
Needs for Developing a School Agricultural Learning Center Model of Students at Praibuengwittayakom School, Praibueng District, Srisaket Province, Thailand

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The objectives of this study were to: 1) explore needs for developing a school agricultural learning center model of students at Praibuengwittayakom school, Praibueng district, Srisaket province; 2) compare needs for developing a school agricultural learning center model of the students at different class levels; and 3) compare needs for developing a school agricultural learning center model of the students whose parents have different occupations. A set of questionnaires was used for data collection administered with the 413 students enrolled in Agriculture subject, academic year 2015. Obtained data were analyzed by using the Statistical Package for finding percentage, mean, and standard deviation. Scheffe test and t-test were used for the hypothesis testing. Results of the study revealed the following:

1. Needs of the respondents included 5 aspects as follows: 1) form of the school agricultural learning center; 2) style of the school agricultural learning center; 3) content used for the teaching/learning facilitation; 4) managerial administration of the school agricultural learning center; and 5) media and other equipment. All of these were found at a high level ($\bar{X} = 4.24$).
2. Regarding the comparison of needs for developing a school agricultural learning center model of the respondents at different class levels, it was found that there was a statistically significance level at .01. Based on Scheffe test, it was found that third year secondary school respondents had different needs for the managerial administration from sixth year secondary school respondents.
3. Regarding the comparison of needs for developing a school agricultural learning center models of the respondents whose parents have different occupations, it was found that there was a statistically significant difference level at .05. This was in terms of 2 aspects: form of the school agricultural learning center and style of the school agricultural learning center. Based on the Scheffe test on needs for the style of the school agricultural learning center, there was difference between the respondents' parents who were government officials or state enterprise

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employees and respondents' parents who were farmers as well as between the respondents' parents who were government officials or state enterprise employees and the respondents' parents who had other occupations. Based on the Scheffe test on needs for the form of the school agricultural learning center, there was difference between the respondents' parents who were government officials or state enterprise employees and the respondents' parents who were farmers. Likewise, there was difference between the respondents' parents who were government official on state enterprise employees and the respondents' parents who had other occupations.

Keywords: needs for developing, school agricultural learning center, Agriculture subject, teaching/learning facilitation, secondary school students

Introduction

Education is an essential aspect for building progress and problem-solving in country development since it is closely related to human resource development especially to be able to deal with problems and exploit existing resources wisely. The 1999 National Education Act put the importance on students and teachers must put the importance on learner center. Section 22 indicated that the educational facilitation must be based on all learner are able to learn and develop themselves in which they are the most important. Besides, section 22 stated that the facilitation of learning process by schools or concerned agencies must be consistent with interest and skills of learners with regard to individual differences in terms of skills, thinking process, dealing with difficulties, application of knowledge for prevention, and problem solving. Thrust, the facilitation of learning activities must include actual experience analytical thinking, continual knowledge seeking, and together with ethics and good values as desired behaviors. Also teachers must be supported to be able to facilitate appropriate learning environment and teaching/learning media for effective learning.

In fact, both teacher and learner may learn at the same time through media and various types of learning sources any place and time. Also, it should have coordination among teachers, students, students' parents or guardians, and all concerned parties in the community in order to develop students based on their potential (Government Gazette, 2002). In addition, a guideline for the facilitation of agricultural teaching/learning is learning by actual practice because it is necessary for this subject so that students will have skills and direct experience and be able to apply it to their livelihood. Hence, the teacher must prepare both learning content and diverse practicing activities both inside and outside the classroom and it will be advantageous if parents or guardians participate in the activities at home (Thanapanyaratchawong, 1988). This aims to make the students or learner truly learns and experiences from various learning sources outside the school by himself continually. In other words, it

promotes and supports the learner to have the occurrence of learning process and be knowledgeable because learning sources can enhance the learner can enhance it (Office of the Basic Education Commission, 2004).

Therefore, it can be seen that the educational facilitation is essential to develop learners to be a perfect human resource. An important component for developing learners is the process of teaching/learning facilitation which enhances learners to learn effectively. A school agricultural learning center is an alternative to develop learners to achieve the goal of learning and be able to apply what they have learned to their daily life activities. There for a study on needs for developing a school agricultural learning model of students is the first step of the development of an agricultural teaching/learning model for effective teaching/learning.

Objectives of the Study

Specifically, the objectives of this study were to:

1. explore needs for developing a school agricultural learning model of students at Praibuengwittayakom School, Praibeung district, Srisaket province;
2. compare needs for developing a school agricultural learning model of the students based on their same level of educational attainment; and
3. compare needs for developing a school agricultural learning model of the students whose parents have the same occupation.

Hypotheses of the Study

1. The students having different level of educational attainment have different needs for developing a school agricultural learning center.
2. The students whose parents have different occupation have different needs for a school agricultural learning center.

Scope and Delimitation of the Study

1. Population in this study consisted of 580 students who were enrolled in Agriculture subject, Praibueng Wittayakom School, academic year 2015. Simple random sampling was used for selecting 413 students. They were: 1) 78 first year secondary school students; 2) 178 third year secondary school students; and 3) 157 sixth year secondary school students.

2. Variables

2.1 Independent variables included sex, age, educational attainment, religion, main occupation of breadwinner, and a number of Agriculture classes per week.

2.2 Dependent variable was needs for developing a school agriculture learning center.

3. Content

Needs for developing a school agricultural learning model of students at Praibuengwittayakom School included the following: 1) styles of the school agricultural learning model; 2) form of the school agricultural learning model; 3) learning content; 4) managerial administration; and 5) media/equipment.

Methodology

1. A set of questionnaires was used for data collection administered with 413 students at Praibuengwittayakom School. The questionnaire consisted of 3 parts as follows:

1.1 General attributes of the respondents

1.2 Needs for developing a school agricultural learning center of the respondents

1.3 Suggestions on a school agricultural learning model of the respondents.

2. The questionnaire was inspected by 5 scholars for improvement based on correctness and consistency (IOC = 0.86). The questionnaire was in the form of a 5-rating scale questionnaire and assessment criteria were as follows: (Patthiyathani 1998: pp. 37-53).

Score	Mean space		Level of Needs
5	4.50-5.00	=	Highest
4	3.50-4.49	=	High
3	2.50-3.49	=	Moderate
2	1.50-2.49	=	Low
1	1.00-1.49	=	Lowest

3. The researcher collected data by himself. Before the data collection, the researcher asked permission and coordination of the school administrator.

4. Obtained data were analyzed by using content analysis and the Statistical Package, i.e. percentage, mean, and standard deviation. Besides, Scheffe test and f-test were also employed.

Results**Table 1.** General attributes of the respondents

Item	n = 413	%
Sex		
Male	145	35.11
Female	268	64.89
Age (Year)		
12	18	4.36
13	61	14.77
14	53	12.83
15	123	29.78
16	1	0.24
17	69	16.71
18	87	21.07
19	1	0.24
\bar{x} = 15.42		
Educational attainment		
1 st year	78	18.89
3 rd year	178	43.10
6 th year	157	38.01
Religion		
Buddhist	412	99.76
Islam	1	0.24
Main occupation of the breadwinner		
Government official	12	2.91
State enterprise employee	4	0.97
Merchant	21	5.08
Farmer	257	62.23
Hired worker	104	25.18
Employee	2	0.48
Personnel of local administrative organization	6	1.45
Other	7	1.69
A number hour of learning agriculture/week		
2 hours/week	413	100

Table 1 shows that most of the respondents (64.89%) were female and Buddhists (99.76%), and their breadwinners were farmers (62.23%). An average age of the respondents was 15.42 years.

Table 2. Needs for developing a school agricultural learning center of the respondents

A school agricultural learning enter model	Level of needs		
	\bar{X}	S.D.	Description
1. Style agricultural learning center model			
1.1 Its location is near school buildings.	3.92	0.80	High
1.2 It has fences preventing animals to destroy yields.	4.17	0.82	High
1.3 It has separate areas suitable for teaching /learning activities.	4.34	0.70	High
1.4 It has adequate water for carrying out agricultural activities.	4.37	0.68	High
1.5 It has an appropriate electrical system.	4.29	0.75	High
1.6 It has fertile soil	4.28	0.70	High
Total (Average)	4.23	0.46	High
2. Form of the agricultural learning center			
2.1 It has separated areas suitable for teaching/learning activities.	4.24	0.70	High
2.2 It has classrooms.	4.22	0.73	High
2.3 It has convenient paths (cemented).	4.34	0.77	High
2.4 It has plots for plant cultivation which are made of bricks or cement.	4.33	0.77	High
2.5 It has stables, pens, and ponds for animal domestication.	4.31	0.75	High
2.6 It has beautiful location and is shady.	4.34	0.75	High
2.7 It has cultivation of diverse plants suitable for livelihoods.	4.33	0.73	High
2.8 It has domestication of diverse livestock's.	4.07	0.81	High
Total (Average)	4.33	0.74	High
3. Learning content			
3.1 It covers plant cultivation and animal domestication	4.15	0.71	High
3.2 It meets with needs of the students.	4.13	0.67	High
3.3 It is consistent with the local condition.	4.23	0.72	High
3.4 It enhances students to perceive the benefits and values of agriculture.	4.57	0.61	Highest
3.5 Students can apply what they have learned to daily life activities.	4.54	0.60	Highest
3.6 It is modern and appropriate with the local condition.	4.23	0.64	High
3.7 Students can participate in preparation, using and maintenance	4.32	0.70	High
Total (Average)	4.34	0.66	High
4. Managerial administration			
4.1 Administers support the project.	3.95	0.78	High
4.2 Teachers participate in the center operation.	3.99	0.81	High
4.3 Parents (guardians) and the community support the project.	3.79	0.85	High
4.4 Students participate in the project operation.	4.26	0.73	High
Total (Average)	4.02	0.66	High

5. Media/equipment				
5.1	Media/equipment is consistent with learning content.	4.30	0.70	High
5.2	Students participate in the preparation/provision of media/equipment for teaching/learning.	4.19	0.71	High
5.3	There are adequate information boards.	4.22	0.72	High
5.4	There are adequate agricultural tools/equipment.	4.22	0.83	High
5.5	There is an agricultural tools/equipment keeping place.	4.26	0.77	High
Total (Average)		4.26	0.73	High
Altogether		4.24	0.44	High

According to table 2, it was found that there was a high level of needs for developing a school agricultural learning center in all of the 5 aspects (\bar{x} = 4.24). Based on its details, it was found that students perceived benefits and values of agriculture at a highest level (\bar{x} = 4.57), followed by students can apply what they have learned to their daily life activities (\bar{x} = 4.54). However, guardians/the community support the project was found to have a lowest average mean score (\bar{x} = 3.79).

Table 3. A comparison of needs for developing a school agricultural learning center of the respondents having different educational attainment

Needs	Education attainment			F	Sig.	Scheffe
	1 st year (n = 78)	3 rd year (n = 178)	6 th year (n = 157)			
1. Style of the school agricultural learning center	4.32	4.20	4.21	1.91	0.14	-
2. Form of the school agricultural learning center	4.35	4.36	4.28	0.53	0.58	-
3. Learning content	4.26	4.30	4.44	2.51	0.08	-
4. Managerial administration	4.07	4.11	3.89	5.26	0.00*	1 st year* 6 th year
5. Media/equipment	4.29	4.32	4.18	1.46	0.23	-
Total Average	4.27	4.26	4.20	0.91	0.40	-

According to Table 3, it was found that the respondents having different educational attainment had no difference in needs for developing a school agricultural learning center with a statistical significance level at .05. Based on the managerial administration, there was a statistically significant difference at 0.01. Results of Scheffe test showed that third year secondary school student respondents were different from sixth year student respondents in terms of managerial administration.

Table 4. A comparisons of needs for developing a school agricultural learning center of the respondents whose breadwinner had different main occupation.

Needs	Main occupation of breadwinners			F	Sig.	Scheffe
	Government official and State enterprise employee (n = 22)	Farmer (n = 257)	Other (n = 134)			
1. Style of the school agricultural learning center	4.46	4.21	4.23	2.94	0.05*	- Government official and State enterprise employee*Farmer - Government official and State enterprise employee*Other
2. Form of the school agricultural learning center	4.71	4.30	4.31	3.10	0.04*	- Government official and State enterprise employee*Farmer - Government official and State enterprise employee*Other
3. Learning content	4.53	4.32	4.36	1.08	0.33	-
4. Managerial administration	4.23	4.00	4.02	1.31	0.27	-
5. Media/equipment	4.38	4.25	4.26	0.28	0.75	-
Total (Average)	4.46	4.22	4.24	3.01	0.05*	- Government official and State enterprise employee*Farmer - Government official and State enterprise employee*Other

According to Table 4, it was found that the respondents whose breadwinners had different main occupation had difference in needs for developing a school agricultural leaning center with a statistical significance level at 0.05. Based on its details, 2 aspects were different: style and form of the school agricultural learning center.

According to Scheffe test, it was found that the respondents whose breadwinners were government official or state enterprise employee, had difference in needs for developing a school agricultural learning center from those whose breadwinners were farmers in terms of its style. Besides, the respondents whose breadwinners had other occupations also had difference in needs for developing a school agricultural learning center in terms of its style.

Regarding form of the school agricultural learning center, there was the difference I needs between the respondents whose breadwinners were government officials or state enterprise employees and those whose breadwinners were farmers or other occupations.

Conclusion and Discussions

According to results of the study, the following could be concluded and discussed:

1. There was a high level of needs for developing a school agricultural leaning center of the respondents in all of the 5 aspects ($\bar{x} = 4.42$). This might be because the respondents want an agricultural learning source having diverse activities which enhance them to perceive the benefits and values of agriculture and be able to apply it to their daily life activities.

2. Needs for developing a school agricultural learning center of the respondents having different educational attainment had no difference in needs with a statistical significance level at .05. Based on its details, it was found that there was statistically significant difference at .01 in terms of managerial administration. Besides, it was found that third year secondary school student respondents had different needs from sixth year secondary school student respondents in terms of managerial administration. This might be because there is the difference in age and educational attainment which have an effect on a level of perception, particularly on the managerial administration. Assistance and cooperation of all concerned parties for educational management is essential for learners to gain knowledge and experience which can be applied to their livelihoods.

3. Findings showed that the respondents whose breadwinners had different occupation had statistically significant difference of needs at 0.05. Based on its detail, it was found that there was difference in two aspects: style and form of the school agricultural learning center. Besides, it was found that there was difference in need for the style of the school agricultural learning center among the respondents whose breadwinners were government officials, state enterprise employees, or farmers. The occupation had statistically significant difference of needs at 0.05. Based on its detail, it was found that there were differences in two aspects: style and form of the school agricultural learning center. Besides, it was found that there were difference in need for the style of the school agricultural learning center among the respondents whose breadwinners were government officials, state enterprise employees, or farmers. The respondents whose parents were government officials or state enterprise employees also had different needs form those whose breadwinners who had other occupations.

This conforms to a study of Saduak, *et.al.* (2015) which found that students whose parents were and were not engaged in agriculture had difference need for developing agricultural teaching and learning with a statistical significance level at 0.05.

Regarding form of the school agricultural learning center, it was found that the respondents' guardians who were government officials or state enterprise employees had different needs from those who were farmers. Likewise, the respondents' guardians who were government officials or state enterprise employees had different needs form those who had other occupation. This might be because family background of each of the students has an effect on the students in the assimilation making them have different needs and access to learning sources.

Suggestions

1. Suggestion for the capability to use data obtained from the study effectively. The following are suggestions:

1.1 Findings shows that the students need for developing the school agricultural learning center at a high level. Thus, the school should support and allocate budgets for the establishment of the agricultural learning center as a source of learning of students.

1.2 Findings shows that the students put the importance on learning content of the school agricultural learning center most. Hence, it should have the development and provision of learning in content which is consistent with needs of the students and it must be up-to-date.

1.3 Parents or gradients and the community should be encouraged to participate in agricultural teaching/learning management by always using the school agricultural learning center. This aims to convince students to perceive the importance of the participation in the school agricultural learning center development.

2. Suggestion for further research, the research, the researcher proposes the following suggestions:

2.1 Investigation on guidelines or important components for developing the school agricultural learning center so as to be sustainable and beneficial to the facilitation of agricultural learning and services.

2.2 It should have research and development on the agricultural teaching learning facilitation by using the school agricultural learning center. This aims to be beneficial to the instillation of good attitudes toward agricultural careers as main occupation of Thai people.

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