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Effect of community-based project learning model to promote learning skills and implementation of local arts culture and wisdom projects

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Abstract

This research aimed to study the effect of community-based project learning models on promoting learning skills, evaluating skills in implementing arts, culture, and local wisdom projects, and studying students' opinions on community-based project-based learning. The target group was 4th-year students in the Program in Performing Arts Education, Faculty of Fine and Applied Arts, Rajamangala University of Technology Thanyaburi. Purposive sampling was used to select 78 students. The research instruments were 1) Learning management plan, 2) 21st-century learning skills assessment form, 3) Arts, culture, and local wisdom project skills assessment form, and 4) Student opinion survey form. The statistics used in the research were percentage, mean, standard deviation, and t-test. The results of the research found that a community-based project learning model promoted students' learning skills with an overall average score at a very good level ($\bar{x} = 4.62$, S.D. 0.59). They had skills in implementing arts, culture, and local wisdom projects. The overall score was at a very good level ($\bar{x} = 4.79$, S.D. 0.52). When comparing project skills after organizing the activity, it was significantly higher than before organizing the activity at a statistical level of .05. The overall score was at a very good level ($\bar{x} = 4.75$, S.D. 0.61).

Keywords: Community-based projects, learning models, learning skills, local arts culture and wisdom projects, project-based learning.

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1. Introduction

In the development of human resources, most countries give importance to and believe that education is a tool to cultivate and refine people's abilities to become quality citizens and be ready in terms of physical, mental, emotional and social aspects, which are important capital for developing and creating the future of the nation to grow up effectively. Therefore, it can be seen that education is an important factor in creating a mechanism for national development. Therefore, it must be a system with potential and efficiency to prepare learners for economic, labor and citizenship opportunities. Gibbons [1], Michael, and Coffman [2]. Currently, Thailand has entered the 21st century as a society that has changed its educational management approach to focus on learners who are the center of learning and can develop themselves. Then, teachers will be the ones to stimulate and create an appropriate atmosphere and environment, as well as facilitate learners to continuously learn based on the belief that everyone can learn and develop themselves to their potential when they gain direct experience in that matter. Pleumsamrankit [3], Sroysing [4], and Oğuz et al. [5] Educational reform is a change in the new mindset from focusing on academics to focusing on life, emphasizing experience and work activities to enable learners to have skills in living with others, be self-reliant and solve problems by themselves. Ministry of Education [6], which organizes learning from experiences that are in individuals, resulting in stimulating the learner's perception and decision-making about experiences that are part of life experiences, which will lead to the accumulation of abilities that affect learning, including acceptance and rejection. Kolb [7] is an organization of learning that emphasizes on learners creating new knowledge, skills and attitudes by using experiences, previous knowledge or things that have been learned to stimulate reflection about those experiences to become new knowledge. The teacher stimulates and allows learners to create understanding and reason about experiences for learning by using analytical thinking skills to synthesize and evaluate knowledge using judgment, self-identity and learning ability of each learner [8, 9].

Thailand has set the conceptual framework for education management under the context by emphasizing education in the 21st century to develop various skills of learners, including critical thinking and problem solving skills, creativity and innovation skills, collaboration, teamwork and leadership skills, cross-cultural understanding skills, communication skills, information and media literacy, computing and media literacy, career and learning skills, and change skills. Panich [10], Office of the Education Council Secretariat [11], Tuntirojanawong [12], Sangaroon [13], and Tongkaew [14]. The main mission of higher education institutions or universities is to help develop learners to have knowledge, understanding, and basic skills necessary for living and to be aware of changes. They can apply knowledge about professional work and apply technology to work creatively to keep up with changes in education in the 21st century [15].

Learning about arts and culture in the community requires learning from the local community to make learning effective and in-depth understanding. It should not be studied only from textbooks. Learning about real situations in the community is learning that learners can apply knowledge and experiences to real life, especially learning in the current era where society is complex and changes all the time. Dewey said that education is just a process used in life, but not preparation for future life. Dewey [16] said that learning in the classroom alone is not enough for higher education. Therefore, teaching methods that promote self-learning through cooperation and commitment are used. Healey et al. [17] are consistent with Sinlarat [18], who said that "The teaching process that will give learners skills for the 21st century, learners should be in an environment where they can learn by themselves as much as possible. The teaching principle must therefore allow learners to set their own goals, find their own knowledge, know how to select information, create knowledge, and know how to filter and crystallize knowledge. Learning is a complex process that requires knowledge to be applied in real situations." Therefore, teachers play an important role in organizing learning about arts and culture in the community. As stated in the Teachers Council of Thailand's Regulations on Professional Ethics A.D.2013, Section 5, Section 15 on Social Ethics, "Education professionals shall act as leaders in the conservation and development of the economy, society, religion, arts, culture, wisdom, the environment, maintain the public interest, and adhere to the democratic regime with the King as Head of State." Regulations of the Teachers Council of Thailand on Professional Ethics [19] Therefore, in learning arts and culture in the community, teachers are important leaders in the conservation and dissemination of arts and culture in the community by using local wisdom, arts, and culture as factors in organizing education to benefit the public, create value, and be useful for organizing learning in the 21st century. Project-Based Learning (PBL) is a strongly supported process that can be used to create a teaching environment by allowing students to participate in selecting projects of interest by jointly exploring, observing, and defining issues of interest, planning to study necessary information, and implementing work according to the plan, experimenting with new discoveries or inventions, and then writing reports and presenting them to the public. Collect data and bring all works and experiences to discuss, exchange ideas, and summarize the learning results obtained from all experiences. Khammanee [20], Efstratia [21], and community-based learning are teaching or learning strategies that enable learners to learn what they need from the community. Owens and Wang [22] is learning that integrates community service with classroom learning to help learners develop their own skills and sense of responsibility in their civic roles, as well as academic skills. Ibrahim [23] is related to the concept that describes the learning process of participation and collaboration based on the concept of social and cultural learning and focuses on the roles of group members or community participation to create both group and individual learning. Fischer et al. [24] Community-based learning is a strategy used to enhance skills in real environments. Beakley et al. [25], and is beneficial to students in other aspects, such as having a positive effect on the development of self-efficacy awareness, spiritual growth, moral development, developing the ability to work with others, leadership and having a positive effect on academic achievement. In organizing community participation activities, Phaetlakfa [26] suggested that: The process of community participation should be studied, and the development of community arts and cultural learning resources in different contexts should be studied in order to provide guidelines for the development of urban community arts and cultural learning resources in various forms that are consistent with the community context.

Therefore, project-based and community-based learning tends to promote learning skills, performing arts, and local wisdom projects of student teachers in the Performing Arts Education Program. Students must explore and apply what they find in their communities as guidelines for designing projects or activities in order to draw out the potential of students by using 21st-century learning skills more effectively. The researchers have defined 5 learning skills to be assessed: 1) Critical thinking and problem-solving skills 2) Creativity and innovation skills 3) Teamwork and leadership skills 4) Communication, information, and media literacy skills 5) Computer, information technology, and communication skills, as well as study skills in performing arts and local wisdom projects, and study opinions on project-based and community-based learning.

2. Objectives

1. To study the results of the Community-Based Project Learning Model to promote learning skills.
2. To evaluate and compare skills in doing arts, culture and local wisdom projects.
3. To study students' opinions on project-based learning using the community as a base.

3. Literature Review

Project-Based Learning (PBL); The theory of project-based learning is consistent with John Dewey's idea about learning experiences by doing (Learning by Doing). He believes that learning experiences occur when individuals have participated in various activities and are able to observe what happens and then decide what can be used or what is important to be used as lessons for improvement and development in other activities in the future. Dewey [9] is currently used in education by emphasizing on learning management that allows learners to gain experience while studying so that learners can develop various skills and from that idea, there is a motivation for learning that comes from actual practice. It is a learning cycle that is continuously linked, namely the step of implementing stimulus (Impulse), which is the step that creates ideas or inspiration for learners, the step of observing the environment that occurs (Observation), which results in the step that brings what is seen in various situations. In the past, the knowledge summary for decision making in application (Judgment) was a process that used careful observation and filtered knowledge to evaluate and understand new situations. Kolb [7] researchers studied the steps of project-based learning according to Ramon Ribe and Nuria Vidal, each step reflects the ability to do the project. There are the following steps: 1. Creating a Good Atmosphere is the step of preparing group members to work together as one, such as using group bonding activities to help learners become familiar and ready to work together. 2. Getting the Class Interested is the step of creating interest in learners to work in order to learn what the learners are interested in. Which may use brainstorming to bring the feelings of students to participate in the work. 3. Selecting the Topic is the step of negotiating and synthesizing various information to compile into the project topic. 4. Creating a General Outline of the Project is the step of planning and defining the scope of the project, analyzing the work steps, and preparing equipment. 5. Doing Basic Research Around the Topic is the step of carrying out the project outline according to the responsibilities of the group members. 6. Reporting to the Class is the step of conveying thoughts and feelings to the class, which may be a report through speaking or writing. 7. Processing Feedback is the step of giving feedback [27].

Community-Based Learning: The Theory of Community-Based Learning is an experiential learning designed to promote learning and develop learners by having learners participate in activities related to individuals and community needs. Community-Based Learning is a strategy or learning management model that integrates curriculum content to connect with the community by using practice as a base for learners to learn from practicing real situations in the community under the participation of teachers, learners and people in the community. There are 8 strategies that promote learning as follows: Owens and Wang [22], Melaville et al. [28] and Puangpanya and Jantanukul [29] 1) Academically Based Community Service: ABCS 2) Civic Education 3) Environmental Education 4) Place-Based Learning 5) Service Learning 6) Work-Based Learning 7) Collaborative Learning Environment 8) Experiential Learning.

In conclusion, it is a search for a learning management approach that is linked to organizations or mechanisms in communities and society; that is, Project-Based Learning (PBL) that combines with Place-Based Learning (PBL) or Community-Based Learning (CBL), which is different from traditional teaching and learning. In traditional learning, students receive direct instruction from teachers (Reception Learning), while Project-Based Learning, using the community as a base, stimulates students to discover (Discovery Learning), analyze, evaluate, and solve problems, with teachers as the ones who stimulate students to want to learn.

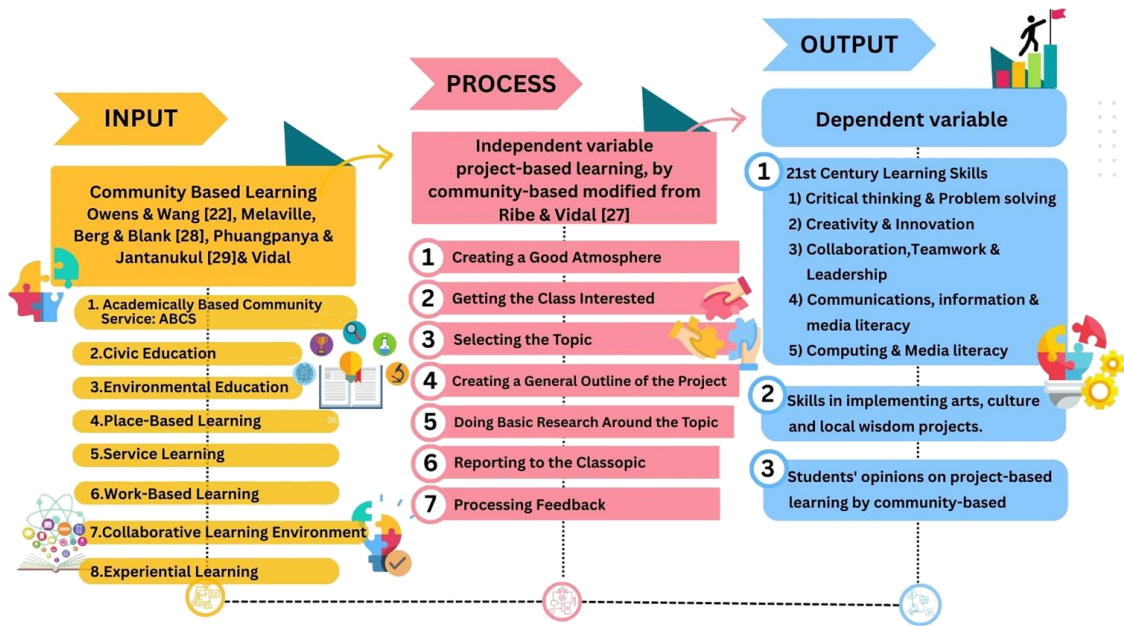


Figure 1. Conceptual Framework.

4. Methods

This research used a one-group pretest-posttest design with the following details:

1. The target group of the research is 4th-year students of the Program in Performing Arts Education, Faculty of Fine and Applied Arts, Rajamangala University of Technology Thanyaburi, who study the subject 07201005 Community Arts Innovation in the first semester of the academic year 2024. Purposive sampling was used to select 78 individuals.

2. The research tools and quality assessment tools from five experts used in this research consisted of:

2.1 Community-based project learning plan to promote learning skills and implementation of local arts, culture, and wisdom projects by specifying the objectives of the learning management plan, learning units, and content used in teaching and learning activities, teaching media, and measurement and evaluation methods. The learning management plan consists of 3 learning units: community context study 12 hours, community fieldwork 6 hours, and community-based project implementation 30 hours, totaling 48 hours. The Index of Item Objective Congruence (IOC) of various components was assessed with a value of 0.67-1.00. The quality and appropriateness were at the highest level (= 4.65, S.D. 0.54).

2.2 Assessment of learning skills in the 21st century, which is a Rating Scale, is divided into 5 skills: 1) Critical thinking & Problem solving, 5 items; 2) Creativity & Innovation, 10 items; 3) Collaboration, Teamwork & Leadership, 4 items; 4) Communication, information & media literacy, 3 items; and 5) Computing & Media literacy, 2 items, totaling 24 items, through the assessment of consistency (IOC) of various components with a value of 0.67-1.00.

2.3 Assessment form for the arts, culture, and local wisdom project skills, which is a Rating Scale, divided into 3 skills: 1) work planning skills, 5 items; 2) work process skills, 5 items; and 3) creative work and presentation skills, 5 items, totaling 15 items, through the assessment of consistency (IOC) of various components with a value of 0.67-1.00.

2.4 Student Opinion Survey on Project-Based Learning Using Community as a Base, which is a Rating Scale, divided into 4 skills: 1) Project Activity Format, 5 items; 2) Project Process, 5 items; 3) Benefits Gained from Doing the Project, 5 items; and 4) Knowledge about Arts, Culture, and Local Wisdom, totaling 20 items. The IOC of the various components was assessed with a value of 0.67-1.00.

5. Data Collection

3.1 Conduct learning management for target groups according to the community-based project learning management to promote learning skills and engage in arts, culture, and local wisdom projects by specifying the objectives of the learning management plan, learning units, and content used in teaching activities, teaching media, and measurement and evaluation methods, totaling 48 hours, as follows:-

3.1.1 Week 1-2, Learning Unit 1: Community Context Study, 12 hours, in which students must study the community context as basic information for analysis and use the information to design projects of interest by writing a timeline and analyzing preliminary community data in 7 districts of Pathum Thani province.

3.1.2 Week 3, Learning Unit 2: Community Fieldwork, 6 hours, assigned to visit communities in 7 districts of Pathum Thani province, with 4th year students divided into 7 groups of 11-12 people each. Students will use the tools in Learning Unit 1 to analyze community data in all aspects to find project topics using the community as a base.

3.1.3 Week 4-8, Learning Unit 3: Community-based project work, 30 hours. Students will work on projects that require defining problems, determining methods for collecting data to answer problems, and determining methods for collecting data to answer problems. The instructor will provide advice and divide students into 7 groups of 11-12 people each.

3.2 The researcher observed the students' learning behavior and performance each week and then scored them on the 21st Century Learning Skills Assessment.

3.3 Evaluate students' project skills from week 4 until project presentation

3.4 Students evaluate their opinions on community-based

Project learning management models after the activity is completed.

4. Data analysis This research uses basic statistics, including percentage, mean, standard deviation and t-test to analyze data, summarize and discuss results using tables and descriptions.

6. Results

From the community-based project learning management model to promote learning skills and doing projects in arts, culture and local wisdom, the research results are as follows:-

Results of the community-based project learning management model to promote learning skills. It was found that the 21st century learning skills of the students with very good scores in 3 skills, namely Computing & Media literacy, were at a very good level ($\bar{x} = 4.88$, S.D. 0.55), Creativity & Innovation were at a very good level ($\bar{x} = 4.71$, S.D. 0.58) and Communications, information & media literacy were at a very good level ($\bar{x} = 4.65$, S.D. 0.59), respectively. The next highest scores were in 2 skills, namely Critical thinking & Problem solving, which were at a good level ($\bar{x} = 4.49$, S.D. 0.59) and Collaboration, Teamwork & Leadership, were at a good level ($\bar{x} = 4.35$, S.D. 0.66), respectively. The overall average scores of all aspects were at a very good level ($\bar{x} = 4.62$, S.D. 0.59). It was also found that 53.28 percent of the students had an overall average score of all aspects at a very good level, with a score range between 4.51-4.65 and 46.72 percent had a good average score in all aspects, with a score range between 4.05-4.49.

Table 1.
Results of the evaluation of students' community-based project learning management model.

Evaluation list	\bar{x}	S.D.	Learning Skill Level
Critical thinking & Problem solving	4.49	0.59	Good
Creativity & Innovation	4.71	0.58	Very Good
Collaboration, Teamwork & Leadership	4.35	0.66	Good
Communications, information & media literacy	4.65	0.59	Very Good
Computing & Media Literacy	4.88	0.55	Very Good
Total average score	4.62	0.59	Very Good



Figure 2.
Learning skills of students' work processes from community-based project learning management models.

The results of the evaluation and comparison of skills in implementing arts, culture, and local wisdom projects found that before organizing the community-based project learning model to promote skills in implementing arts, culture, and local wisdom projects, both in terms of work planning skills, work process skills, and creative and presentation skills were at a moderate level ($\bar{x} = 3.20$, S.D. 0.51). After organizing the project-based learning activities using the community as a base to promote skills in implementing arts, culture, and local wisdom projects, it was found that there were skills in implementing arts, culture, and local wisdom projects. The overall picture was at a very good level ($\bar{x} = 4.79$, S.D. 0.52), with creative work and presentation skills being the highest ($\bar{x} = 4.90$, S.D. 0.59), followed by work planning skills ($\bar{x} = 4.79$, S.D. 0.51) and work process skills ($\bar{x} = 4.67$, S.D. 0.47), respectively. When compared, it was found that after organizing the activity, it was

higher than before organizing the project-based learning activities using the community as a base to promote skills in doing arts, culture and local wisdom projects with statistical significance at the 0.05 level.

Table 2.

Results of the evaluation of skills in performing arts, culture and local wisdom projects from community-based project learning management models.

Skills in implementing arts, culture and local wisdom projects	Before organizing an event			After organizing an event		
	\bar{x}	S.D.	Level	\bar{x}	S.D.	Level
Work planning skills	3.15	0.54	Moderate	4.79	0.51	Very Good
Process skills	3.43	0.51	Moderate	4.67	0.47	Very Good
Creative and presentation skills	3.03	0.49	Moderate	4.90	0.59	Very Good
Total average score	3.20	0.51	Moderate	4.79	0.52	Very Good

Table 3.

Comparison results of skills in performing arts, culture and local wisdom projects from the community-based project learning management model.

Experimental Group	n	\bar{x}	S.D.	t-test	Sig
Before organizing an event	78	3.20	0.51	23.63	0.000
After organizing an event	78	4.79	0.52		

Note: *p < .05.

The evaluation results of students' opinions on the community-based project learning model found that students' opinions on the community-based project learning management model were at a very good level overall ($\bar{x} = 4.75$, S.D. 0.61). The opinions on the benefits gained from doing the project were at a very good level ($\bar{x} = 4.89$, S.D. 0.66), followed by knowledge on arts, culture and local wisdom at a very good level ($\bar{x} = 4.75$, S.D. 0.59), the process of doing the project at a very good level ($\bar{x} = 4.69$, S.D. 0.53) and the format of the project activities at a very good level ($\bar{x} = 4.65$, S.D. 0.67), respectively.

Table 4.

Results of student evaluation of opinions on the community-based project learning model.

Evaluation list	\bar{x}	S.D.	Learning Skill Level
In terms of the format of project activities	4.65	0.67	Very Good
In terms of the process of doing the project	4.69	0.53	Very Good
In terms of benefits gained from doing the project	4.89	0.66	Very Good
In terms of knowledge about arts, culture and local wisdom	4.75	0.59	Very Good
Total average score	4.75	0.61	Very Good

7. Discussion

From the community-based project learning management model to promote learning skills and engage in projects related to arts, culture, and local wisdom, the research results can be summarized and discussed as follows:-

1. The results of project-based learning management using the community as a base to promote learning skills found that in project-based learning management using the community as a base to promote learning skills and doing projects of arts, culture and local wisdom by specifying the objectives of the learning management plan, learning units and content used in teaching activities, teaching media and measurement and evaluation methods. The learning management plan consists of 3 learning units: studying the community context for 12 hours, visiting the community for 6 hours and doing projects using the community as a base for 30 hours, totaling 48 hours, using the learning management model modified from Ribe and Vidal [27] 1) Creating a Good Atmosphere, 2) Getting the Class Interested, 3) Selecting the Topic, 4) Creating a General Outline of the Project, 5) Doing Basic Research Around the Topic, 6) Reporting to the Class and, 7) Processing Feedback, in which students must study the community context as basic information for analysis and use the information to design projects of interest by writing a timeline and analyzing preliminary community data. It is scheduled to visit communities in 7 districts of Pathum Thani province. The fourth-year students are divided into 7 groups of 11-12 people each. The students will use the tools to analyze community data in all aspects to find project topics using the community as a base. The students will do the project by defining the problem, determining the method of collecting data to answer the problem, and determining the method of collecting data to answer the problem. The instructor will provide advice and observe the learning behavior and work of the students each week that demonstrates the Learning Outcome Chatchai and Apinya [30] and Yolao [31], and learning skills in the 21st century. 1) Critical thinking & Problem solving, 2) Creativity & Innovation, 3) Collaboration, Teamwork & Leadership, 4) Communications, information & media literacy, 5) Computing & Media literacy, Panich [10]; Office of the Education Council Secretariat [11], Tuntirojanawong [12], Sangaroon [13] and Tongkaew [14] which the average score of all aspects was at a very good level ($\bar{x} = 4.62$, S.D. 0.59). It was also found that 53.28 percent of students had an average score of all aspects at a very good level with a score range of 4.51-4.65 and 46.72 percent, the average score of all aspects is at a good level with a score range of 4.05-4.49 because project-based learning has processes and steps that train learners to be able to solve problems, know how to learn and plan work systematically, be responsible, and develop social skills in working with others. Kokotsaki et al. [32] is consistent with the research of Sripanlom et al. [33] who studied

Community-Based Project Learning in Local Chemistry Product Course. It was found that teaching through community-based projects can develop students to gain real-world work experience that links scientific concepts to product creation from daily life to commercial levels. Students have the opportunity to access local resources to develop and expand their ideas, exchange knowledge from the community, and use local wisdom resources to create creative works. Project-based learning focuses on learners and their interests, stimulating learners to learn. Learners will find ways to deal with problems with the teacher as a supporter and consistent with Naikhon et al. [34] who studied Community-Based Project Learning Model to Promote 21st Century Learning Skills for Applied Biology Students Rajabhat Rajanagarindra University found that in the community-based project learning management model to promote 21st century learning skills conducted for applied biology students at Rajabhat Rajanagarindra University, when considering the use of 21st century learning skills in all 5 important areas, it was found that students developed such skills at a good to very good level, indicating that community-based project learning management model can promote 21st century learning skills very well Neawchampa et al. [35] and consistent with Sisamud and Chatwattana [36] who studied The Project-based Learning Model using Design Thinking for the Innovators in the 21st Century, found that integrating the project-based learning process with the design thinking process has clear, concrete, and reliable steps and processes that can be used as a guideline for developing a learning model to promote learners' creative thinking skills. In addition, community-based learning is an important process for critical reflection, which will lead to a better understanding of the community and aims to promote learning and develop learners in a variety of knowledge and skills, such as analytical thinking, synthesis, and critical thinking, which are essential skills in the 21st century [37].

2. The results of the evaluation and comparison of skills in doing arts, culture and local wisdom projects found that before organizing the project-based learning activities using the community as a base to promote skills in doing arts, culture and local wisdom projects, students had skills in doing arts, culture and local wisdom projects in various aspects at a moderate level. After organizing the community-based project learning activities, the overall level was very good. When compared, it was found that after organizing the activities, the scores were higher than before organizing the community-based project learning activities to promote skills in doing arts, culture and local wisdom projects with statistical significance at the .05 level. This is consistent with the research of Suriyothin et al. [38] who studied Project Management Skills Development in Art and Culture of Pre-Service Teachers Through Project and Community Based Learning: A Case Study of Pre-Service Teachers of the College of Teacher Education Student Union, Phranakhon Rajabhat University, which found that students had skills in doing arts and culture projects and were more capable of planning projects than before. From the observation of the advisory faculty who attended the meeting, including discussions and questions about various tasks, it was found that students were able to answer questions about the work process clearly and were able to do it practically. In addition, the community-based project learning management model to promote 21st century learning skills is in line with Dewey's [9] experiential theory philosophy that emphasizes students to think, do, and solve problems. There is an integration of learning between knowledge, skills, and previous and new experiences. Students choose projects based on their interests and use scientific process skills and 21st-century learning skills to solve problems. In this research, students' projects are the result of linking knowledge from the community with knowledge in science and then developing them to obtain work pieces that can be applied in daily life by applying 21st-century learning skills to obtain complete projects [30, 31, 39].

3. The evaluation results of students' opinions on project-based learning using the community as a base found that after organizing activities according to the community-based project learning management model to promote learning skills and doing projects on arts, culture, and local wisdom, students had the highest level of agreement on the benefits of doing the project. Students thought that doing the project could utilize local resources to benefit and could disseminate and transfer knowledge and apply knowledge from participating in the project to their daily lives, Phuttasorn [40]. This was consistent with the research of Suriyothin et al. [38] who studied the satisfaction of students with using project-based learning and community-based learning at a very good level. This can be seen from the implementation of the project activity format that was clear, step-by-step, and interesting. There was a systematic plan and details in collecting data on various aspects. In addition, students were able to create creative works of art and culture. In addition, the survey of students' opinions on learning management by Arantes and Lino [41] studied the advantages and disadvantages of combining project-based learning and community-based learning in a research methodology course for university students. From the survey and focus group discussion with students, it was found that 1) students had problems in working in teams, making appointments with communities, and thinking of project topics; 2) project-based learning improved students' learning process; 3) community-based learning was a valuable experience for students; and 4) this course was successful in developing students' work skills. Therefore, surveying students' opinions on learning management is necessary to further develop new learning management models.

8. Suggestion

8.1. Suggestions for Applying the Research Results

1. Coordinate with local agencies or community leaders to survey the needs of that area or facilitate field visits and contacts with information providers in order to obtain in-depth information and maximize the benefits for that community.

2. Prepare sufficient vehicles for the field visit, taking into account the appropriate number of people, various equipment for data collection, and check the time and weather conditions.

8.2. Suggestions for Future Research

1. The community-based project learning model can be adapted to other fields of study or levels of education that focus on integrating learning and experiences to promote 21st-century learning skills for learners.

2. It should promote the community-based project learning management model to develop 21st-century learning skills and further enhance and promote the value and worth of artistic and cultural works in other dimensions.

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