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## The Need of Students and Student's Parents on Development of Learning and Teaching Agricultural Subjects of Phraibueng Wittayakhom School, Sisaket Province

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Saduak, W., Sangnate, W. and Pongsuk, P. (2015). The need of students and student's parents on development of learning and teaching agricultural subjects of Phraibueng Wittayakhom School, Sisaket Province. *International Journal of Agricultural Technology* 11(2):473-483.

**Abstract** The purposes of this study were: 1) to study of the need of students and student's parents on development of learning and teaching agricultural subjects of Phraibueng wittayakhom school, Sisaket province, and 2) to compare the need of development of learning and teaching agricultural subjects between students and student's parents. Sampling group of the research was 163 students who study on agricultural subjects and 170 student's parents, selected by using Simple Random method. The data were analyzed by percentage, mean, standard deviation, and t-test. The results were as follows: 1) the need of students on development of learning and teaching agricultural subjects in 5 aspects including (1) subject content, (2) teacher, (3) media and equipment, (4) measurement and evaluation, and (5) other aspects. In overall that students were need of development of learning and teaching agricultural subjects at a high level. The comparison between students based on family farming and non-family farming found that the need for development of teaching agriculture in general and the difference is statistically significant at the 0.05 level, except for the measurement and evaluation aspect were no significant difference statistically significant. 2) the need of student's parents on development of learning and teaching agricultural subjects in 5 aspects. In overall that student's parents were need of development of learning and teaching agricultural subjects at a high level. The comparison between student's parents based on family farming and non-family farming were found that the need for development of teaching agriculture in general and the difference is statistically significant at the 0.05 level, except for the subject content aspect were no significant difference statistically significant. 3) comparison of need of development on learning and teaching agricultural subjects between students and student's parents were found that in both of overall and each aspect were high level.

**Keywords:** needs, learning and teaching, agricultural subjects, high school students, parents of the students

### Introduction

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A guideline for learning reform and development of Chapter 4, Nation Education Act (1999) and the amendment in 2002 (2<sup>nd</sup> issue) places the importance of students and learning facilitation. Section 22 indicates that educational management must be on the basis of all students can learn and develop themselves and they are the most important in classroom activities. The educational management process must promote students to be able to develop themselves naturally based on their potential. Section 24 reveals that the learning facilitation, the school and concerned agencies must prepare learning content and activities which are consistent with interest and skills of learners and individual differences. This was based on thinking process, problem management and application of knowledge for problem prevention and solving.

Learning facilitation can be done through actual situations and experiential learning. Besides, it can be in the form of the combination of various learning contents. Meanwhile, learners must be instilled on code of conduct (ethic and virtue), good values, and desired behaviors in all subjects. Teachers are promoted and supported to facilitate appropriate learning environment and teaching media which enhance effective learning of students. In addition, research can be part of the learning process. The teacher and students may learn together through teaching/learning media and various types of learning source. That is, learning facilitation can be practiced every time and place. Also, it should have collaboration among teachers, parents or guardians, and concerned personnel in the community for the development of students' potential (Government Gazette, 2002). In addition, the National Social and Economic Development Plan (Issue 8-11) places the importance of continual human resource development. That is, human resource or people in the country are the center for development in terms of potential, knowledge, skills, etc. Consequently, the can sustainably help develop the country in all aspects (Puangsuk, 2014).

Based on afore mentioned, it can be said that educational management is essential for developing learners. Learning facilitation must promote learners to have the occurrence of learning. Besides, participation in learning/teaching facilitation of students and their parents/guardians is important in the determination of a guideline for appropriate classroom activities. This can lead to the development of learners to achieve the goals of learning. That is, they are able to apply their knowledge to daily life activities effectively. Thus, this study can be the starting point of the development of agricultural subject teaching/learning facilitation for a highest effective learning of learners.

### ***Objectives of the Study***

Specifically, this research aimed to:

1. Explore needs for the development of agricultural subject teaching/learning facilitation of students and their parents/guardians of Phraibueng Wittayakhom school, Sisaket province.
2. Compare their needs for the development of agricultural subject teaching/learning facilitation.

### ***Scope and Limitation of the Study***

The scope and limitation this research were as follows:

2.1 Population: Matthayomsuksa 6 students and their parents/guardians of Phraibueng Wittayakhom school, Sisaket province taking up agricultural subject in academic year 2014.

2.2 Variables

- Dependent variable: needs for the development of agricultural subject teaching/learning facilitation of Matthayomsuksa 6 students and parents/guardians of Phraibueng Wittayakhom School, Sisaket province.

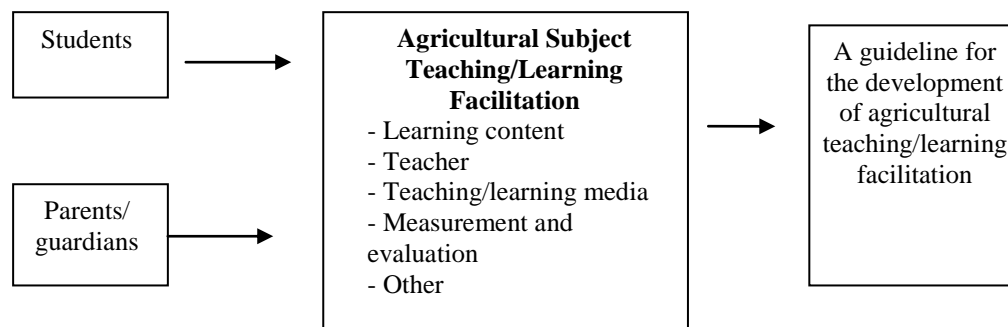
- Independents variable: Matthayomsuksa 6 students and their parents/guardians.

2.3 Content: the investigation of data on needs for Phraibueng Wittayakhom school, Sisaket province included the following 5 aspects:

- 1) Learning content
- 2) Teacher
- 3) Teaching/learning media
- 4) Measurement and evaluation
- 5) Others

### ***Conceptual Framework***

The conceptual framework in this research was adapted from that of Abhisit (Abhisit, 1981), and Arphapirom (Arphapirom, 1988) showing basic components of the process of agricultural teaching/learning. This was based on the following 5 aspects: learning content, teacher, teaching/learning facilitation, measurement and evaluation, and others as shown in Fig. 1.



**Figure 1.** The conceptual paradigm of the study

**Materials and methods**

**1. Population**

1) 119 Matthayomsuksa 6 students of Phraibueang Wittayakhom school, Sisaket province, 163 corresponded to the questionnaire (81.90%).

2) 199 parents/guardians of Matthayomsuksa 6 students of Phraibueang Wittayakhom school, Sisaket province, 170 corresponded to the questionnaire (85.42%).

**2. Research Instrument**

In this study, a set of questionnaires was used for data collection. It was investigated and prepared then submitted to 5 scholars for correction and improvement. The 3 rating questionnaire consisted of 3 parts as follows:

Part 1: General data of the respondents

Part 2: Needs for the development of agricultural subject teaching/learning facilitation

Part 3: Suggestion for the development of agricultural subject teaching/learning facilitation.

The interpretation criteria used in this study is shown below.

$$\frac{\text{Highest criterion} - \text{Lowest criterion}}{\text{A number of all criteria}} = \frac{3 - 1}{3} = 0.66$$

Legend:

Scale Limits	=	Descriptive Equalents (Needs)
2.34– 3.00	=	High
1.67– 2.33	=	Moderate
1.00– 1.66	=	Low

### 3. Data Analysis

This included content analysis and statistical analysis by using the Statistical Analysis: percentage, mean, and standard deviation t-test (Independent Samples Test) was also used.

### Results

#### Results of the study were as follows:

1. Needs for the development of agricultural subject teaching/learning facilitation of the student respondents. Findings showed that most of the student respondents were female (71.17%) and years old (62.58%), only 36.20 percent were 18 years old. An average age of the student respondents was 17.39 years old. All of them (100%) were Buddhists. Occupation of most of the parent respondents (82.21%) were farming and the rest were general hire works (15.95%), government service (1.23%), and merchant (0.61%), respectively.

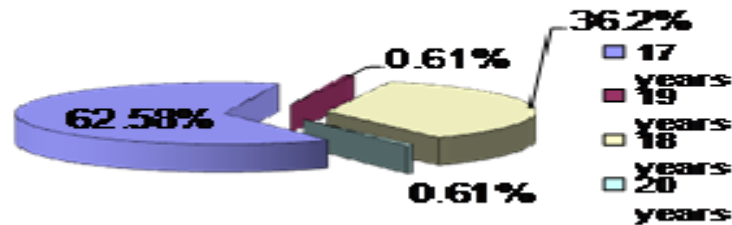
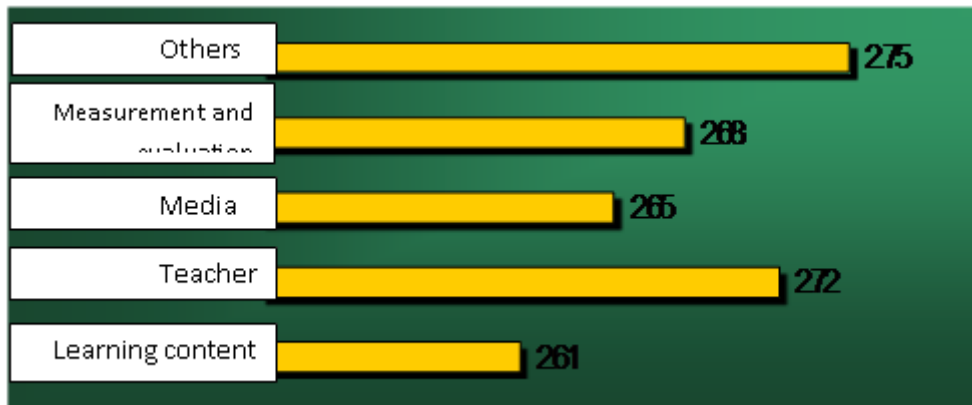


Figure 1. Age rang of the students respondents

Regarding needs for the development of agricultural subject teaching/learning facilitation of the students respondents, it was found at a high level in terms of the following 5 aspects: learning content, teacher, teaching/learning media, measurement and evaluation, and others.



Legend:

Scale Limits  
2.34 – 3.00  
1.67 – 2.33  
1.00 – 1.66

Descriptive Equivalents (needs)  
High  
Moderate  
Low

**Figure 2.** Needs for the development of agricultural subject teaching/learning facilitation in terms of the 5 aspects

Results of the study showed that there was a statistically significant difference (0.05) in needs for the development of agricultural subject teaching/learning facilitation between the student respondents from farming families and those not from farming families. Likewise, there was a statistically significant difference between the two students' respondent groups in terms of learning content, teacher, teaching/learning media, and others. However, there was no statistically significant difference in terms of measurement and evaluation (0.05).

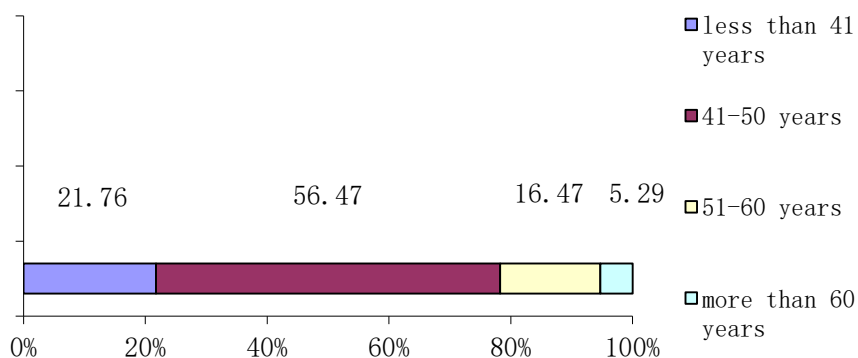
**Table 1.** Needs for the development of agricultural subject teaching/learning facilitation of the students having different family background

Needs	Family background						t	-2tailed Sig.
	Farming (N = 134)			Not farming (N = 29)				
	$\bar{X}$	S.D.	Level	$\bar{X}$	S.D.	Level		
Learning content	2.66	0.34	High	2.37	0.33	High	4.162	0.000*
Teacher	2.76	0.33	High	2.57	0.30	High	2.735	0.007*
Teaching/learning media	2.68	0.34	High	2.51	0.32	High	2.309	0.022*

Measurement and evaluation	2.69	0.36	High	2.64	0.27	High	0.947	0.348
Others	2.78	0.32	High	2.60	0.29	High	2.821	0.005*
Total	2.71	0.29	High	2.54	0.25	High	2.968	0.003*

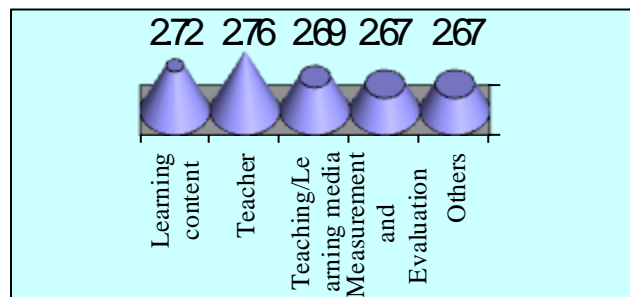
**Remarks** \*Statistically significant difference at 0.05

Need for the development of agricultural subject teaching/learning facilitation of parent/guardian respondents. Finding showed that most of the parent respondents (70.59%) were female. Age range of more than one-half of them (56.47%) was 41-50 years, followed by less than 41 years (21.76%). As a whole, an average age of the parent respondents was 46.38 year. More than one-half of them were elementary school graduates, followed by lower-secondary and upper secondary school graduates (20.59 and 16.47%, respectively). All of the parent respondents (87.94%) were Buddhists and most of them (82.94%) were married. The main occupation of most of the parent respondents (81.18%) was farming, followed by general hired worker (12.35%).



**Figure 3.** Age range of the parent respondents

Regarding needs for the development of agricultural subject teaching/learning facilitation of the parent respondents, it was found at a high level of all aspects: learning content, teacher, teaching/learning media, measurement and evaluation, and others.



Legend:

Scale Limits	Descriptive Equivalents (needs)
2.34 – 3.00	High
1.67 – 2.33	Moderate
1.00 – 1.66	Low

**Figure 4.** Needs for the development of agricultural subject teaching/learning facilitation of the parent respondents in terms of 5 aspects

Findings showed that, as a whole, there was a statistically significant difference in needs for the development of agricultural subject teaching/learning facilitation (0.05) between the parent respondents doing farming and those do not. Likewise, there was a statistically significant difference in the needs based on teacher, teaching/learning media, measurement and evaluation, and others except learning content.

**Table 2.** Needs for the development of agricultural subject teaching/learning facilitation of the parent respondents based on family background (occupation)

Needs	Family background						t	-2tailed Sig.
	Farming (n = 138)			Not farming (n = 32)				
	$\bar{X}$	S.D.	Level	$\bar{X}$	S.D.	Level		
Learning content	2.73	0.31	High	2.66	0.33	High	1.101	0.273
Teacher	2.79	0.30	High	2.63	0.35	High	2.507	0.013*
Teaching/Learning Media	2.72	0.32	High	2.55	0.39	High	2.599	0.010*
Measurement and Evaluation	2.71	0.35	High	2.47	0.35	High	3.484	0.001*
Others	2.70	0.33	High	2.53	0.34	High	2.602	0.010*
Total	2.73	0.28	High	2.57	0.29	High	2.912	0.004*

**Remark** \*statistically significant difference at 0.05



A comparison of needs for the development of agricultural subject teaching/learning facilitation of the student and parent respondents. Findings showed that, as a whole, the parent respondents had a high level of need for the development of agricultural subject teaching/learning facilitation in all of the five aspects.

**Table 3.** A comparison of needs for the development of agricultural subject teaching/learning facilitation of the students and parent respondents

Items	Needs					
	Students )N = 163)			Parents )N = 170)		
	X	SD.	Level	X	SD.	Level
Learning content	2.61	0.35	High	2.72	0.32	High
Teacher	2.72	0.33	High	2.76	0.32	High
Teaching/Learning Media	2.65	0.35	High	2.69	0.34	High
Measurement and Evaluation	2.68	0.34	High	2.67	0.36	High
Others	2.75	0.33	High	2.67	0.34	High
<b>Total</b>	<b>2.68</b>	<b>0.29</b>	<b>High</b>	<b>2.70</b>	<b>0.29</b>	<b>High</b>

## Conclusion

Based on results of the study conclusion and discussions were as follows:

1. As a whole, the students and their parents of Phraibueang Wittayakhom School, Sisaket province had a high level of needs for the development of agricultural subject teaching/learning facilitation based on the following 5 aspects: learning content, teacher, teaching/learning media, measurement, and evaluation, and others. This might be because of the following:

1.1 Learning content There is the progress in agricultural technology and adaption of agricultural practice at present. However, the learning content is not consistent with needs of the local community and benefits of learners in terms of knowledge applied to daily life activities.

1.2 Teacher The teacher is knowledgeable in agriculture, active, up-to-date and able to give suggestions, solve problems, and encourage students to activity participate in classroom activities.

1.3 Teaching and learning media Various media can be used in agricultural classroom activities but an amount of media is not enough or ready for using. However, the teacher has provided the media and local materials for teaching and learning facilitation. Besides, government agencies provide training places for learning in the actual situations.

1.4 Measurement and evaluation In fact, this should be done in the actual situation but there are many factors not contribute to the measurement and evaluation e.g. climate conditions, farm animals, disease, pests etc.

1.5 Others Agricultural subjects are mostly in the form of experiential learning. Thus, constructed learning sources still not are fully responsive to the teaching and learning facilitation. Besides, some learning sources were not so completed in terms of agricultural diversity.

2. Needs for the development of agricultural subject teaching and learning facilitation of the students having different family background. That was the students form a farming family and not farming family had a high level of the need in terms of learning content, teacher, teaching and learning media, and others but there was a statistically significant difference at 0.05. Meanwhile, there was a statistically significant difference (0.05) between the two groups of parents in terms of teacher, teaching/learning media, measurement and evaluation and others even though they had a high level of the needs.

3. A comparison of needs for the development of agricultural teaching and learning facilitation of the students and their parents. As a whole, both of the two groups had a high level of the needs but the parent group had a higher average mean score than that of the students group in terms of learning content and teaching/learning media. However, the parent group in terms of measurement/evaluation and others. This might be because the parents have better knowledge and understanding as well as interaction with the said aspects. For the measurement and evaluation, the parents do not perceive its process but the students do.

## **Suggestions**

The following were details of suggestions:

1. in order to effectively apply data obtained form results of study, the following are proposed:

1) The school should support and allocate budgets for the facilitation of agricultural subject teaching and learning more than ever;

2) Parents/guardians should participate in the facilitation of teaching/learning activities more than ever;

3) Students should apply knowledge and experience to their daily life activities;

4) Students should apply knowledge and experience to their farther education and future careers; and

5) Parents/guardians should place the importance of the facilitation of agricultural teaching/learning more than ever.

2. Suggestions for further research are:

1) Research and development on the facilitation of agricultural teaching/learning at a higher level should be conducted and

2) Research and development on agricultural teaching/learning in learning sources of the school should also be conducted.

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