

The Impact of the “Career Fun” Project on the Vocational Attitudes of Middle School Students in Ratchaburi’s Opportunity Expansion Schools

Tanapon Tomrongkunan, King Mongkut’s University of Technology Thonburi, Thailand
Chayanit Pichitronnchai, King Mongkut’s University of Technology Thonburi, Thailand
Tanes Tanitteerapan, King Mongkut’s University of Technology Thonburi, Thailand

The Asian Conference on Education & International Development 2026
Official Conference Proceedings

Abstract

This research aimed to: 1. Examine the satisfaction levels regarding the development of foundational skills and knowledge for pursuing vocational careers among students in opportunity expansion schools in Ratchaburi Province. And 2. Collect problems and suggestions related to the development of foundational skills and knowledge for pursuing vocational careers among students in opportunity expansion schools in Ratchaburi Province and analyzed across four key topics. The sample group consisted of 30 students studying in 3rd year of middle school from selected opportunity expansion schools in Ratchaburi Province. A questionnaire, with a reliability coefficient of .95, was used as the research instrument. Statistical analyses included percentage, mean, and standard deviation. The study revealed the following: Part 1: Participant Satisfaction with the Activity are 1. Knowledge and Understanding: Participants' average knowledge scores were higher after the training compared to before it. 2. Usefulness for Further Study: 100% of participants found the knowledge and information gained from the camp useful for choosing their future studies, with an average usefulness rating of 4.31 (SD = 5.61). 3. Usefulness for Career Choice: 100% of participants also found the knowledge and information useful for choosing a career, with an average usefulness rating of 4.24 (SD = 4.90). 4. Interest in Vocational Fields: Students' interest in vocational careers, in descending order, was: Computer Technician (28%), Mechanical Technician (21%), Electrical Technician (19%), Civil Technician (19%), and Welder (13%). Part 2: Overall Participant Satisfaction are 1. Applicability to Further Study: Participants rated the usefulness of the knowledge and information.

Keywords: opportunity expansion school, vocational careers, basic knowledge

iafor

The International Academic Forum
www.iafor.org

Introduction

Nowadays in Thai society is increasingly focused on developing knowledge, skills, and information. The belief is that when person, organizations, and communities have the right knowledge and can apply it effectively, solving the problems, overcome obstacles, and increase their competitiveness in a knowledge-based society. Knowledge is seen as a valuable resource that stands apart from other production factors. This is because knowledge constantly changes and expands, creating a competitive advantage, especially in a learning-driven society. Therefore, the concepts and principles of knowledge management play an importance situation. Giving students the chance to learn about and explore their interests before choosing a field of study helps them make more informed decisions. This proactive approach can also help prevent students from dropping out of the formal education system prematurely. This issue is particularly relevant for opportunity expansion schools in remote areas. A study by Kuruna Pariपुरana looked at students who graduated from 3rd year of middle school (ninth grade) in expansion schools in remote areas, in Suan Phueng, Ban Kha, and Chom Bueng districts, as well as smaller schools near King Mongkut's University of Technology Thonburi's Ratchaburi campus. The research, covering the academic years 2015–2021, found that 80% of these students continued their education. However, of those who continued, only 33% chose general education, and other 67% pursued vocational programs. The discussions of the school administrators revealed a significant problem: students often choose to continue their studies in vocational fields based on what institutions recruit at their school or what older students have pursued, rather than understanding their own aptitudes or genuine interests. This often leads to a number of students dropping out of the education system each year for various reasons, including disliking their chosen subject. Therefore, providing students with opportunities to learn about and explore their preferences and aptitudes before selecting a field for further study helps them make better decisions and can potentially prevent them from leaving the education system early. Furthermore, opportunity expansion schools in remote or small areas have the challenges with an insufficient number of teachers covering all subjects. This means some schools lack teachers skilled in teaching electricity, or they don't have the necessary equipment for students to conduct practical experiments. This cut off the students from the valuable learning and hands-on experience. Most importantly, if a teacher lacks real-world experience, they may not be able to cover the content comprehensively. This includes topics like applying energy by converting electrical energy into other forms, safe electricity usage precautions, and essential first aid and basic life support for electrical shock. Moreover, incorporating experts who have graduated or are currently working in electricity-related fields with diverse occupations like skilled air conditioning technicians, electrical engineers in companies, business owners, and university professors can provide students with valuable real-world examples and career guidance. This also helps ensure students gain foundational electrical knowledge, both theoretical and practical, that aligns with the curriculum. They learn to use electricity properly and safely, know how to protect themselves from electrical accidents from the start, and are better prepared if they're interested in a career as an electrician. In 2022, seven opportunity expansion schools in Suan Phueng, Ban Kha, and Chom Bueng districts participated in the project. These included three mediums to large sized schools in remote areas under the Education Fund project (with 458–1,172 students): Rujiraphat School, Ban Tako Lang School, and Ban Pong Krating Bon School. There were also three medium-sized schools in semi-rural, semi-urban areas (149–275 students): Ban Lam Phra School, Wat Nong Phan Chan School, and Ban Berk Phrai School. Finally, one medium-sized school in a sub-district municipality (323 students) is Anuban Suan Phueng school. The researchers, experts, and teachers at these schools are selecting students who wish to pursue vocational studies to help

them develop the foundational skills and knowledge needed for further education in electrical careers.

This project aims to help middle school students in opportunity expansion schools who plan to pursue vocational careers. It will give them the chance to discover their interests and aptitudes within various vocational fields. The project also focuses on preparing these students for vocational education and exposing them to potential career paths in five key trades: electrical, computer, civil, mechanical, and welding after their graduation.

Research Objectives

1. To study the satisfaction levels regarding the development of foundational skills and knowledge for pursuing vocational careers among students in opportunity expansion schools in Ratchaburi Province.
2. To enable middle school students in opportunity expansion schools to self-discover and analyze their aptitudes in order to choose a suitable vocational path.

Research Methodology

Research Population

3rd year high school students from 7 opportunity expansion school in Suan Phueng, Ban Kha and Chom Bueng districts Ratchaburi Province, 321 people.

The Sample

3rd year middle school students from 7 opportunity expansion school in Suan Phueng, Ban Kha and Chom Bueng districts Ratchaburi Province, 200 people by researchers, lecturers and teachers at the school select students who want to continue their vocational studies to develop basic skills and knowledge to further study in vocational careers.

Research Tools

The satisfaction in developing basic skills and knowledge in order to further study in Electrical vocational education of the student in opportunity expansion school in Ratchaburi Province. The tools for this research have been created.

1. The curriculums for developing basic skills and knowledge in order to further study in vocational education.
2. The learner's satisfaction questionnaire consisted of 4 aspects: 1) Knowledge and understanding of the participants before and after the training, 2) Satisfaction aspect, 3) Lecturer aspect, 4) Overall aspect of activities towards the course provide teaching and learning skills and basic knowledge in order to further study vocational education. The questionnaire is a questionnaire with a 5-level estimation scale.

Data Collection

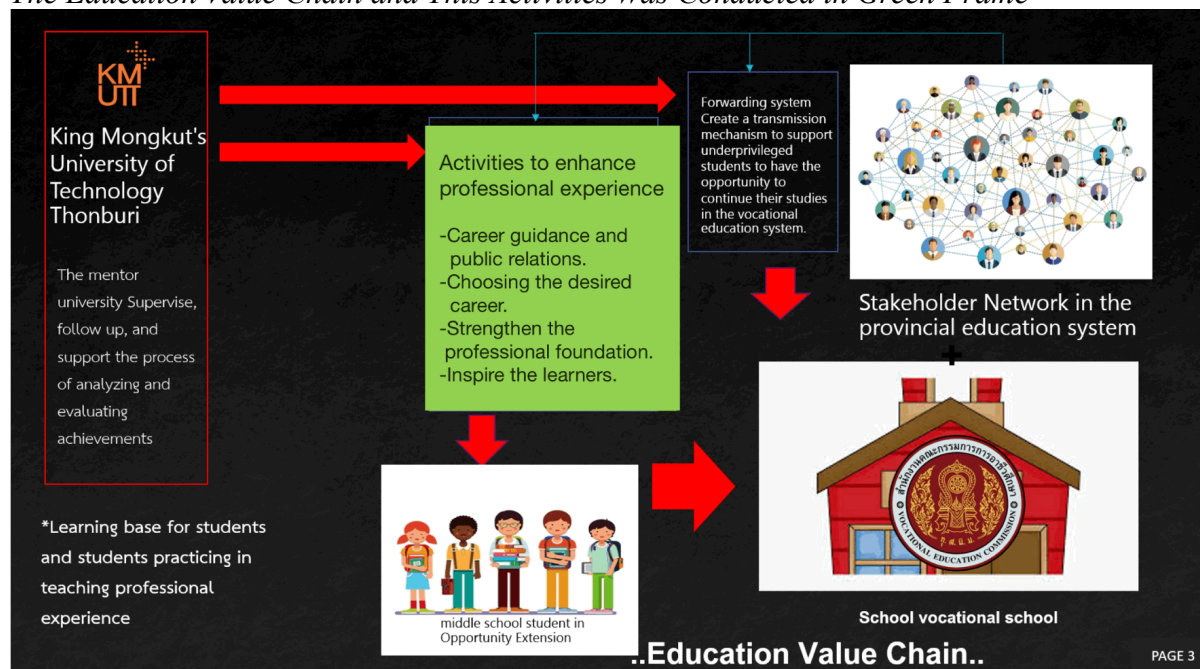
The data collection in this research. The results were collected after the sample group had passed the training with the curriculum and measure student satisfaction in all 4 aspects.

Scope of the Research

1. Design learning activities for five vocational skill areas: electrical, computer, civil, mechanical, and welding.
2. Organize hands-on learning activities (workshops) to allow students to acquire vocational skills through practical experience.
3. Guide students in self-assessment to help them discover and analyze their aptitudes for choosing a suitable vocational path.

Figure1

The Education Value Chain and This Activities Was Conducted in Green Frame



Data Analysis

This research explores the change in attitude and career interest among 3rd year of middle school students after participating in the “Career Fun” project at opportunity expansion schools in Ratchaburi Province. The study's findings are divided into two main sections: Part 1: Participant Satisfaction with the Training Curriculum and part 2: Overall Participant Satisfaction.

Table 1
The Conclusion of the Satisfaction From the Participant

The satisfaction from the participant	Satisfaction level					Sum	Average	SD
	Excellent (5)	Very good (4)	Average (3)	Poor (2)	Very poor (1)			
1. Knowledge and understanding of the participants before and after the training								
<u>Before</u> the level of the knowledge about the training subject.	13	25	49	18	3	90	3.25	2.76
<u>After</u> the level of knowledge about the training subject.	39	52	5	2	0	90	4.18	1.45
2. Satisfaction								
The benefit of activities	51	46	11	0	0	90	4.42	1.29
Able to apply knowledge in everyday life	49	46	13	0	0	90	4.30	1.38
Format and topics inorganizing activities are appropriate	45	49	14	0	0	90	4.29	1.37
The duration of the activities is appropriate	52	42	13	0	0	90	4.32	1.89
3. Lecturer								
The speaker can communicate understand easily	42	52	13	1	0	90	4.25	1.40
The atmosphere conducive to learning	57	36	15	0	0	90	4.39	1.51
Given the opportunity to ask question and answer question clearly.	75	24	9	0	0	90	4.61	1.19
4. Overview in organizing this event								
Overall satisfaction in organizing this event	72	31	5	0	0	90	4.62	0.95

From Table 1. the satisfaction from the participant. 1) Knowledge and understanding of the participants after training are higher than before training 2) The satisfaction of this training has the average in the topic of the benefit of this event are in very good level (average = 4.42 SD = 1.29) 3) the topic of the lecturers, the topic: Give the opportunity to ask questions and answer questions clearly in the excellent level (average = 4.61 SD = 1.19) 4) The overall of this event are in excellent level (average = 4.62 SD = 0.95) by collecting the data of the trainees taking 3 days to participate.

Table 2*The Conclusion From the Participant Satisfaction Assessment*

1. The knowledge and information received from this activities take advantage to choose a field to continue studying.					Yes	No		
					30	0		
Useful level								
Very important (5)	Fairly important (4)	Important (3)	Slightly important (2)	Not at all important (1)	total	average	SD	
16	17	1	0	0	30	4.44	0.31	
2. The knowledge and information gained from this activities can be used for the benefit of choosing a career.					Yes	No		
					30	0		
Useful level								
Very important (5)	Fairly important (4)	Important (3)	Slightly important (2)	Not at all important (1)	total	average	SD	
16	17	1	0	0	30	4.44	0.31	

Table 2 the conclusion from the participant satisfaction assessment. 1) the knowledge and information received from this activities take advantage to choose a field to continue studying is in fairly important level. 2) the knowledge and information gained from this activities can be used for the benefit of choosing a career is in fairly important level. In the overall of 2 topics, the overall of creating the activities in excellent level by collecting the data of the trainees taking 3 days to participate.

Table 3*The Post-intervention Assessment Measured Knowledge, Skills and Attitude Score (KSA) of Each Field*

Field	Knowledge (%)	Skills (%)	Attitude (%)
Electrical	77.41	80.94	82.35
Computer	73.4	79	92.8
Civil	79.71	73.92	88.35
Mechanical	93	88.75	82.5
Industrial	73.23	65.38	82.76

Table 3 present the post-intervention assessment score across 5 field of studies into Knowledge, skills and attitude (KSA). The summarized as follows:

The overall performance: the results indicate a generally high level of achievement across all categories. Especially, the attitude domain is the highest score across almost all field, with values ranging from 82.35%–92.8% this mean that the activities was highly effective in creating positive perceptions and creating inspiration among the participants.

Field- specific highlight: Mechanical field has the high proficiency in both knowledge (93%) and skills (88.75%). Computer field has the highest attitude score (92.8%). Industrial field showed the lowest score in almost every assessment score.

Research Conclusion

The “Careers Fun” project was evaluated by 185 participants (76 male students, 109 female students). The findings indicate:

100% of participants felt the knowledge and information gained from these activities would be useful for choosing further education, with a usefulness rating of 4.31 (SD = 5.61).

100% of participants also believed the knowledge and information from these activities would be useful for choosing a career, with a usefulness rating of 4.24 (SD = 4.90).

Student interest in vocational careers, in descending order, was: Computer Field (28%), Mechanical Field (21%), Electrical Field (19%), Civil Field (19%), and Industrial Field (13%). (Note: “Civil Field 19%” was listed twice; I've kept it as one entry representing that percentage of interest.)

The satisfaction with activity participation was further evaluated by 200 participants, with results summarized in Table 1 (not provided here, but implied) and highlighted below:

Satisfaction With Each Vocational Station

Electrical Station

Participants rated the overall organization of the activity as Very Good (4.55). Specific aspects rated as Good include:

- The activity's usefulness to participants (4.29)
- Ability to apply knowledge in daily life (4.41)
- Appropriateness of the activity format/topics (4.35)
- Appropriateness of the activity duration (4.24)
- Clarity of communication by organizers (4.47)
- Organizers' ability to create a conducive learning environment (4.42)
- Organizers' willingness to allow questions and provide clear answers (4.44)

Industrial Station

Participants rated the overall organization of the activity as Very Good (4.56). Specific aspects rated as Good include:

- The activity's usefulness to participants (4.32)
- Ability to apply knowledge in daily life (4.25)
- Appropriateness of the activity format/topics (4.28)
- Appropriateness of the activity duration (4.32)
- Clarity of communication by organizers (4.48)
- Organizers' ability to create a conducive learning environment (4.37)
- Organizers' willingness to allow questions and provide clear answers (4.38)

Mechanical Station

Participants rated the overall organization of the activity as Very Good (4.54). Specific aspects rated as Good include:

- The activity's usefulness to participants (4.38)
- Ability to apply knowledge in daily life (4.43)
- Appropriateness of the activity format/topics (4.31)
- Appropriateness of the activity duration (4.34)
- Clarity of communication by organizers (4.45)
- Organizers' ability to create a conducive learning environment (4.47)
- Organizers' willingness to allow questions and provide clear answers (4.39)

Civil Station

Participants rated the overall organization of the activity as Very Good (4.54). Specific aspects rated as Good include:

- The activity's usefulness to participants (4.35)
- Ability to apply knowledge in daily life (4.26)
- Appropriateness of the activity format/topics (4.19)
- Appropriateness of the activity duration (4.27)
- Clarity of communication by organizers (4.45)
- Organizers' ability to create a conducive learning environment (4.40)
- Organizers' willingness to allow questions and provide clear answers (4.38)

Computer Station

Participants rated the overall organization of the activity as Good (4.49). Specific aspects rated as Good include:

- The activity's usefulness to participants (4.29)
- Ability to apply knowledge in daily life (4.08)
- Appropriateness of the activity format/topics (4.26)
- Appropriateness of the activity duration (4.23)
- Clarity of communication by organizers (4.26)
- Organizers' ability to create a conducive learning environment (4.33)
- Organizers' willingness to allow questions and provide clear answers (4.26)

References

- Ananchanok Sakonthawat. (2015). *Poverty and inequality*. Documents for the 10th lecture, Human Resource Economics Course, Chulalongkorn University.
- Antoine. (2011). *Inequality in education*. Inequality Project.
<https://inequalityproject.wordpress.com/inequality-in-education>
- Archawanantakul, S. (2011). *Portable edition of inequality: The main idea of inequality (1st ed.)*. Pentai Publishing.
- Chongsathityu, J., & Jitjang, A. (2012). *A geospatial network to promote learning development of children and youth*. Office of the Science Promotion Commission for Research and Innovation.
- Machin, S., & Vignoles, A. (2004). Educational inequality: The widening socio-economic gap. *Fiscal Studies*, 25(2), 107–128.
- Monkanpai, J. (1990). *The reasons for continuing education of students in the project to expand educational opportunities at the junior high school level*. In Collection of thesis abstracts, academic year 1990. Graduate School, Chulalongkorn University.
- Mount, F. (2008). *Five types of inequality*. Joseph Rowntree Foundation.
<https://www.jrf.org.uk/report/five-types-inequality>
- Nin, K. (1987). *Research strategies*. National Research Council of Thailand.
- Saengmahamad, R. (2017). *Policing people's values against politics, administration, and culture*.