi, M.Y., Sanders, A., & Benefield, P. (2006). *The value of outdoor learning: evidence from research in the UK and elsewhere*. *School Science Review*, 87, 107-111.

Hsin-Ping, Huang & Larry D. Yore. (2005). A Comparative Study of Canadian and Taiwanese Grade 5 Children’s Environmental Behaviors, Attitudes, Concerns, Emotional Dispositions, and Knowledge. *International Journal of Science and Mathematics Education*, 1(4), 419-448.

Kiattisak Charoensook, Prayoon Wongchantra & Banyat Salee. (2016). The Development Training Activity on Local Vegetable Songkhram Watershed Conservation for Student Second Primary Education in Srisongkhram District Nakhonphanom Province. *Journal of Education Mahasarakham University*, 10(3), 51-66.

Noppadon Thiammuangphaen, Prayoon Wongchantra & Banyat Salee. (2016). The Development of music activities to environmental for music teachers of Mathayom suksa education area office 27 Roi-et province. *Journal of Education Mahasarakham University*, 10(1), 90-107.

Office of the National Economic and Social Development Board. (2013). *The study of an analysis of policy impact on country development about environment through studying population projections of Thailand B.E*, 2553-2583. Bangkok.

Okrit Tee-ngarm, Prayoon Wongchantra & Manit Sachiyo. (2016). The Development of Environmental Conservation Youth Camping Using Environmental Education Process. *Journal of Education Mahasarakham University*, 10(4), 209-223.

Ozgul, Yilmaz, William J. Boone & Hans O. Andersen. (2004). Views of Elementary and Middle School Turkish Students Toward Environmental Issues. *International Journal of Science Education*, 26(41), 1527-1546.

Phiphop Sinthuophong, Prayoon Wongchantra and Banyat Salee. (2016). The Development of Rally Activities to Environmental Conservation for Social Education Teachers of Mathayom Suksa Education Area Office 27 Roi-Et Province. *Journal of Education Mahasarakham University*, 10(3), 125-138.

Prayoon Wongchantra. (2015). *Principles of Environmental Education*. Mahasarakham University.

Prayoon Wongchantra. (2016). Teaching of ASEAN Natural Resource and Environment by The Teaching Document for Undergraduate Students. *AEE-T Journal of Environmental Education*, 7(15), 13-22.

Siwina, S. (2009). *Effects of learning environmental education using the good science thinking moves with metacognitive techniques and the teacher's handbook approach on learning achievement, critical thinking, and basic science process skills of Mathayomsuksa 3 students with different science learning achievements*. (Doctoral Dissertation). Mahasarakham University.

Somyot Wichianmit, Prayoon Wongchantra & Banyat Sali. (2016). Development of Environmental Education Camping Activity Model on Forest Resource Conservation and Restoration for Youths in Kalasin Province, Thailand. *Journal of Education Mahasarakham University*, 10(2), 171-187.

Thakorn Sitthichok. (2016). The Learning Process of Environmental Education in Place of Education. *Journal of Humanities and Social Sciences, Thaksin University* 11(Specail), 177-197.

Wannasakphijit Boonserm, Prayoon Wongchantra and Banyat Sali. (2015). The Development of Environmental Activities Conservation Using Green Poem for Students of Environmental Education Program *Journal of Education Mahasarakham University*, 9(3), 209-221.

Copyrights
Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).