
Needs for the Development of a School Agricultural Learning Center (SALC) Model of Students' Guardians, Praibueng Wittaya School, Praibueng District, Srisaket Province

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This study aimed to: 1) explore needs for the development of SALC model of students' guardians, Praibueng Wittaya school, Praibueng district, Srisaket province and 2) compare needs for the development of SALC model based on different class levels of the students. A set of questionnaires was used for data collection administered with 413 breadwinners of the students' families, school 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 comparison.

Results of the study revealed that most of the respondents (73.12%) were female and their main occupation was agriculture (66.23%). More than one-half of respondents (62.83%) were elementary school graduation. The respondents needed for 5 aspects of the development of a SALC model as follows; 1) form of the school agricultural learning center, 2) style of the SALC, 3) learning content, 4) managerial administration, and 5) media/equipment which all of these were found at a high level ($\mu = 4.20$). It was found that there was difference in needs for the development of a SALC model at .01 in 2 aspects: managerial administration and media/equipment.

Regarding the Scheffe test, it was found that there was difference in need for managerial administration between the informants who had high educational attainment (higher than bachelor's degree and those who were bachelor's degree holders. Besides, the respondents who had high educational attainment (higher than bachelor's degree had different needs for managerial administration from those whose educational attainment was lower than bachelor's degree. Based on media/equipment, it was found that there was difference between the informants whose educational attainment was higher than bachelor's degree. Besides, there was difference between the respondents whose educational attainment was higher than bachelor's degree and those whose educational attainment was lower than bachelor's degree.

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Introduction

Education is an important basis for the construction of progress and problem solving of the country. This because education is related to human resource development as well as wise utilization of resources. The facilitation of agricultural teaching and learning helps learners have knowledge, understanding, and skills essential to their livelihoods and be able to cope with various current changes. Besides, they can be able to apply what they have learned to their future occupation. In fact, agricultural education makes learners to perceive a guideline for their future occupation and have good attitudes toward it. They can live in the society happily and be able to coordinate or compete against others in the context of Thai society and the international level (Department of Curriculum an instruction Development, 2002: p.3).

Therefore, a guideline or the teaching/learning facilitation aiming to make learners have the qualifications as mentioned needs to have a learning source as the center of data, information, and experiences supporting learners to be knowledgeable through experiential learning. In addition, the learning source helps expand ideas about the facilitation of learning activities and it can stimulate learners to develop the process of learning activities. Needs for developing a SALC of Praibueng Wittayakom School is one way of the participation in the development of agricultural teaching/learning among students' parents or guardians, the community and concerned personnel. It aims to develop learners to be a perfect man who can apply what they have learner to their daily life activities.

Objectives of the Study

Specifically, this research aimed to:

1. Explore needs for developing a SALC of students' guardians, Praibueng Wittayakom School, Praibueng district Srisaket province.
2. Compare needs for developing a SALC of students' guardians having different level of education attainment.

Hypothesis

Students' guardians having different level of educational attainment have different needs for developing a SALC.

Scope and Delimitation of the Study

This study aimed to explore needs for developing a SALC of students' guardians, Praibueng Wittayakom school, Srisaket Province.

1. Population-the population in this study consisted of 413 students' guardians, Praibueng Wittayakom School, Praibueng district, Srisaket province. Their children were enrolled in Agriculture subject, first semester of academic year 2015.

1.1 The guardians whose children were first year secondary school students (78 persons).

1.2 The guardians whose children were third year secondary school students (178 persons).

1.3 The guardians whose children were sixth year secondary school students (157 persons).

2. Variables

2.1 Dependent variables – Socioeconomic attribute of the respondents such as sex, age, educational attainment, marital status, religion, and main occupation of the breadwinner.

2.2 Independent Variable – Needs for developing a SALC of students' guardians, Praibueng Wittayakom School, Srisaket province.

3. Content

Investigation of data on needs for developing a SALC of students' guardians, Praibueng Wittayakom School, Srisaket province in 5 aspects as follows: 1) form of the school agricultural learning center, 2) style of the SALC, 3) learning content, 4) managerial administration, and media/equipment.

Research Methodology

1. Population: 413 students' guardians whose children were enrolled in agriculture subject, Praibueng Wittayakom School.

2. Research Instrument and Data Collection: questionnaire consisting of 3 parts:

Part 1. Socio-economic characteristics of the respondents.

Part 2. Needs for developing a SALC.

Part 3. Suggestion on form and style of the SALC

The questionnaire was proposed to 5 scholars to check correctness and consistency (IOC = 0.74). The questionnaire was in the form of 5 rating scales as follows:

5 = A highest level of needs

4 = A high level of needs

- 3 = A moderate level of needs
- 2 = A low level of needs
- 1 = A lowest level of needs

The assessment criteria were as follows: (Patthiyathanee, 1998: pp.37-53)

- 4.50-5.00 = A highest level of needs
- 3.50-4.49 = A high level of needs
- 2.50-3.49 = A moderate level of needs
- 1.50-2.49 = A low level of needs
- 1.00-1.49 = A lowest level of needs

The researcher collected data by himself by having the students bring the questionnaire to their guardians.

3. Data analyses–Content analysis and statistical data analysis by using the statistical package i.e. percentage, mean, and standard deviation. Scheffe test and t-test were also employed.

Results of the Study

Table 1. Socio-economic characteristics of the respondents.

Items	N = 413	%
Sex		
Male	111	26.88
Female	302	73.12
Age		
Less than 41 years	147	35.59
50-41years	197	47.70
More than 50 years	69	16.71
Educational attainment		
Elementary school	276	66.83
Lower secondary school	67	16.22
Upper secondary school	54	13.08
Bachelor's degree	12	2.91
Higher than bachelor's degree	4	0.97
Marital status		
Married	367	88.86
Divorced	26	6.30
Single	20	4.84
Religion		
Buddhist	406	98.31
Islam	2	0.48
Christ	1	0.24
Other	4	0.96
Main occupation of the breadwinner		
Farmer	257	62.23
Hired worker	104	25.18
Merchant	21	5.08
Government official	12	2.91
Personnel of local administrative organization	6	1.45
State enterprise employee	4	0.97
Employee	2	0.48
Other	7	1.69

Table2 . Needs for developing a school agricultural learning center.

The school agricultural learning center	Level of needs		
	μ	S.D.	Description
.1Style of the school agricultural learning center			
1.1The area is near school buildings	4.14	0.81	High
1.2Having fence to prevent pests	4.13	0.77	High
1.3The area is divided properly suitable for teaching/learning activities	4.21	0.73	High
1.4Having an appropriate water system	4.16	0.74	High
1.5Having an appropriate electrical system	4.31	2.62	High
1.6Having fertile soil	4.21	0.79	High
.2Form of the school agricultural learning center			
2.1The area is divided properly based on type of teaching/learn activities such as arable area and pastoral area	4.25	0.71	High
2.2Having an area for students to stay together	4.19	0.74	High
2.3Having convenient path such as concrete floor	4.27	0.75	High
2.4Having plant cultivation plots and livestock domestication place made of cement or brick	4.30	2.62	High
2.5Having pen/stable/pond for domestication of various kinds of farm animals	4.21	0.74	High
2.6The area is decorated beautifully with shade	4.18	0.76	High
2.7Having diversity of plant types which is appropriate with lifestyle	4.32	0.69	High
2.8Having many kinds of farm animals	4.15	0.76	High
.3Learning content			
3.1Cover both crop cultivation and livestock domestication	4.26	0.69	High
3.2Consistency with needs of students	4.26	2.08	High
3.3Consistency with local condition	4.23	0.69	High
3.4Encourage students to realize benefits and value of agriculture	4.32	0.74	High
3.5Students are able to apply it to daily life activities	4.42	0.63	High
3.6Modern and up-to-date to current situations	4.20	0.74	High
3.7Students participate in activities of the school agricultural learning activities such as care-taking and using	4.25	0.75	High
4. Managerial administration			
4.1School administrations support the project	4.16	0.73	High
4.2Teachers participate in the center	4.15	0.78	High
4.3Guardians and the community participate in the center establishment and development	4.01	0.82	High
4.4Guardians and the community participate in activity planning of the center	4.01	0.81	High

Table2 . Continued

The school agricultural learning center	Level of needs		
	μ	S.D.	Description
4.5Students participate in planning on the establishment and development of the center	4.10	0.80	High
4.6Students participate in planning on activities of the center	4.10	0.81	High
.5Media/equipment			
5.1Media are consistent with the learning content	4.41	0.85	High
5.2The community/guardians participate in the preparation of and provision of media/equipment	4.04	0.84	High
5.3Having adequate media/equipment such as hoe, harrow and curved spade	4.23	0.83	High
5.4Having adequate materials for agricultural practice	4.23	0.81	High
5.5having an agricultural equipment keeping place	4.17	0.84	High

Table3 . A comparison of needs for developing a SALC of the respondents having different level of educational attainment.

Needs	Educational attainment			F	Sig	Scheffe
	Lower than bachelor's degree (n = 397)	Bachelor's degree (n = 12)	Higher than bachelor's degree (n = 4)			
Style of the SALC	4.20	4.02	4.33	0.43	0.65	-
Form of the SALC	4.23	4.28	4.53	0.48	0.61	-
Learning content	4.27	4.40	4.35	0.38	0.68	-
Managerial administration	4.10	4.23	2.70	13.25	*0.00	-Higher than bachelor's degree and lower than bachelor's degree -Higher than bachelor's degree
Media/equipment	4.23	4.06	2.80	6.15	*0.00	-Higher than bachelor's degree and lower than bachelor's degree -Higher than bachelor's degree
μ	4.21	4.20	3.74	1.77	0.17	-

According to Table 3, the difference in education attainment of the respondents had no effect on the difference in needs for developing a SALC. Based on it details, however, there were 2 aspect having difference at .05: managerial administration and media/equipment. According to Scheffe test it

was found that the respondents having educational attainment higher than bachelor's degree had different needs from those whose educational attainment was bachelor's degree in terms of managerial administration. The respondents whose educational attainment was higher than bachelor's degree had different needs from those whose educational attainment was lower than bachelor's degree in terms of the development of the school agricultural learn center. Based on media and equipment, it was found that the respondents whose educational attainment was higher than bachelor's degree had different needs from those whose educational attainment was bachelor's degree and lower than bachelor's degree.

Conclusion and Discussion

According to results of the study, it could be concluded as follows:

.1As a whole, there was a high level of needs for developing a SALC ($\mu = 4.20$) in 5 aspects: 1) style of the SALC; 2) form of the SALC; 3) learning content; 4) managerial administration; and 5) media/equipment. This might be because parents or guardians play important roles in the determination of a guideline for schooling of their children. Thus, they need to find learning sources as a SALC as important media on teaching/learning activities. Based on its details, it was found that learning content can be applied to daily life activities had a highest average mean score ($\mu = 4.42$), followed by media were consistent with the learning content ($\mu = 4.41$). This might be because parents or guardians want their children to be able to apply what they have learned to their daily life activities. Besides, they put the importance on teaching/learning media helping their children have a better standing on what they are learning. This conforms to the National Education Act, 1999 (Chongpipat, 2003: p. 73) which indicate that parents or guardians should help one another on the development of children (learners) based on their potential (Section 8(2)). The educational management must put the importance on family and concerned agency participation. In addition, Section 9(6) indicated that the process of educational management must have coordination among parents/guardians, and school in order to develop potential of students. Tritonthip (2010: abstract) claimed that most parents/guardians participate in the educational management in terms of academy, teaching/learning activities, and schools structures.

.2Regarding the comparison of needs for developing the SALC of the respondents having difference in educational attainment, it was found that there was no difference in needs for it and thus it rejected the hypothesis. Based on its details, it was found that there were 2 aspects having difference at .05: managerial administration and media/equipment. Based on Scheffe test, it was

found that the respondents whose educational attainment was higher than bachelor's degree had different needs from those whose educational attainment was bachelor's degree or lower in terms of managerial administration. In terms of media/equipment, it was found that the respondent whose educational attainment was higher than bachelor's degree had different needs from those whose educational attainment was bachelor's degree or lower. This might be because parents or guardians believe and expect that the school can teach their children to be able to apply what they have learned to their daily life activities or livelihood based on experiential learning. In addition, they might perceive that the teaching/learning facilitation in the form of learning center can be fully supported by school administrators, teachers, and concerned personnel for effective learning. Besides, adequate media/equipment can enhance students or learners learn effectively. This conforms to Meephukham (2015) who found that there was no difference in the difference of educational attainment and age of parents or guardians in the participation of educational management based on decision-making about the school policy, management of curricular programs, teaching/learning facilitation, assistance of learning at home, and a relationship between the school and parents of the student.

Suggestions

The following were suggested for effective using of data obtained from results of the study:

1. The school should facilitate agricultural teaching/learning which is consistent with daily life activities of the learner.
2. Parents or guardians should participate in the teaching/learning facilitation more than ever.
3. The student should apply what he has learned and experienced to his daily life activities.
4. The student should apply what he has learned and experienced to his future occupation or study.
5. Parents or guardians should support and put the importance on agricultural teaching/ learning.

For further study, the researcher has suggestions for interested persons as follows:

1. The study should involve parent participation in the development of a SALC.
2. It should have a study for development on the teaching/learning facilitation by making use of the school learning sources.

References

- Chongpipat, R. (2003). Manual for Teacher and Guardians: Teaching and Learning in Accordance with the National Education Act. 6th edition. Bangkok: Wattanapanich Press.
- Department of Curriculum and Instruction Development. (2002). A manual on the learning facilitation of career and technology learning content group. Bangkok: The express Transportation Organization of Thailand (ETO) Press.
- Meephukham, P. (2015). Guardian Participation in Educational management, Baan Tondamrongwit School. Sakhonnakhon Primary School Office, Region 1. (Online), 10 October 2015. http://www.northbkk.ac.th/gs/thesis/abstract_/531300369pdf.
- Pathiyathanee, S. (1998). Educational Measurement. 10th Edition. Faculty of Education, Mahasarakham University.
- Tritonthip, P. (2010). Guardian Participation in Educational Management of Lanna International school, Chiang Mai Province. Independent study, Master of Education (Educational Administration), Chiang Mai University.