



The effects of creative-based learning on self-efficacy and creative dramatic arts performance

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Abstract

This research aims to 1) compare self-efficacy perceptions in creative dramatic arts performance before and after creative-based learning, 2) study dramatic arts performance creation skills and abilities, and 3) examine the relationship between self-efficacy perceptions and the quality of dramatic arts performances. The research sample consisted of 76 third-year Bachelor of Education in Performing Arts Education students enrolled in the 07-211-309 Creation of Dance course, selected using purposive sampling. The research instruments included 1) Creative-Based Learning (CBL) activities, 2) The Test for Creative Thinking Drawing Production (TCT-DP), 3) A self-efficacy assessment questionnaire, and 4) a creative dramatic arts performance ability assessment questionnaire. The research findings revealed that: 1) A comparison of self-efficacy in creative dramatic arts performance showed that students' overall average self-efficacy scores after the intervention were significantly higher than before the intervention (Posttest $\bar{x}$ = 4.73, S.D. = 0.21 > Pretest $\bar{x}$ = 1.91, S.D. = 0.38, t = 34.72), with statistical significance at the 0.05 level. 2) The study of creative thinking skills showed that students possessed the highest overall average score in creative thinking skills ($\bar{x}$ = 4.68, S.D. = 0.39), and their ability to create dramatic arts performances was also at the highest level ($\bar{x}$ = 4.70, S.D. = 0.46). 3) The study of the relationship between self-efficacy and the quality of dramatic arts performances revealed a very high positive correlation (r = 0.845) with the quality of dramatic arts performances, with statistical significance at the 0.05 level.

Keywords: 21st century skills, Active learning, Creative dramatic arts performance, Creative-based learning, Self-efficacy.

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Contribution of this paper to the literature
This study contributes to the existing literature by evaluating Creative-Based Learning (CBL) within performing arts education. The primary contribution of this research is the finding that this pedagogical approach significantly enhances students' self-efficacy, creative thinking processes, and performance skills. Furthermore, the study demonstrates a positive correlation between creative self-confidence and the quality of artistic presentations.

1. Introduction

The global society today is undergoing rapid changes in social, economic, political, environmental, and technological aspects, including the digital age, where information is rapidly interconnected across all dimensions. Developing human potential is crucial for national development, aligning with the 13th National Economic and Social Development Plan (2023-2027). This plan focuses on the social and human resource dimensions, emphasizing access to educational opportunities at all ages, improving the quality and efficiency of education, and promoting diverse forms of lifelong learning. These resources support individuals' potential, enabling them to play a vital role in responding to the rapidly changing needs of the labor market and society (Office of the National Economic and Social Development Council, 2023).

Due to changing global societal trends and developments in the 21st century, the global community must adapt to evolving economic and social conditions to keep pace with change and compete internationally. Education is a crucial tool for human resource development (Office of the Education Council, 2017). The educational process must adhere to the principle that all learners can learn and develop themselves, and that learners are the most important element. It must also promote the natural development of learners to their full potential (National Education Act (No. 4), B.E. 2562, 2019). This aligns with the United Nations Sustainable Development Goals 2030 (SDGs: SDGs 2030), specifically ensuring inclusive and equitable access to quality education for all, supporting lifelong learning opportunities, and providing everyone with the necessary knowledge and skills to promote development in cultural diversity and cultural inclusion for sustainable development (Rittibul & Makpa, 2026). The emphasis is on process rather than knowledge, utilizing a 21st century skills-based approach encompassing literacy and innovation skills, life skills, and career skills and information, communication, and technology skills (Burmark, 2002; Carroll, 2007; Elkins, 2007; Frey & Fisher, 2008; National Advisory Committee on Creative and Cultural Education, 1999; Prontadavit, 2016; Riddle, 2009; Trilling & Fadel, 2009).

Thailand's education system has undergone a restructuring and development of its educational management system, known as Educational Reformation, to improve the efficiency and quality of education to meet standards. The goal is to produce quality human resources for a learning society, equipped with 21st-century skills such as a love of learning, creativity, and collaborative learning, with an emphasis on technological skills, as well as desirable attitudes and values (Saavedra & Opfer, 2012). In the 21st century, the world is changing rapidly, requiring educational systems worldwide to shift from rote memorization to innovation. Creativity has therefore become an essential skill in developing learners to keep pace with the dynamics of the world, in line with the international competency framework and Thailand's 20-year national strategy, which focuses on developing human resources into “innovators” or creators. In the education sector, the search for creative and effective teaching methods continues, especially in an era that emphasizes educational reform to enhance creative learning experiences. (Atthachakara, 2021) focusing on the potential to revolutionize traditional teaching models and methods (Puriwat & Tripopsakul, 2020) and creativity as a key source of success in many fascinating and unique aspects of human life, all stemming from creativity as an essential 21st-century skill (Csikszentmihalyi, 1996). Studying creative learning models in the Thai context is important for several reasons, and although significant progress has been made in this area, there are still gaps that should be further explored. This is based on a diverse range of existing research on creative learning models that contribute to promoting innovation among Thai learners (Poonsin & Jansoon, 2021) and preparing them for the demands of the global labor market, impacting the effectiveness of these learning models, as well as the challenges and opportunities associated with integrating these learning models.

Traditional dramatic arts education has followed the philosophy of perennialism, emphasizing the teacher's importance because all knowledge originates from the teacher. Dramatic arts education emphasizes knowledge transmission through individual tradition rather than textbooks or books. The management of knowledge from master teachers in a field refers to individuals who are highly regarded in their profession for their excellence in creating and developing knowledge. This knowledge is considered an educational property that can be used to develop learning management models in the field of dramatic arts. Furthermore, dramatic art is a branch of culture (Boontonglek, Prontadavit, Trirat, & Prammane, 2021). Originally, most teaching was imitation, with teachers leading and students following. Therefore, teaching Thai dramatic art requires instructors to be highly proficient in both theory and practice in their field, as well as to possess excellent techniques and methods for conveying knowledge to students. This is because dramatic arts involve a vast array of movements and songs, including newly created performances in modern times (Boontonglek, Rittibul, Orachun, & Boonsong, 2023). This study examines the teaching models of dramatic arts and the context of their transformation. The researchers therefore studied teaching models to develop students' creative thinking skills. The Creativity-Based Learning (CBL) model

is one method of Active Learning, with the student as the central focus. The main structure of the CBL model is designed according to Torrance's theory of measuring creativity, which emphasizes measurement through four main components: Fluency, Flexibility, Originality, and Elaboration (Guilford, 1956; Torrance, 1962, 1974). It is also an evolution of Problem-Based Learning, a student-centered teaching approach that has proven successful in many countries. The creativity theory is used to create a new learning model that focuses on encouraging students to actively explore rather than passively receive lectures. It creates a joyful learning environment and promotes the development of the 4Cs skills. Education for the 21st century must shift perspectives from traditional paradigms to a new paradigm that places the student's world and the real world at the center of the learning process. It is a learning approach focused on developing skills and attitudes (Pettongma, 2024).

This learning process redefines the approach to problem-solving in education, leading to development, behavioral changes, and new attitudes. This personal development process requires both experiential learning and aims to cultivate knowledge, understanding, artistic skills, and appreciation of art, providing opportunities for students to express themselves freely in various art forms. The development and progress of human society demand creativity. Improving the capabilities and quality of higher education students, as a crucial part of the national innovation system, necessitates university-level learning as a primary focus for developing innovative personnel. Methods for nurturing innovative abilities and developing creativity among higher education students are increasingly of interest to educators and society as a whole. Sternberg and Lubart (1996) believe that creativity can solve everyday problems for individuals. For society, it can lead to artistic creation, scientific innovation, new inventions, and new design plans. Economically, it can create new or novel services or products, increase product value, and create new employment opportunities. Bandura believes that building self-confidence is the recognition of one's ability to perform. It assesses an individual's ability to create and execute processes to achieve defined objectives. Therefore, confidence in one's perceived self-efficacy influences creativity. Self-confidence, or confidence in specific abilities, is a crucial component of self-motivation and work commitment (Bandura & Cervone, 1983). Specifically, creative self-confidence is the belief that one is capable of performing creative work effectively (Tierney & Farmer, 2002). Given the challenges involved in creative production, individuals need commitment and resilience to realize their creative potential. Creative self-confidence has been proven to predict creative performance better than general work self-confidence (Tierney & Farmer, 2002) and openness to experience (Jaussi, Randel, & Dionne, 2007). Creative self-confidence should help groups overcome factors hindering creative collaboration (Taggar, 2018), although groups should also be provided with a wider and more diverse range of resources. The researchers therefore recognized the importance of the creative-based learning (CBL) process, which can be used to enhance students' self-confidence in recognizing their desired abilities, leading to improved academic performance. This is a crucial foundation for developing creative abilities in performing arts in the future.

1.1. Objective

1. To compare self-perceived abilities in creative thinking for performing arts before and after learning using a creative-thinking-based approach.
2. To study the skills and abilities in creating dramatic arts performances that have been taught using a creative-based learning approach.
3. To study the relationship between perceived self-efficacy and the quality of dramatic arts performances.

2. Literature Review

2.1. The Concepts of Creative Thinking

The concept of creativity from the perspectives of the current environment, behavioral processes, and resulting outcomes originated in the 1950s. Guilford, president of the American Psychological Association, emphasized that "creativity is not merely a gift or characteristic of a few individuals, but an ability of all people." Some scholars believe that creativity is related to personality traits, knowledge, intelligence, abilities, creative skills, the external environment, and motivation (Barron, 1955; Gordon, 1961; Guilford, 1956; Helson, 1965). From a behavioral-process perspective, creativity focuses on the development of creativity. Wallas (1926) described four stages in the development of ideas: preparation, incubation, clarification, and verification. Zhou, Yang, and Zhao (2006) believe that, from a creative-process research perspective, creative activity comprises a complex and diverse range of cognitive activities, and creativity is its essence. Leonard-Barton and Swap (1999) believe that the process of generating and expressing novel ideas that may be useful is creativity. From an outcome-creating perspective, over the 30 years since the 1960s, the definition of creativity has shifted from a process-oriented focus to a product-oriented focus (Scott, 1995). "Creativity is defined as a novel and practical idea, product, or service" (Amabile, 1996; Greenberg, 1992). Creativity is defined as "the process of creating new work or output." Although researchers define creativity in a variety of dimensions, scopes, and perspectives, it is generally believed to refer to the ability of an individual or group of individuals working closely together to create new and appropriate ideas (Amabile, 1983). In this study, creativity is defined as the skills and abilities of students in creating dramatic arts performances, with a correlation between their perceived self-efficacy and the quality of their dramatic arts performance after receiving creativity-based learning.

2.2. The Concepts of Creative-Based Learning (CBL)

Creative-Based Learning (CBL) is a learner-centered learning process. Many scholars have adopted this model in their teaching designs to help learners develop concrete creative thinking skills and enhance analytical thinking. It emphasizes hands-on learning, enabling learners to acquire knowledge and 21st-century skills (Sreejun & Chatwattana, 2023). The CBL process promotes the development of 4Cs skills: critical thinking, creativity, communication, and collaboration/teamwork. The learning process can be synthesized into five steps as follows (Meeplat, 2020; Phuangphae, 2017).

Step 1: Stimulating interest. This step involves introducing the lesson topic, during which the instructor stimulates the students' interest. This is crucial for fostering curiosity, enthusiasm, and a desire to learn and find answers. It is a key factor in achieving success and can be achieved by employing various appropriate methods.

Step 2: Identifying the problem and dividing students into groups based on interest. This process uses a problem-based approach. In this step, the teacher allows students to research problems they are curious about and then divides them into groups based on their interests and preferences. Students are not forced to know the answers; the teacher does not pre-determine the questions. Instead, students are allowed to explore the problems they are curious about, which must stem from their own curiosity. The number of groups formed corresponds to the number of problems encountered in the class. The membership of each group depends on the students' preferences.

Step 3: Research and Think. The teacher allows students ample time to research and think. This step requires time in the learning process. The teacher's role is to follow the groups, providing guidance, advice, and answering questions to give students opportunities to think and make decisions independently. The teacher will not judge students based on their answers but will offer guidance when students encounter problems, suggest appropriate sources of information, and allow students to choose the correct information themselves. The teacher should also make the exploration of knowledge enjoyable for students.

Through this process, students will develop critical thinking skills, research abilities, and the ability to make decisions based on the information they have gathered.

Step 4: Presentation. Students will present their research and ideas. In this step, the instructor should allow students to present until completion without interruption. The role of asking questions and expressing opinions rests with classmates. Encouraging classmates to ask questions and offer opinions helps verify the accuracy of the information.

If the information is incorrect, new questions arise, prompting the presenter to reconsider and reflect. The instructor's role is to ensure that questions and opinions stay relevant to the lesson content. If no classmates ask questions, the instructor may initiate questions to create a discussion atmosphere in the classroom.

Step 5: Evaluation. This involves evaluating all activities that the learners have undertaken at every stage. The evaluation must cover three areas: 1) knowledge, 2) skills, and 3) desirable attributes, to achieve a standard of quality in student learning.

2.3. The Concepts of Self-Efficacy

Perceived self-efficacy, or self-confidence, is an assessment of one's likelihood of completing a particular task. From Bandura's perspective, perceived self-efficacy gives rise to self-confidence, which refers to a person's confidence or belief in their own ability to achieve behavioral goals in a specific domain (Bandura, 1982). Based on Bandura's definition of self-efficacy, domestic scholars have defined it differently depending on their research objectives and fields.

For example, Wang (1992) believes that self-efficacy is the judgment of a person's ability to manage and execute their own behavior to achieve a predetermined behavioral pattern. Self-efficacy is not solely concerned with the skills an individual possesses, but also with their ability to utilize what they have. Self-efficacy is the level of forecasting, judging, and confidence in one's own ability to handle a particular situation, and is the perception and understanding of an individual's capacity to achieve specific goals. Self-efficacy is the belief in an individual's ability to succeed in a specific task by mobilizing motivation, perception, and other resources. Self-efficacy refers to an individual's general confidence in their ability to perform challenging tasks in any situation (Zhou & Guo, 2006). Some scholars believe that self-efficacy refers to an individual's general confidence in their ability to handle challenging tasks in any situation; it is an acknowledgment of the existence of general self-confidence (Zhang & Xu, 2023). In this study, self-efficacy is defined as students' perceived ability to create dramatic arts performances, which is related to the quality of the dramatic arts performance after being taught using a creative-based learning approach.

2.4. Study on the Relationship Between Self-Efficacy and the Quality of Dramatic Arts Performance

Based on the theory that self-confidence can control and direct human thought processes, emotions, and behavior, it can, consequently, control and direct creativity. Various studies have shown that creative and innovative self-confidence, a form of self-confidence, can positively predict creative and innovative performance (Carmeli & Schaubroeck, 2007). Creative and innovative self-confidence is crucial for creative effort and effectiveness (Chen & Wang, 2014). Mathisen and Bronnick (2009) suggest that cultivating creative self-confidence can enhance an individual's creativity, and that training creative self-confidence may have a more significant long-term effect than training in creativity itself. Self-confidence is an individual's self-assessment of their abilities in a particular area of work.

According to self-confidence theory, individuals who believe they have high self-confidence in the face of challenging tasks are more willing to take risks. Studies have proven that the higher a student's self-confidence level, the higher their exhibited creativity. This may be because, on the one hand, individuals with high levels of self-confidence are more likely to utilize their abilities, which may be a means of developing creativity on the other hand. Positive emotions associated with an individual's psychological capital in self-confidence can positively influence an individual's creativity by promoting coherent thinking activities, distributed thinking activities, and cognitive flexibility.

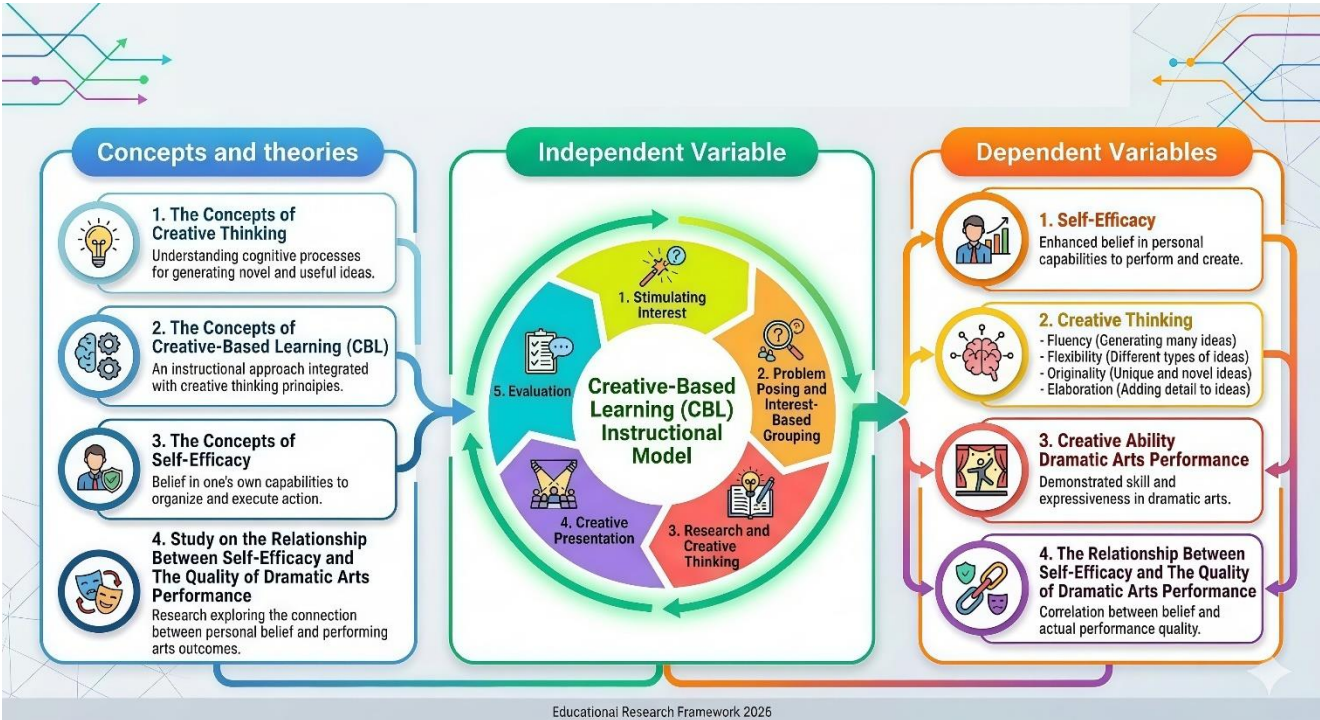


Figure 1. Concept Framework of Creative-Based Learning (CBL) On Self-Efficacy and Creative Dramatic Arts Performance.

Figure 1: Concept Framework of Creative-Based Learning (CBL) on Self-Efficacy and Creative Dramatic Arts Performance illustrates the structural integration of creative thinking, the CBL instructional model, and the selected dependent variables.

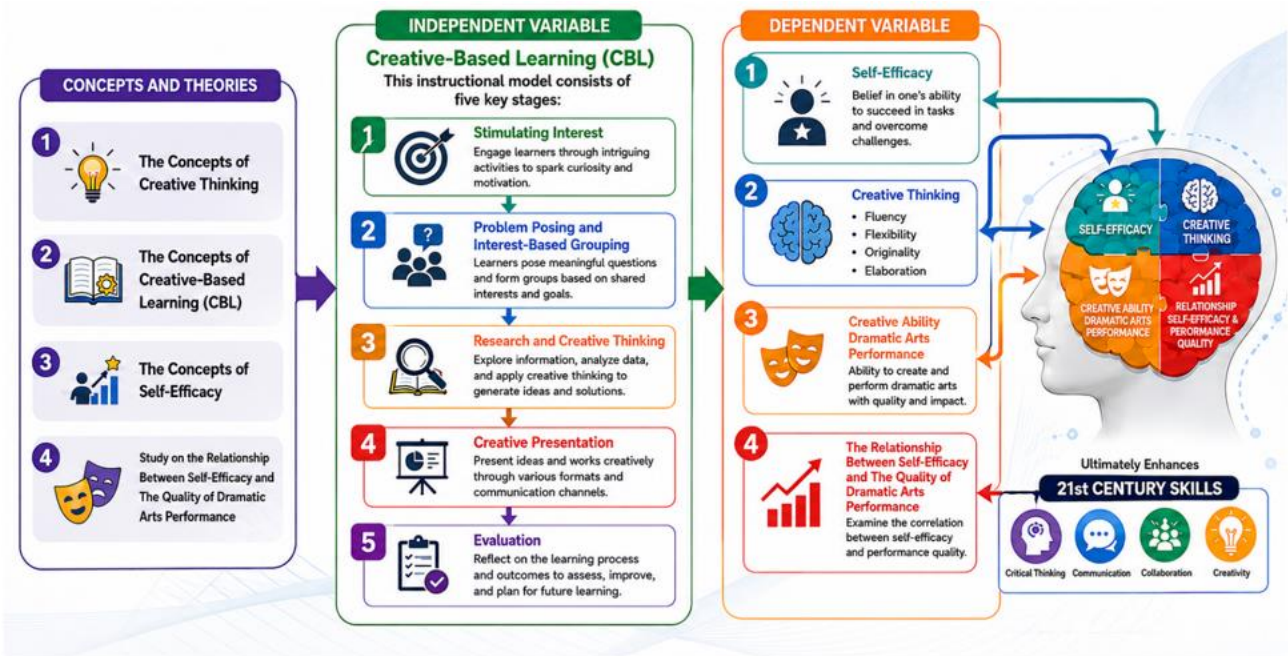


Figure 2. Integrating Creative-Based Learning into the 21st Century Skills.

Figure 2 Integrating Creative-Based Learning into the 21st Century Skills illustrates how the five key CBL stages systematically foster the development of essential competencies.

3. Methodology

This research employed a quasi-experimental design, specifically a one-group pretest-posttest design.

3.1. Population and Sample

1. The population used in this study consisted of 303 students from the Faculty of Fine and Applied Arts at Rajamangala University of Technology Thanyaburi, Thailand, in the Bachelor of Education Program in Performing Arts Education.
2. The sample group used in this study consisted of 76 students from the Faculty of Fine and Applied Arts, Rajamangala University of Technology Thanyaburi, Thailand, in the Bachelor of Education Program in Performing Arts Education, third-year students currently enrolled in the second semester of the 2025 academic year. These students were selected using a purposive sampling method and were enrolled in the course 07-211-309 Creation of Dance.

3.2. Tools used for Data Collection

1. Creative-Based Learning (CBL) activities in the course 07-211-309 Creation of Dance for pre-teaching students in the Performing Arts Education Program, spanning 15 weeks. Each learning activity consists of

5 hours, totaling 75 hours. This instructional model comprises five key stages: 1. Stimulating Interest, 2. Problem Posing and Interest-Based Grouping, 3. Research and Creative Thinking, 4. Creative Presentation, and 5. Evaluation. Students are required to utilize their creative thinking skills to design dramatic arts performances and present their knowledge in a stage-based format during the presentation stage. This learning activity has undergone content validity testing, been presented to three experts, and revised according to their feedback, resulting in an Index of Content Validity (IOC) of 0.67-1.00.

Table 1: Creative-Based Learning (CBL) Activities presents the structured guidelines, teacher roles, and learner activities within the five stages of the Creative-Based Learning model.

Table 1. Creative-Based Learning (CBL) Activities.

Creative-Based Learning (CBL)	Guidelines for organizing learning activities.	
	The role of the teacher	The role of the learner
1. Stimulating Interest	Sparker: The instructor introduced the content of the performance design course to prepare students for the next lesson and posed questions to enhance their understanding of cultural capital that can be creatively utilized for communication and creating awareness of values using technology and its applications in performance.	Observer: Students listened to the instructor's explanation of the performance design course, participated in critical thinking, and answered questions in class.
2. Problem Posing and Interest-Based Grouping	Guide: - The concept of "THAI" presents problems or situations related to cultural capital that are relevant to students' lives, to stimulate students' journey of self-discovery. -Observe the group process and encourage students to express their opinions and analyze the situation.	Explorer: - Divide into groups of 4-5 people and brainstorm to analyze interesting aspects that can be creatively developed for communication and creating awareness of values using technology and its applications in performances. - The group collaboratively analyzed and linked cultural capital with knowledge of performance design.
3. Research and Creative Thinking	Supporter: The instructor designed activities that emphasized creative thinking processes to promote group discussion, encouraging students to summarize knowledge gained from research using the 6W technique to identify topics, which include: 1. What is new? 2. What is uniqueness? 3. What is the difference? 4. What is innovativeness? 5. What is value impact? 6. To whom? Students will be required to design based on the eight elements of performance and propose innovative ways to disseminate this knowledge to society and the community by applying information technology to the performance.	Designer: Students researched information from various sources, including academic documents, online media, and fieldwork, discussing the 6W concept. Furthermore, they proposed new design approaches for presentations using information technology to develop educational media for disseminating knowledge about cultural capital.
4. Creative Presentation	Coach: The instructor provided guidance and consultation on methods for presenting knowledge by applying information technology tools to create multimedia presentations.	Maker: Students will receive feedback and suggestions within their groups, as well as from a panel of qualified judges who will evaluate their creative abilities and performances.
5. Evaluation	Evaluator: The instructor assesses creative skills from the students' performances, evaluating creative thinking skills in four areas: 1. Fluency 2. Flexibility 3. Originality 4. Elaboration It reflects the results, providing feedback for improvement and enhancement of the work.	Communicator: Students will have their work evaluated in terms of creative thinking skills and receive feedback to improve their work and make it more effective.

2. The Test for Creative Thinking Drawing Production (TCT-DP), developed by Jellen and Urban (1986), is a drawing-completion tool that has undergone expert evaluation and has clear assessment criteria. This aligns with the research of Togrol (2012), which found the TCT-DP to have a reliability coefficient of 0.77, and the research of Ruamkaew, Simmatun, and Samavardhanae (2016), which found the TCT-DP to have reliability coefficients of 0.81 and 0.85, respectively. The creative thinking test is presented as stimuli in the form of six pieces of varying shapes and sizes: semicircles, points, right angles, curves, dashed lines, and small open-ended squares, located inside and outside a 5 x 5-inch square frame.

- 3. A self-efficacy assessment tool for creative thinking in dramatic arts performance, conducted before and after creative thinking-based learning for students in the course 07-211-309, Creation of Dance. This assessment is a 5-level rating scale consisting of 20 items. The content validity and linguistic accuracy of each item were verified by three content experts, resulting in an Index of Content Validity (IOC) of 0.67-1.00.
- 4. The assessment tool for creative dramatic arts performance learning, implemented using a creative-based learning approach in the course 07-211-309 Creation of Dance, is a 5-level rating scale consisting of 15 items. The content validity and linguistic accuracy of each item have been verified by three content experts, resulting in an Index of Content Validity (IOC) of 0.67-1.00.

3.3. Methods for Collecting Data and Statistics Used in Analysis

- 1. The self-efficacy assessment of the sample group's creative thinking in performing arts before and after creative thinking-based learning was conducted using a 5-level rating scale with 20 items. The self-efficacy assessment forms were distributed to the sample group, and the assessment criteria were explained.
- 2. Implement Creative-Based Learning (CBL) activities in course 07-211-309, Creation of Dance, for pre-teaching students in the Performing Arts Education Program for 15 weeks. Each learning activity will last 5 hours, totaling 75 hours.
- 3. The creativity of the sample group was measured after learning management using creativity-based learning, employing the TCT-DP creativity test developed by Jellen and Urban (1986). This test was an activity-based test with a time limit of 15 minutes. The researchers informed the students that they could draw anything they wanted, as there were no right or wrong answers and the drawings would not affect their course scores. No eraser was provided to prevent students from correcting their imaginative drawings. The time students completed the test before the allotted time (12 minutes) was recorded in the upper right corner of the test sheet for inclusion in the scoring criteria.
- 4. The ability to create dramatic arts performances, taught using a creative-based learning approach in the course 07-211-309 Creation of Dance, was assessed using a 5-level rating scale consisting of 15 items. Five experts evaluated the students' knowledge presented in the design process and their stage performances.

3.4. Statistics used in the Analysis

- 1. The researchers, in collaboration with one content expert, separately scored the creativity test before and after the creativity-based learning intervention. The test used the TCT-DP and the scoring criteria of Jellen and Urban (1986), which consist of 14 areas with a maximum score of 72 points. The scores were then analyzed to identify both agreements and differences in each area, aiming for a consensus on all assessments. The overall level of creative thinking skills and skills in each area were then interpreted, and pre- and post-test scores were compared using a dependent t-test, showing statistical significance at the .05 level.
- 2. A dependent t-test was used to compare perceived self-efficacy in creative thinking for performing arts before and after creative thinking-based learning, with statistical significance at the .05 level.
- 3. Analyze the mean ($\bar{x}$) and standard deviation (S.D.) of the creative ability in performing arts after being taught using a creative-based learning approach.
- 4. Analyze the positive correlation (r between perceived self-efficacy and the quality of dramatic arts performance using positive correlation.

4. Results

- 1. A comparison of perceived self-efficacy in creative thinking for performing arts before and after learning using creative thinking-based learning.

Table 2. Comparison of perceived self-efficacy in creative thinking for performing arts before and after learning using creative thinking-based learning (dependent t-test).

Self-efficacy	Score	Statistics (n = 76)			
		$\bar{x}$	S.D.	t-test	p
In terms of confidence in initiative and creativity.	Before class	2.10	0.26	66.83	0.00
	After class	4.71	0.24		
In terms of confidence in application and adaptation.	Before class	1.90	0.42	53.77	0.00
	After class	4.76	0.19		
In terms of confidence in creative operational skills.	Before class	1.80	0.32	61.10	0.00
	After class	4.70	0.20		
In terms of confidence in performance evaluation and development.	Before class	1.91	0.51	60.89	0.00
	After class	4.76	0.21		
Sum	Before class	1.91	0.38	34.72	0.00
	After class	4.73	0.21		

Note: Statistically significant at the 0.05 level.

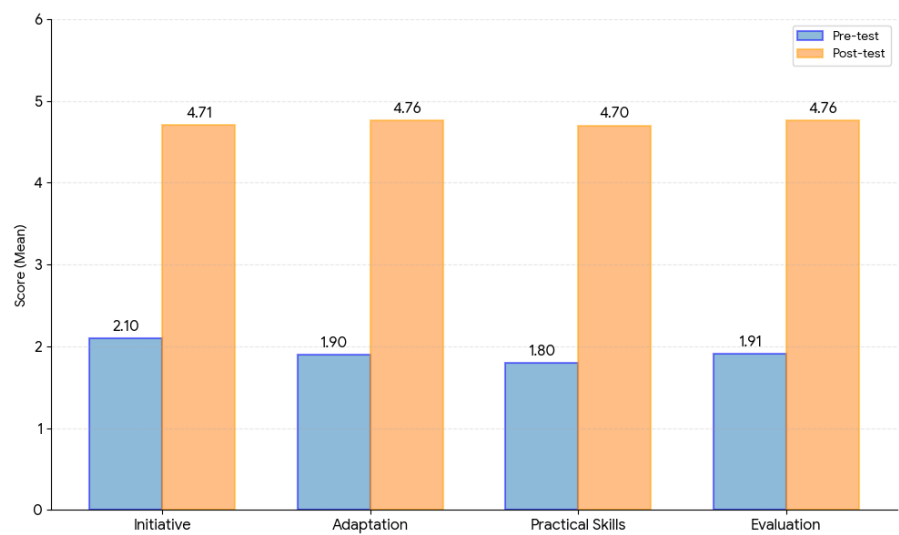


Figure 3. Comparison of results of perceived self-efficacy in creative thinking for performing arts before and after learning using creative thinking-based learning.

Figure 3, comparison of results of perceived self-efficacy in creative thinking for performing arts before and after learning using creative thinking-based learning, illustrates significant growth in students' self-confidence across all four assessed dimensions.

Table 2 shows a comparison of perceived self-efficacy in creative thinking for performing arts before and after learning using creative thinking-based learning. It was found that each component and the students' self-efficacy perception had significantly higher post-test scores in each area compared to pre-test scores at the .05 statistical significance level, as follows: 1) Confidence in creative initiative (Posttest $\bar{x}$ = 4.71, S.D. = 0.24 > Pretest $\bar{x}$ = 2.10, S.D. = 0.26, t = 66.83), 2) Confidence in application and adaptation (Posttest $\bar{x}$ = 4.76, S.D. = 0.19 > Pretest $\bar{x}$ = 1.90, S.D. = 0.42, t = 53.77), 3) Confidence in creative practical skills (Posttest $\bar{x}$ = 4.70, S.D. = 0.20 > Pretest $\bar{x}$ = 1.80, S.D. = 0.32, t = 61.10), and 4) Confidence in evaluating and developing work (Posttest $\bar{x}$ = 4.76, S.D. = 0.21 > Pretest $\bar{x}$ = 1.91, S.D. = 0.51, t = 60.89)

Table 3. Perceived self-efficacy in creative thinking for performing arts.

In terms of self-efficacy	$\bar{x}$	S.D.	Level of self-efficacy
In terms of confidence in initiative and creativity			
- I am confident that I can create new dramatic arts moves that are different from the original ones.	4.62	0.49	Very Good
- I dare to present unique and unconventional performance ideas in front of others.	4.71	0.46	Very Good
- Upon receiving the performance assignment, I can immediately visualize the style of expression.	4.64	0.48	Very Good
- I believe I can use my surroundings as inspiration to create dramatic arts movements.	4.71	0.46	Very Good
- I can initiate and determine the storyline or theme of the performance myself.	4.84	0.37	Very Good
Sum	4.70	0.45	Very Good
In terms of confidence in application and adaptation			
- I can adapt basic dramatic arts steps to suit modern music.	4.72	0.45	Very Good
- I am confident in my ability to seamlessly integrate Thai dramatic arts with other performing arts.	4.67	0.47	Very Good
- When problems arise during training, I can immediately think of ways to correct my posture and achieve the appropriate technique.	4.87	0.34	Very Good
- I can adjust the rhythm and style of my movements to match the mood of a wide variety of music.	4.84	0.37	Very Good
- I can design props that complement the newly created dramatic arts moves.	4.71	0.46	Very Good
Sum	4.76	0.42	Very Good
In terms of confidence in creative operational skills.			
- I am confident that I will be able to clearly convey the emotions through the dramatic arts movements I have created myself.	4.53	0.50	Very Good
- I can extend a single dramatic arts movement into a short performance sequence.	4.68	0.47	Very Good
- I can design formations that are beautiful and coordinated with the dramatic arts movements.	4.58	0.50	Very Good
- I am confident in my choice of costumes and makeup to enhance the creativity of the performance.	4.88	0.33	Very Good
- I can explain the meaning and origin of the dramatic arts movements I have created to others.	4.83	0.38	Very Good

In terms of self-efficacy	$\bar{x}$	S.D.	Level of self-efficacy
Sum	4.70	0.44	Very Good
In terms of confidence in performance evaluation and development.			
- I am willing to critique my own work to find areas for improvement.	4.88	0.33	Very Good
- I am confident that I can accept advice from others and use it to develop new dramatic arts movements.	4.82	0.39	Very Good
- I am confident that the dramatic arts performances I have created are beautiful and possess artistic value.	4.53	0.50	Very Good
- I felt entertained and challenged when given the task of creating a new dramatic arts performance.	4.78	0.42	Very Good
- I believe I have the potential to become a great dramatic arts creator in the future.	4.79	0.41	Very Good
Sum	4.76	0.41	Very Good
Overall	4.73	0.43	Very Good

Table 3 shows the results of the study on perceived self-efficacy in creative thinking for performing arts before and after learning using creative thinking-based learning. Based on the assessment of four dimensions, students had a very good overall average self-efficacy score ($\bar{x} = 4.73$, S.D. = 0.43). Considering self-efficacy perception in each dimension, confidence in application and adaptation was at a very good level ($\bar{x} = 4.76$, S.D. = 0.42), followed by confidence in evaluating and developing work ($\bar{x} = 4.76$, S.D. = 0.41). This was followed by confidence in creative initiative ($\bar{x} = 4.70$, S.D. = 0.45), and confidence in creative practice skills ($\bar{x} = 4.70$, S.D. = 0.44), respectively.

2. Results of the study on skills and abilities in creative thinking for performing arts using creative thinking-based learning.

Table 4. Creative thinking skills for performing arts using creative thinking-based learning.

Creative thinking skills	$\bar{x}$	S.D.	Level of self-efficacy
Fluency	4.72	0.38	Very High
Flexibility	4.65	0.41	Very High
Originality	4.59	0.44	Very High
Elaboration	4.75	0.35	Very High
Overall Mean	4.68	0.39	Very High

Table 4 shows the results of creative thinking skills for performing arts using creative thinking-based learning. Based on the assessment of four aspects, it was found that students possessed creative thinking skills with an overall average score at the very high level, with $\bar{x} = 4.68$ and S.D. = 0.39. Considering each aspect of creative thinking skills in order, Elaboration was at the very high level ($\bar{x} = 4.75$, S.D. = 0.35), followed by Fluency ($\bar{x} = 4.72$, S.D. = 0.38), Flexibility ($\bar{x} = 4.65$, S.D. = 0.41), and Originality ($\bar{x} = 4.59$, S.D. = 0.44), respectively.

Table 5. Ability to create the performing arts using creative thinking-based learning.

The ability to create dramatic arts performances	$\bar{x}$	S.D.	Level of ability in creating dramatic arts performances
The format and method of presentation are clear and appropriate, and align with the creative purpose.	4.66	0.41	Very High
The performance was appropriate, beautiful, and the communication was easy to understand.	4.84	0.44	Very High
The creation of a clear and appropriate identity for the performance.	4.77	0.51	Very High
The casting was appropriate for the performance.	4.73	0.48	Very High
The ability of the performers to communicate and express emotions.	4.60	0.44	Very High
The costume style is appropriate, clear, and consistent with the purpose of the performance.	4.60	0.53	Very High
Costumes enhance and support the performers, making them look outstanding and beautiful.	4.57	0.39	Very High
The equipment used enhances and supports the performers, making them look outstanding, beautiful, and easily understandable.	4.81	0.44	Very High
The music used in the performance was clear and appropriate, fulfilling the purpose of the performance.	4.73	0.46	Very High
The use of performance techniques, lighting, and color was diverse, beautiful, and appropriate.	4.76	0.49	Very High
The duration used was appropriate for the performance.	4.56	0.59	Very High
Creative dramatic arts performances can appropriately promote Thai arts and culture.	4.84	0.41	Very High
Creative dramatic arts performances have benefits and value for society.	4.80	0.50	Very High
The overall elements are appropriate and consistent with the creative work of dramatic arts.	4.61	0.53	Very High
Creative expressions can be shared with the public.	4.60	0.36	Very High
Overall Mean	4.70	0.46	Very High

Table 5 shows the results of the study on creative ability to create the performing arts using creative thinking-based learning. The overall average score was at the very high level, with $\bar{x} = 4.70$ and S.D. = 0.46. Considering the highest average scores for creative dramatic arts performances in descending order, the performance was found to be appropriate, beautiful, and easy to understand ($\bar{x} = 4.84$, S.D. = 0.44). This was followed by the creative dramatic arts performance's ability to appropriately promote Thai arts and culture ($\bar{x} = 4.84$, S.D. = 0.41), the use of props that enhanced the performer's appearance, beauty, and ease of communication ($\bar{x} = 4.81$, S.D. = 0.44), and the creative dramatic arts performance's benefit and value to society ($\bar{x} = 4.80$, S.D. = 0.50).

3. Results of the study on the relationship between perceived self-efficacy and the quality of dramatic arts performances.

Table 6. The relationship between perceived self-efficacy and the quality of dramatic arts performances.

Self-efficacy	The relationship between perceived self-efficacy and the quality of dramatic arts performances.		
	Correlation value (r)	Sig*	Level of Correlation
In terms of confidence in initiative and creativity.	0.786**	0.00	High Correlation
In terms of confidence in application and adaptation.	0.754**	0.00	High Correlation
In terms of confidence in creative operational skills.	0.812**	0.00	Very High Correlation
In terms of confidence in performance evaluation and development.	0.795**	0.00	High Correlation
Sum	0.845**	0.00	Very High Correlation

Note: *Statistically significant at the .05 level.
**Statistical significance (p-value) confirms that the result is not due to random chance, with additional asterisks signifying higher reliability and stronger statistical confidence.

Figure 4 illustrates the correlation model defining the strong relationship between self-efficacy components and performance quality.

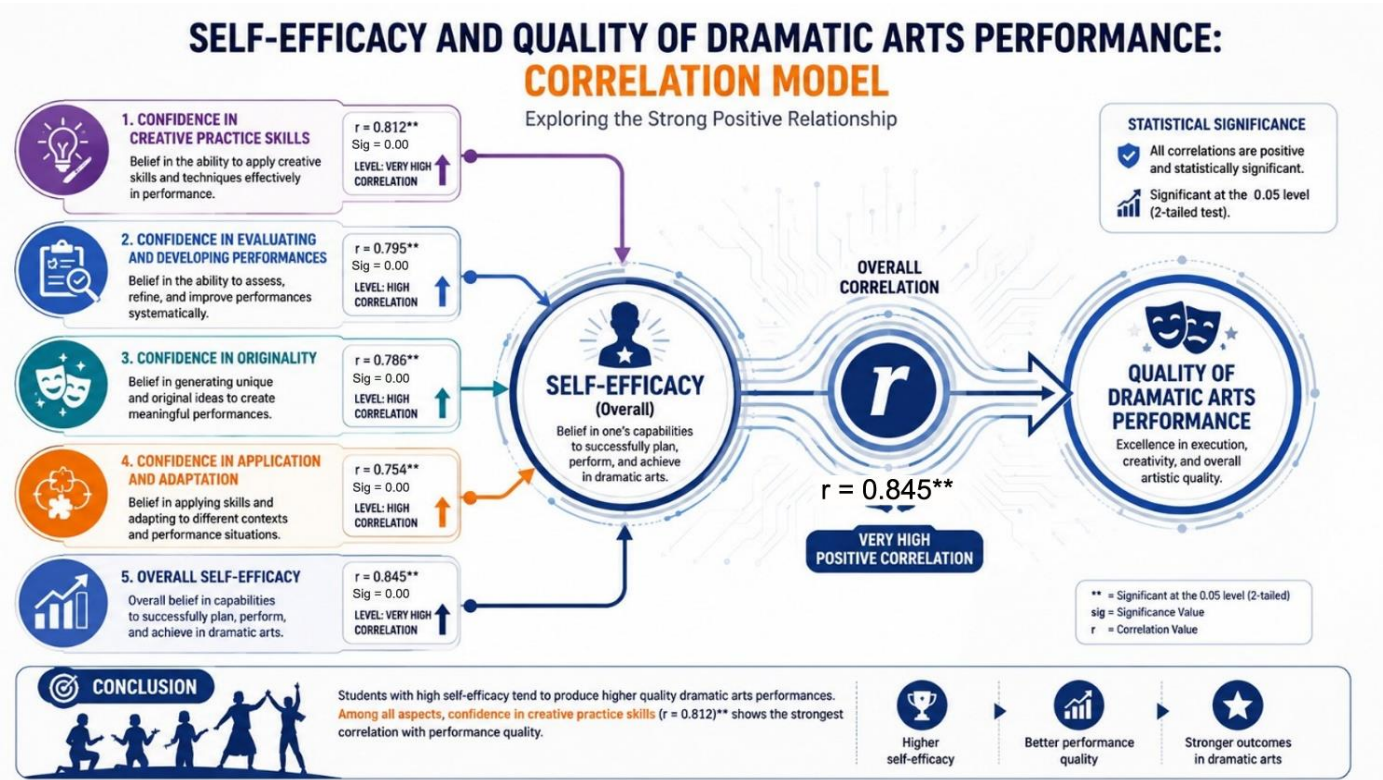


Figure 4. Model the relationship between perceived self-efficacy and the quality of dramatic arts performances.

Note: **Statistical significance (p-value) confirms that the result is not due to random chance, with additional asterisks signifying higher reliability and stronger statistical confidence.

Figure 4 Modeling the relationship between perceived self-efficacy and the quality of dramatic arts performances illustrates the strong positive correlation ($r = 0.845$) between students' creative confidence and their final presentation outcomes.

Table 6 shows that the study of the relationship between self-efficacy and the quality of dramatic arts performance revealed a very high positive correlation ($r = 0.845$) between self-efficacy and the quality of dramatic arts performance, statistically significant at the .05 level. When considering each aspect individually, all aspects of self-efficacy showed a positive correlation with the quality of dramatic arts performance, statistically significant at the .05 level. The correlation coefficients, from highest to lowest, were: confidence in creative practice skills (very high correlation, $r = 0.812$), followed by confidence in evaluating and developing performances (high correlation, $r = 0.795$), confidence in originality (high correlation, $r = 0.786$), and confidence in application and adaptation (high correlation, $r = 0.754$). In conclusion, students with high self-efficacy tend to produce higher-quality dramatic arts performances, particularly those with confidence in practice skills, which showed the strongest correlation to performance quality.

5. Conclusion and Discussion

1. A study comparing self-efficacy in creative thinking for dramatic arts performances before and after creative-based learning revealed that students' self-efficacy in creative thinking for dramatic arts performances significantly increased after Creative-Based Learning (CBL) compared to before, at a statistical significance level of .05, in all aspects. This indicates the effectiveness of the CBL process in boosting creative confidence. The research shows that the Creative-Based Learning model is a highly effective process for promoting learners' confidence, as evidenced by the significant overall increase in post-test scores ($\bar{x} = 4.73$, S.D. = 0.21) compared to the low pre-test score ($\bar{x} = 1.91$, S.D. = 0.38). This is because the CBL process focuses on providing opportunities for learners to initiate and act, consistent with the analysis of confidence in creative initiative and confidence in creative practice skills, which showed very high t-test values (66.83 and 61.10, respectively), demonstrating that learning activities that reduce limiting creative thinking are highly effective. Promoting freedom in creative design and dramatic arts performance helps unlock anxieties, enabling students to boldly present new ideas and believe in their ability to implement their own creative inventions. This aligns with Bandura (1982) theory that higher post-test scores can be explained by confidence in application and adaptation, and confidence in evaluating and developing work. The highest post-test score ($\bar{x} = 4.76$) from the CBL (Creative-Based Learning) approach created mastery experiences for learners through repeated practice and problem-solving in real-world situations, leading to expertise. Furthermore, the collaborative evaluation and development of work by learners served as verbal persuasion and vicarious experiences, fostering confidence in applying existing dramatic arts knowledge to create new things and enabling them to evaluate the quality of their own work systematically. Consistent with the research of Tasa, Sears, and Schat (2011), overall effectiveness in promoting outcomes is primarily due to collaborative learning through the team-building relationships of learners in real-world situations. Shin and Zhou (2007) stated that overall creative effectiveness is fostered by openly sharing ideas in collaborative learning, resulting in clearly defined teamwork behaviors that achieve the assigned tasks. Furthermore, Richter, Hirst, van Knippenberg, and Baer (2012) found that teamwork with diverse members possessing high creative self-confidence can lead to higher individual creativity development. This increased creative self-confidence, in turn, allows individuals to better utilize group information resources and increases the likelihood of group members confidently sharing novel ideas openly.

2. The results of the study on skills and abilities in creating dramatic arts performances taught using a creative-based learning approach showed that students' overall creative skills were at the highest level. The aspect with the highest average score was elaboration ($\bar{x} = 4.75$). This research reflects that the CBL learning process plays a significant role in promoting students' attention to detail in their work. This may be due to the nature of dramatic arts as an art form that emphasizes refinement. When stimulated by the creative thinking process, students did not stop at merely creating new dramatic arts movements (originality), but they focused on refining and elaborating their performances to make them more elaborate, beautiful, and perfect. This aligns with Torrance (1962) and Torrance (1974) concepts that elaboration is a crucial element for achieving completeness and practical application in a work. The ability to create dramatic arts performances requires meticulous attention to detail, which involves a relationship between beauty and communication. When compared to the evaluation of creative ability, the aspect with the highest average score was appropriateness, beauty, and ease of communication ($\bar{x} = 4.84$). This research indicates that creative-based learning does not lead students to create works that are so unconventional that they lack aesthetic appreciation. Instead, it helps them apply existing knowledge to present new works seamlessly, aligning with Guilford (1956)'s concept that creativity comprises fluency, flexibility, originality, and elaboration. The learning process developed by the researcher facilitated the full utilization of these elements, particularly in the area of elaboration, which received the highest score. This demonstrates students' attention to detail in designing the performance and various elements to achieve completeness and beauty. The high score in this area correlates with the promotion of Thai arts and culture ($\bar{x} = 4.84$), showing that students can integrate creativity with cultural foundations harmoniously. The resulting work is not only novel but also beautiful and effectively communicates awareness, which is a key aspect of performing arts. Furthermore, the high scores in props and costumes ($\bar{x} = 4.81$) provide empirical evidence confirming the first research finding regarding elaboration, showing that students have conveyed their attention to detail through artistic elements on stage in a tangible way, as supported by Sternberg and Lubart (1996). Continuous training of creative skills through challenging activities is crucial. This will help learners effectively connect imagination to practice, supporting the idea that creativity is not just a talent, but a skill that can be developed through decision-making and action in the right environment.

3. The study of the relationship between perceived self-efficacy and the quality of dramatic arts performance revealed a very high overall correlation ($r = 0.845$). This finding aligns with Bandura (1982) Self-Efficacy Theory, which states that self-confidence directly affects actions, effort, and determination. In the context of dramatic arts, a discipline requiring both physical and mental skills, when students have confidence in their abilities, they are more expressive, experience less anxiety, and are more dedicated to practice. This results in more refined, beautiful, and high-quality performances. The aspect of creative practice skills, with the highest correlation coefficient ($r = 0.812$), clearly reflects the practical skill nature of dramatic arts. Confidence in physical skills such as movement, body control, and memorization of dramatic arts steps is the most important foundation. If learners are confident in their practical skills, it will result in potential smoothness, natural facial expressions, and dramatic arts movements that effectively communicate emotions, which is a key criterion for judging the quality of dramatic arts performances. The role of performance evaluation and development ($r = 0.795$) had the second-highest correlation value. This indicated that students who were confident in their own abilities to critique and correct their own work were better able to improve shortcomings during rehearsals, resulting in a more complete outcome than those who lacked confidence in reviewing their own work. In summary, promoting the quality of dramatic arts performances should not focus solely on practical instruction. Instructors need to create learning processes that enhance self-efficacy, especially confidence in practical skills, so that students can fully utilize their potential in creating performances. This aligns with the work of Harrison and Stockwell (2014) in performance psychology, which found that

performers with high self-confidence will be able to manage excitement and demonstrate their physical potential flow, resulting in higher-quality performances in the eyes of the audience. This is consistent with the research of Tierney and Farmer (2002), which found that confidence in one's own creativity is a significant predictor of creative performance; when learners believe they can invent new things or solve dramatic arts problems, they are more likely to perform creatively. They will dare to take risks in designing more unconventional and complex poses, resulting in unique and distinctive works.

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