

This file has been cleaned of potential threats.

If you confirm that the file is coming from a trusted source, you can send the following SHA-256 hash value to your admin for the original file.

1256d71727c96a4176ad6280b298bc322d3c36d8b87afcbcf712c93b2a489be7

To view the reconstructed contents, please SCROLL DOWN to next page.

# SCIENCE LEARNING ATTITUDES OF STUDENTS AT SUAN SUNANDHA RAJABHAT UNIVERSITY, THAILAND.

Thanunpon Khongkhao\* & Nich Wongsongja\*\*

\*, \*\* *Faculty of Science and Technology, Suan Sunandha Rajabhat University,  
Bangkok, Thailand*

E-Mail: \* *thanunpon.kh@ssru.ac.th*, \*\* *nich.wo@ssru.ac.th*

## ABSTRACT

The aims of this research is to study and compare science learning attitudes of students at Suan Sunandha Rajabhat University. The study was conducted by quantitative method. Data were collected by questionnaires from students at Faculty of Science and Technology. The descriptive statistics including Percentage, Mean, and Standard Deviation, Dependent Samples t-test and One-Way Analysis of Variance (ANOVA) and the individual differences by LSD method were applied for data analysis. It was found that 1) The level of science learning attitude of students was in the high level, every item was firstly Utilization of Science, followed by science learning and need for science education, respectively. 2) The results of the comparison of science learning attitudes were that students of different sex had science attitude in science education and different knowledge utilization. The suggestion of this research is science education should be used to Public relation and presentation to the importance of science and applying it in various careers to students through more modern media.

**Keywords:** Science Learning, Attitude, Student

## INTRODUCTION

Nowadays, Communication and technology in the digital world, there are many roles for humans from facilitation to learning and understanding of nature, which involves various technologies. The creation of new knowledge able to integrate various sciences Understand together, the use of media and the integration of technology in learning. Therefore, create knowledge and understanding. Affect awareness create a positive attitude for learning, especially science and technology learning is a new way for students to test repeatedly Until understanding the phenomena, Knowledge of science is not only used to improve the quality of life but also helps people to have correct knowledge about the use and care. As well as conservation, development of the environment and natural resources in a balanced and sustainable way, in developed countries, the continuous emphasis is placed on scientific knowledge by beginning with the development of education [1].

Tom Koran, co-director of the Columbia University Educational Policy Research Institute Researchers and teaching development in the United States thinks that science helps citizens to help themselves and others. Including the nation in the event of floods and tsunamis, therefore, investment and development of science and mathematics, especially in the applied aspect, will receive higher social returns than the general public understands and says, "Teachers need to understand and have skills in knowledge management of learners. In order to be able to design learning processes throughout the lesson period effectively Such as lesson problem setting Give students the opportunity to exchange and ask questions from their classroom learning experience and summarize the knowledge in the classroom to practice the skills of linking knowledge from the classroom and analytical skills to exchange

with others, In which the teacher should continuously give suggestions to the children Which are important for the development of children's learning."

However, organizing teaching and learning activities, there are some problems and obstacles that cause teaching and learning to not reach the set objectives, there are many reasons that can be analyzed from current conditions found that the cause is caused by various factors, Regarding the teachers who provided an education that did not correspond with the learning process of the students. Focus on teaching content rather than the thinking process, methods, and techniques, lack of teaching activities, As for the students who are still not interested in teaching and learning activities Little enthusiasm Can't see content relationships Lack of thinking skills And group process skills result in a low level of student achievement and a curriculum that is partially complex and difficult to understand, Teaching and learning materials are few and do not attract the attention of students. The course content, teaching, and learning management, also emphasizes teacher-centered teaching. Resulting in problems in measurement and evaluation by focusing on knowledge management as a necessity rather than a measurement of knowledge and competency derived from actual practice [2].

From the above, it is found that communication and modern technology have a role to humans. The matter of facilitation to learning and understanding in various technologies, the integration of technology in learning and creating knowledge and understanding creates a positive attitude for learning. Especially science and technology learning can be used for a variety of purposes, Teaching and learning activities found problems and obstacles arising from teachers who focus on teaching content rather than the thinking process, lacking methods and techniques for organizing teaching and learning activities as for the students who are still not interested in teaching and learning activities, and the curriculum in which some content is difficult to understand. Resulting in important characteristics and behavioral indicators of students with scientific attitudes does not correspond to the course goals, the researcher saw the importance of the project and therefore conducted a research project on Study of scientific learning attitudes. In order to know the scientific attitude of students with the aim to be a guideline for further education management.

## **OBJECTIVE**

To study and compare science learning attitudes of students at Suan Sunandha Rajabhat University.

## **METHODOLOGY**

### **Population and sample**

The population used in the research were students at Faculty of Science and Technology. [3] and the sample was students at Faculty of Science and Technology who learning about science and enrolled in the 2<sup>nd</sup> semester of the academic year 2019.

### **Research tool**

Questionnaire about study science learning attitudes of students.

### **Data analysis**

Analyze personal information and opinions by presenting the analysis results as a percentage and characteristics as a rating scale are the average (Mean), Standard Deviation (S.D.), T - test dependent (t-test), Analysis of variance (ANOVA) and the individual differences by LSD method. For the criteria for translating the average, the researcher used the criteria of Best [4] which has the following:

Average	4.21 - 5.00	means	the highest level
Average	3.41 - 4.20	means	the high level
Average	2.61 - 3.40	means	the moderate level
Average	1.81 - 2.60	means	the low level
Average	1.00 - 1.80	means	the minimum level

## RESULT

1. The results of the demographic analysis of students found that most are female 77.5% were second-year students 65.83%, first year students and a third year students, respectively.

2. The results of the scientific attitude analysis of students classified by each aspect. It was found that science learning attitudes of students had high level in every item, firstly, in Utilization of Science, followed by science learning attitude of student and need for science education, respectively in Table 1.

**Table 1.** Mean and standard deviation of the science learning attitudes of students

SCIENCE LEARNING ATTITUDES OF STUDENTS	MEAN	S.D.	INTERPRETATION
1. Science learning	4.14	.55	high level
2. Need for science education	4.01	.60	high level
3. Utilization of Science	4.22	.91	highest level

3. Male and female students from Suan Sunandha Rajabhat University had science learning attitudes of students in overall, need for science education and utilization of Science were different, while male students had more Science learning attitude of student than females. The students in different years had the science learning attitudes of students not different. Result showed in Table 2 and 3.

**Table 2.** Comparison of science learning attitudes of students classified by gender

SCIENCE LEARNING ATTITUDES OF STUDENTS	gender	MEAN	S.D.	t	df	P-value
1. Science learning	male	4.35	0.41	2.63*	59.07	0.010
	female	4.09	0.58			
2. Need for science education	male	4.10	0.50	0.91	118	0.362
	female	3.98	0.63			
3. Utilization of Science	male	4.61	1.56	2.61*	118	0.010
	female	4.10	0.56			
Overall	male	4.38	0.57	3.18*	118	0.001
	female	4.02	0.49			

\* Significant level 0.05

**Table 3. Comparison of science learning attitudes of students classified by year**

<b>SCIENCE LEARNING ATTITUDES OF STUDENTS</b>	<b>YEAR</b>	<b>MEAN</b>	<b>S.D.</b>	<b>F</b>	<b>p- value</b>
1. Science learning	1	4.111	0.551	0.769	0.466
	2	4.135	0.566		
	3	4.375	0.375		
2. Need for science education	1	4.144	0.551	1.007	0.369
	2	4.081	0.514		
	3	3.954	0.642		
3. Utilization of Science	1	4.208	0.502	0.653	0.522
	2	4.006	0.602		
	3	4.352	1.492		
Overall	1	4.147	0.561	2.284	0.106
	2	4.325	0.354		
	3	4.215	0.906		

## DISCUSSION

According to the findings, most of the students were 2<sup>nd</sup>-year female students with the highest level of scientific attitude in every item, firstly, Utilization of Science, followed by science learning, and need for science education, respectively, Students of different gender had a general attitude towards science. Science learning and Utilization of Science differently, the male students had a science attitude more than female and the students with different years had no different science attitudes, show that Males have higher behaviors and interests in using programs and computers than females, Including the nature of learning in each science, resulting in behavior and interest in science vary according to usage. Consistent with the concepts of Khanchai Athikeat and Thanarakarn Thuankaew (2019) [5] mention the important factors that influence the 4 methods of study are individual differences. Readiness in organizing appropriate lessons Time spent in education that relates to the nature of each subject and learning efficiency with learning innovations, applying concepts or new learning management processes Used to manage to learn in problem-solving or development of learning that is as effective as the goal Will help make education and teaching more effective, Students are able to learn quickly, more efficiently than before. Motivation to study and save time in studying as well.

## SUGGESTION

Student's science learning need should be used to help publicize the interest in science teaching and should present the importance of science and its use in various professions To the people with modern media And should study the relationship between the need to study science and their application in various professions And trends of scientific attitudes for quality of life development.

## ACKNOWLEDGMENTS

Thank you to Suan Sunandha Rajabhat University and Research and Development Institutions that support this research and thank you the Faculty of Science and Technology for their important research and dissemination of national and international research articles.

## REFERENCES

- [1] Pettaweeponadej, K. (2007). *The best way to teach science leads to ... learning management of modern teachers*. Bangkok: Aksorn Chareon Tut.
- [2] Natthawut, J. (2011). *A study on science learning achievement and scientific attitude of matthayomsuksa 3 students the cippa instructional model and through team-game-tournameet*. Srinakharinwirot University.
- [3] Educational Administration, Faculty of Science and Technology. (2018). *Student Information*. Retrieved September 10, 2018, from <http://reg.ssru.ac.th>
- [4] Wongsongja, N. (2017). *Factor using of electronic document office system (e-office) for efficient using of personnel at faculty of science and technology Suan Sunandha Rajabhat University*. Bangkok: Suan Sunandha Rajabhat University.
- [5] Athikeat, K. and Thuankaew, T. (2019). *Modern teaching and new teaching techniques methods*. Retrieved September 10, 2018, from <http://regis.skru.ac.th/RegisWeb/datafiledownload/25590714-15.pdf>