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# Thai Language Curriculum to Enhance Creativity Thinking Skills for Primary School Students

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**Abstract**

Creativity in the present society is essential for growth and reform. It is also beneficial for having creative students organize thought, imagine and discover new ideas from an early age. This study aimed to 1) investigate primary information related to learning management results, current situations, and school curriculum development needs, 2) design a Thai language curriculum to enhance creative thinking for primary school students, and 3) study the effects of the curriculum. The study was divided into three phases: primary information research, curriculum design, and implementation. The participants consisted of 30 students in grade 5 during the 2019 academic year. Phase 1 revealed that the majority of schools still had fair fourth-standard results, which related to the ability of analysis, synthesis, critical, creative, and considered thinking. There were approaches to solving the problem that involved analyzing the policy and the practice outcomes. The results of phase 2 revealed that the curriculum's principles and goals were to assist students in improving their creative thinking in two dimensions: 1) knowledge and intelligence and 2) feeling, mind, and attitude. The results of phase 3 yielded that 1) primary school students had higher scores after learning to enhance creative thinking significantly at .05, 2) creative thinking of students who learned by using the curriculum was higher than creative thinking of students who learned through traditional curriculum significantly at .05. It can be stated that promoting creative thinking should be encouraged in many subject areas as early as possible.

**Keywords:** curriculum, creative thinking, primary school

## 1. Introduction

### *1.1 Background*

Creativity is a process that occurs in the human brain and is necessary for future discovery. Creative people are frequently admired for their ability to think and act in ways the average person does not. People and organizations must reform in the context of the country as a whole, requiring creative thinking throughout the process (Charoenwongsak, 2002). In the education industry, creativity is critical in today's society, especially in the future, because it is the unique ability of humans to imagine and create new things in terms of total productivity, including a problem-solving process that will benefit and sustain the nation's society's progress and benefit the world greatly (Ponroongrot, 2003). Although teachers have been encouraged to organize learning to develop thinking widely over the last two decades, it has been discovered that students' cognitive development was still possible in a limited area and did not achieve the desired goal (Ministry of Education, 2006). This is evident from the Office of Academic Affairs and Educational Standards' educational reform progress report findings. The Office of National Education Standards and Quality Assessment (Public Organization) reported on the assessment of educational institutions across the country based on the benchmarks that good quality was less than 50%; moreover, it was shown that learners' thinking skills needed to be improved in practically every part of the country (Office of the Education Council, 2008).

Williams (1970) proposed a form of creative development known as the "Williams Cube C.A.I. Model" (A Model for Implementing Affective Cognitive Behavior in the Classroom), which was divided into three dimensions: curriculum, teacher behavior, and pupil behavior. The pupil behavior dimension covered the cognitive part of intelligence as well as in terms of feelings, minds, and attitudes because the successful

development of creativity is based on many aspects such as emotional, mental, learner attitude, content, and activity environment. Creativity can be cultivated in a number of different ways. The first method is to teach creative thinking as a separate subject, which has the advantage of allowing teachers to clearly identify the thinking skills that need to be developed; however, this method has the disadvantage of students being unable to transfer their thinking skills learned in this course to other subjects. The second method is to define the type of thinking that needs to be developed in the curriculum so that thinking skills can be transferred to other subjects. This also allowed teachers to review their learning management plans and thinking skills that needed to be developed throughout the course so that teachers could choose the most effective teaching techniques for learners (Ministry of Education, 2008).

According to Buzan and Buzan (1997), the human brain's left hemisphere is responsible for rational thinking and processing, while the right hemisphere is responsible for creative thinking and imagination. Knowing how to think and connect things with all of their aspects leads to creative thinking based on a scientific principle known as a mind map.

As a result, the researchers focused on developing a Thai language learning group curriculum to promote creativity in primary school students utilizing William's technique and mind mapping to develop in three dimensions: curriculum, teacher behavior, and pupil behavior.

*1.2 Research Objectives*

To investigate primary information related to learning management results, current situations, and school curriculum development needs.

To develop a Thai language curriculum for primary school students in order to improve their creative thinking.

To study the effects of implementing a Thai language curriculum to improve creative thinking in primary school students, which consisted of two parts: a) to compare primary school students' creative thinking before and after learning the Thai language curriculum in order to enhance primary school students' creative thinking, and b) to compare primary school students' creative thinking between the control group who followed the traditional curriculum and the experimental group who followed the Thai language curriculum developed to enhance creative thinking skills.

*1.3 Curriculum Development*

The development of the curriculum theory previously resulted in positive effects on the pedagogical areas. For example, Seechaliao (2017) investigated the instructional strategies to support creativity and innovation in education and found that the instructional strategies which support the creation of creative and innovative education should focus on the system approach. It also suggests that using various stimulating ideas to find possible solutions to problems facilitates brainstorming and helps learners think about new ideas. Aldig and Arseven (2017) also explored the contribution of learning outcomes for listening to creative thinking skills and suggested that developing a course curriculum contributed to the development of creative thinking skills of students. Further, Karimi, Nasr and Sharif (2012) explored the curriculum design requirements and challenges of the learning society approach and discovered that learners faced challenges such as non-substitution of learning for education, incomplete identification of students' and society's real needs, and non-revision of the curriculum to meet changing needs, poor communication between levels of higher education curriculum and previous degrees, centralization in curriculum planning, and a lack of flexibility in curriculum design. These studies suggest that curriculum development will contribute to learners' creative thinking and pedagogy.

Good (1973) distinguished two types of curriculum development: curriculum improvement and curriculum change. Curriculum improvement is one method of curriculum development used to tailor the school's teaching objectives, materials, teaching methods, and assessments. Curriculum change refers to modifying a course to make it different from the original to create new learning opportunities.

According to Kongchawan (2003), curriculum development is the process of creating and developing distinct learning experiences that drive learners to change. Goal-setting, content, activity, material, and assessment are all used to make modifications that will benefit the learners the best.

According to the definitions above, curriculum development is the process of creating, testing, evaluating, and improving a curriculum. There are three phases to this research: phase 1 is the study of basic information, phase 2 is curriculum designing, and phase 3 is curricular experimentation.

Tyler (1949) outlined the curriculum development process as follows: 1) determining the course's temporary goals based on social studies of learners and scholars, then designating them as permanent goals by screening for

important special aspects employing learning psychology, educational philosophy, and social philosophy to develop for practical final goals or permanent goals, 2) selecting learning experiences by considering the activities and content identified in the goals. The activities and experiences selected should satisfy learners and be practicable. The behaviors identified in the objectives, activities, and experiences are all within the realm of possibility. Several activities and experiences may lead to a single goal, or single learning activity and experience may serve multiple functions, 3) managing learning experiences by investigating the relationship between time and content using effective criteria, such as continuity, sequence, and integration, 4) evaluation was used to determine whether or not the learning experience was successful. The assessment had to be in line with the goals.

Chookampang (2012) summarized a pattern that represented the course development sequence as follows: a) Step 1: Study various useful information for the development of the curriculum, problem survey analysis, and needs analysis; b) Step 2: Development curriculum, which followed the curriculum components of each curriculum and used the objectives from step 1 to set the contents and activities to design the curriculum outline; c) Step 3: Implement curriculum, this was a trial of the curriculum to consider its consistency with the course objectives by using various methods to obtain information about the results of the developed curriculum; d) Step 4: Evaluate and follow-up was to evaluate the developed curriculum using various methods based on theoretical assessment, including adjustment and improvement for a better curriculum before curriculum implementation.

It is possible to conclude that there are many steps in the curriculum development process, each with a similar time and process. Curriculum evaluation should take place after the curriculum has been written to ensure that it is appropriate for the students before the curriculum is implemented. Dissara (1992) asserted that curriculum evaluation could occur in three ways: before, during, and after the operation. Chookampang (2012) stated that curriculum evaluation consisted of five steps: determining objectives, planning, data collecting, data analyzing, and reporting. It could be concluded that curriculum evaluation is the examination of the developed curriculum to make it suitable for the learners. It is for determining clear objectives, population, data, technique, criterion, data collecting, and data analysis to find improvement points.

The Basic Education Core Curriculum B.E. 2008 are a) Learning is the goal for children and youths for them to have knowledge, skills, attitudes, and morals based on their Thainess combined with internationalization; b) Every citizen has the opportunity to study in an equal and high-quality manner; c) It combines decentralization with societal participation; d) It has a flexible structure in terms of learning subjects, timing and learning management; e) It is learner-centered; and f) It is suitable for formal, non-formal, and informal education and can transfer learning outcomes and experiences.

### *1.4 Creativity*

Williams (1970) proposed the Williams Cube C.A.I. Model to help people develop their knowledge, feelings, minds, and attitudes. It's a classroom implementation approach for cognitive-emotional behavior. It can be separated into three dimensions: curriculum, teacher behavior, and pupil behavior, which cover the cognitive side of intelligence as well as feelings, minds, and attitudes. The following were the specifics:

Content, there was an emphasis on keeping the curriculum's content as the core and managing the teaching according to the specified content by incorporating creativity into all curriculum subjects.

Teacher behavior was mainly focused on creative thinking teaching techniques that could be implemented in all subjects of the curriculum using 18 methods such as 1) paradox, 2) attribute, 3) analogies, 3) discrepancies, and 4) contradictions. 5) provocative inquiry, 6) change example, 7) habit example, 8) structured random search, 9) search skills, 10) ambiguity tolerance, 11) intuitive expression, 12) development re-adjustment, 13) research the creative process and person, 14) assess the scenario, 15) develop creative reading skills, 16) develop creative listening skills, 17) develop creative writing skills, and 18) develop visualizing skills.

Pupil behavior, after organizing the learning process in accordance with the subject content and teaching methods outlined above, students demonstrated two behavioral changes: first, cognitive behavior, which included four aspects: fluent thinking, flexible thinking, initiative, and thoughtful consideration, and second, affective behavior, which included four aspects: curiosity, willingness to take risks, the satisfaction of locating a difficult solution, and thoughtful consideration.

### *1.5 Mind Mapping*

According to Buzan and Buzan (1997), mind mapping is an expressive schematic or diagram of omnidirectional thinking. It is a natural human brain behavior and an effective visualization technique that leads to the key to unlocking the brain's potential. As learning progress and clear thinking lead to the development of actions, mind

maps can be applied to all aspects of life.

Fukkhaw (2001) defined mind mapping as a diagram or diagram showing the relationship of concepts or concepts beginning with the title concept and then branching into a sub-concept and sub-concepts spread out around them, similar to the appearance of brain cells. It created a picture of the connection of knowledge of any subject in detail in every aspect. Khamanee (2001) defined mind mapping as a diagram that demonstrates the relation between contents or ideas to be seen in an overview by using lines, words, colors, symbols, geometric shapes, and pictures to communicate and connect the ideas or contents.

It can be concluded that mind mapping is a form of knowledge summarization that can be used in a variety of situations, including note keeping, planning, and lesson summarizing, by employing colors, lines, and symbols to make information easier to understand and recall. Figure 1 presents the conceptual framework.

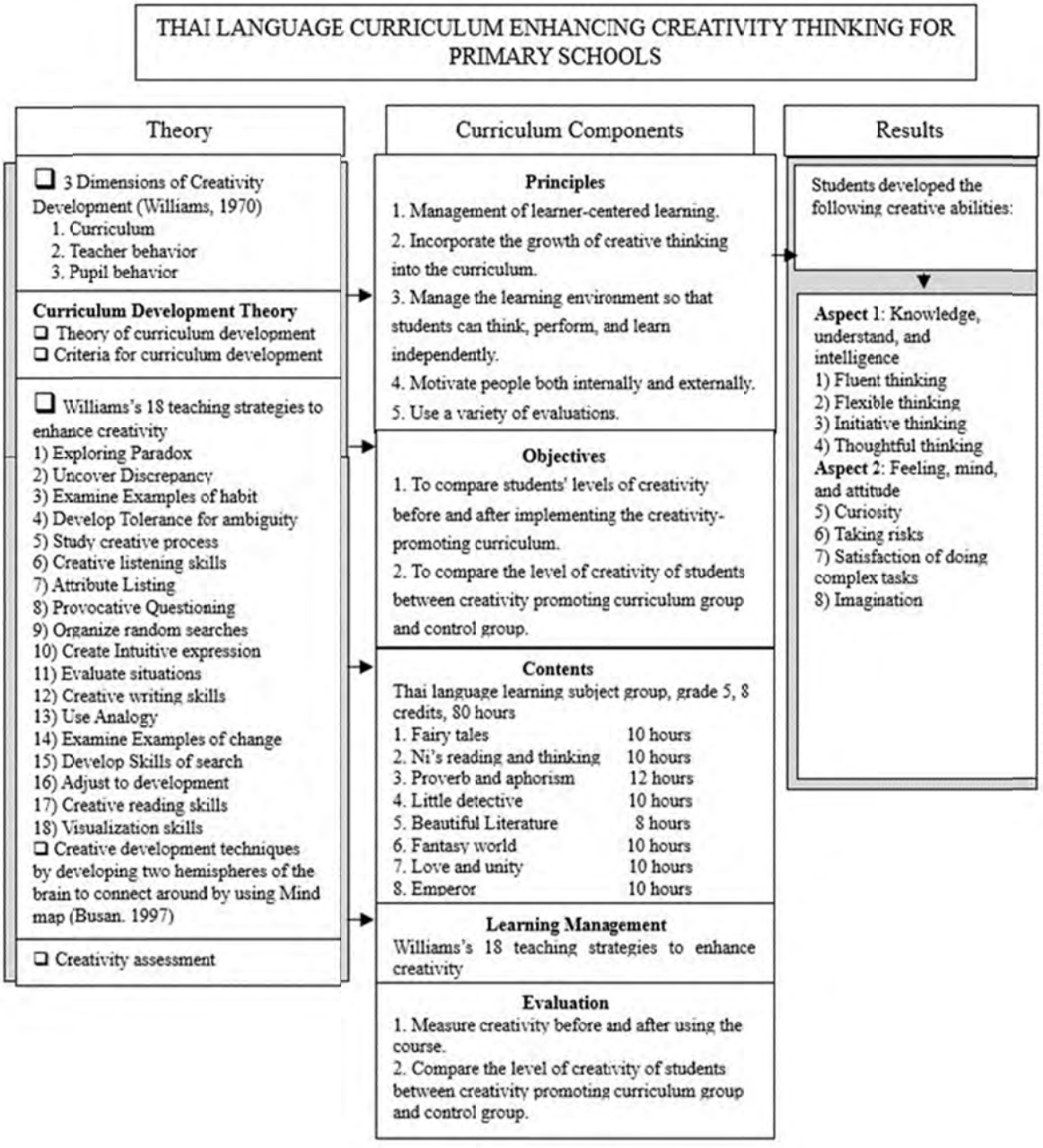


Figure 1. Conceptual framework

The current study is a type of research and development with three phases of progression, as shown below.

Phase 1: Basic Information Study

1) Investigated basic information about the outcomes of the Basic Education Core Curriculum B.E. 2008 implementation.

The study's target population included 5 Thai language teachers and 15 fifth-grade students.

The teachers and students were interviewed about the implementation of the basic education core curriculum B.E. 2008 as research tools.

The data was gathered through interviews.

Content analysis was used to examine the data.

2) The summary report of policy and practical recommendations based on the 2nd external quality assessment results and S.A.R. from Mahasarakham Primary Education Service Area 2 was used to investigate the problems discovered in the implementation of the basic education core curriculum B.E. 2008.

3) Studied theoretical concepts related to curriculum development and creative development from documents.

Phase 2: Curriculum Development

The followings were the processes of developing a Thai language curriculum that promotes creativity and critical thinking for primary school students.

Develop the curriculum based on the following basic information: ① principle, ② objective, ③ content, ④ learning management, and ⑤ evaluation.

Five experts evaluated the drafted curriculum based on curriculum benchmarks. The curriculum was considered to be suitable at the highest level, with a score of 4.56.

The curriculum was tried out at Mahasarakham Primary Education Service Area 2's Ban Pa Khai School.

Phase 3: Curriculum Implementation

1) Developed curriculum experiment

Samples were grade 5 students from 78 classes of 71 schools under Mahasarakham Primary Education Service Area 2. The total number of students who participated in the study was 1,231.

In this procedure, simple random sampling was used. As a result, 30 students from Phayakhaphum Phisai School were included in the sample.

The followings were the research methodology:

Examine the developed curriculum to validate students' creativity after implementation, investigate students' opinions about the developed curriculum, and investigate problems and obstacles encountered during curriculum implementation as well as factors that supported the effective curriculum.

The developed curriculum was implemented with the sample group by using a true control group with pre-test and post-test design.

The following steps were taken to analyze the data: 1) The students' ideas about challenges and demands for curriculum development were analyzed using content analysis, and 2) the students' creativity was analyzed and compared using a t-test.

## 2. Methodology

### *2.1 Participants and Setting*

The participants in the present study were Thai primary school students, who were selected using convenient-random sampling from the 71 government schools in northeastern Thailand. The schools included 1,231 students in 78 classrooms. All participants were students in Grade 5, and their age range was 10–11 years old. The 30 participants of the experiment and control groups were randomly selected from one school to be examined for research purposes.

### *2.2 Instruments*

The instruments were used in Phase 1. A summary-document description was first developed based on the Basic Education Core Curriculum B.E. 2008 to gain teachers' information. The issues in developing the curriculum and the solutions were involved. Second, an interview question of the Basic Education Core Curriculum B.E.

2008 for teachers included the content synthesis in the Thai-subject department in Grade 5, how the learning management model or any teaching method was used, and the assessment of students who lacked thinking skills in what areas. Finally, an interview form for learners about the use of educational institutions according to the Basic Education Core Curriculum B.E. 2008.

The instruments were used in Phase 2, including a curriculum draft to promote creativity in Thai language learning groups of primary school students and a lesson plan such as learning management, creative thinking, and achievement test.

The instruments were used in Phase 3, consisting of a training course used to encourage learners' creative thinking in the Thai language department and a lesson plan for the curriculum.

The curriculum was designed and developed by William (1970), and teaching methods were developed based on Buzan and Buzan (1997). The present study developed the measure based on Torrance (1966) to assess learners' creative thinking in knowledge and comprehension. Moreover, a creative-thinking test was used to measure the participants after the interventions, as well as an achievement test.

*2.3 Research Design*

This research is founded on postpositivist premises, which are more applicable to quantitative research. A postpositivist relates to philosophy and dictates the effects of the variables analyzed. As a result, the researchers' issues reflect the necessity to identify and analyze the reasons that impact results, such as those found in the experiments. Plus, it is reductionistic. The aim is to simplify the notions into a smaller set of variables to evaluate, such as hypotheses and research questions. This experimental research was the pretest-treatment-post test design.

*2.4 Treatment*

Williams (1997) proposed a teaching form of thinking creativity known as the Williams Cube C.A.I. Model (A Model for Implementing Cognitive-Affective Behavior in the Classroom) is a creative thinking development for learners, i.e., knowledge and feelings, minds, and attitudes. It is divided into three dimensions: the curriculum or content dimension, the teacher teaching dimension, and the student behavior dimension in terms of the component of student behavior and the component of feelings, minds, and attitudes.

*Content dimension*: It is crucial to maintain the core curriculum's content and manage teaching and learning according to the curriculum's content. It demonstrates how creativity can be taught in every subject matter. Williams has split the topics into categories: languages, math, social studies, science, music, and the arts. Williams stresses teaching creativity so that it may be incorporated into the curriculum's prescribed disciplines, in other words. or the lesson's content, and they may select their teaching tactics based on that material. They can also use various strategies depending on the course's subject matter.

*Teacher behavior dimension*: Williams focuses on teaching methods and activities essential to fostering creativity when it comes to creativity-boosting instruction. Teachers can teach subject matter defined in the normal course of instruction while employing the designated teaching methods, or they can plan activities that foster creativity in strategies, techniques, and teaching methods.

*Pupil behaviors dimension*: After the teachers have organized the teaching and learning process according to the subject content and teaching strategies mentioned above, students were to have behavioral changes, mainly cognitive behavior. That means students' physical and mental processes must improve in four ways, i.e., fluency thinking, flexible thinking, originality, and elaborative thinking. Students also were developed in terms of affective behavior, e.g., changes in emotional and mental behavior; the development included curiosity, risk-taking, complexity, and imagination.

*2.5 Data Collection Procedures*

This experimental research was to increase and develop learners' creative thinking skills. After permission from the school was obtained, a training course was provided based on a lesson plan for the curriculum to train learners about creative thinking.

Before the tests were administered, the instructions and a few test examples were demonstrated to participants. The experimental group was given the creative thinking training treatment, and the control group had no training. The training treatment was 80 hours and contained the Thai language information based on the instructions of the Basic Education Core Curriculum B.E. 2008. The participants were then asked to administer the achievement test and creativity-thinking test after training. The research design is shown in Table 1.

Table 1. Research design

| Groups | Creativity thinking treatment | Measures |
|---|---|---|
| Experiment *N* = 30 | 80 hours of explicit training on creativity thinking skills | Tests for creativity thinking and achievement |
| Control *N* = 30 | No training in creativity thinking skills | Tests for creativity thinking and achievement |

### *2.6 Data Analysis*

The data were presented as descriptive statistics. An independent-sample *t*-test was used to detect a significant difference between two different groups of the participants' test scores in both tests for measuring creativity, thinking, and achievement. Further, the interview data were interpreted based on the Basic Education Core Curriculum B.E. 2008. The research was to seek the effectiveness of the interventions in improving the students' creative thinking.

## 3. Results

1) The results of the phase 1 study revealed that the majority of schools did not pass the standard assessment in terms of thinking skills. The Ministry of Education, on the other hand, has established a policy focusing on teacher development in terms of thinking skills, activity organizing skills, and curriculum-enhancing thinking skills.

2) The findings of the Thai language curriculum enhancing creativity thinking for primary school students in phase 2 revealed five components: criterion, objective, content, learning management, and evaluation.

Principle, the experts suggested that objectives should be related to educational policy, which was the national economic and social development plan, so the researchers added the following principles to the current curriculum development: 1) learner-centered classroom management, 2) determination of creative thinking developing in the contents,3) learning environment that allows students to think and learn.

The objective could be divided into knowledge or feeling and mind or attitude.

Content, the researchers chose grade 5 students for this study because this is the age when creativity begins to decline. According to the experts' recommendations, the research was undertaken over the course of one academic year, with eight units completed in 80 hours.

Learning management, according to the experts, is appropriate for both students and teachers.

Following the comments of the experts, the researcher improved the creative thinking and learning achievement measurement form, and thus the integrated creativity measurement was used in this study.

3) The results of the developed curriculum implementation revealed that students were eager to learn and answer questions because there were agreements about learning goals decided by the learners and cooperation between the teachers and the learners. As a result, they met the requirements for the assessment criterion. Furthermore, the students may use the mind map to recap what they had learned during the class.

The comparison of students' creative thinking before and after curriculum implementation revealed a statistically significant improvement at.05.

When the experimental and control groups' creative thinking were compared, the experimental group was significantly higher than the control group at.05.

The following results were obtained from a comparison of the students' creative thinking between the experiment group and the control group using a pre-test and post-test design:

Table 2. Creative level of experiment and control group

| Testing | N | Mean | S.D. | *t* |
|---|---|---|---|---|
| Experiment Group | 30 | 149.36 | 17.90 | 17.88* |
| Control Group | 53 | 65.79 | 21.73 | |

*Note.* * statistically significant at .05.

Table 2 shows the comparison of the students' creative thinking between the experiment group and the control group. The experimental group was considerably higher than the control group at .05.

## 4. Discussion

This study clearly demonstrated that the developed curriculum enhancing creative thinking could effectively develop the learners' creative thinking. It is useful for elementary school teachers and other levels and can also be used for further study.

### *4.1 Phase 1: Basic Information Study*

Since the curriculum and data collection were designed, the researchers researched related documents and research papers to design the need analysis questionnaires. After systematically determining the population and samples, the data were examined and used to develop the curriculum. The learning objectives, content, and standards were developed in accordance with the curricular benchmarks. In addition, the researchers examined the second self-assessment report (S.A.R.), basic curriculum implementation issues, and conducted interviews with Thai language teachers and grade 5 students. Moreover, curriculum development and creative thinking theory were reviewed to construct the curriculum according to Buasri's (1991), Chookampang's (2012), Nerngchalerm's (2014), Tyler's (1949), and Wongyai's (1998) ideas which were in agreement that basic information, problems, and social and self-needs should be studied and analyzed before delegating responsibility. Da-o (2007), Limcharoen (2009), Praison (2015), and Sukkamart (2010) applied this theory in their research by examining basic information and needs prior to developing the curriculum.

### *4.2 Phase 2: Curriculum Development*

The present curriculum was developed from five elements, including 1) principle, 2) objective, 3) content, 4) learning management, and 5) evaluation by applying the ideas of Wongyai (1991), Tyler (1949), Saylor and Alexander (1974). They came to the conclusion that curriculum development entailed determining the course's objectives in relation to the contents, social conditions, economy, and politics. Principles, structures, components, goals, and evaluation should all be determined. Khabuannam (2015), Saenglert-uthai (2007), Sawaspong (2008) adapted the theory by determining temporary goals based on educational policy, social, learner, and scholar opinions. Then, by screening for the significance of learning psychology, philosophy of education, and social, permanent goals were established. The ultimate objectives were determined and implemented in the curriculum development. Furthermore, selecting learning experiences and offering appropriate activities as indicated in the contents resulted in learning management and evaluation that met the curriculum's goals.

### *4.3 Phase 3: Curriculum Implication*

In the current study, it was discovered that after the implementation of the developed curriculum to enhance creative thinking for primary school students, students' creativity increased significantly at.05. Furthermore, in every way, the experiment group outperformed the control group in terms of innovative thinking. It's possible that this is because the researchers based the curriculum on Tyler's idea, which had been evaluated and proved at each stage of curriculum creation. Tyler (1949) stated that there were some factors to consider when choosing a learning experience, such as specific activities and contents, time and content relationship exploration, step ordering, integration, and evaluation. It agreed with Nerngchalerm (2011), who stated that content selection must fulfill the objectives and that learning experience contribution must be based on the learning objectives. Furthermore, grade 5 students were chosen for this study because this is the age when creativity is at its highest point. Torrance (1966) looked into the development of creativity in boys and girls in the U.S. The findings revealed that levels of creative development increased in grades 1–3, began to decline in grades 4, and then rose again in grades 5–6. These findings were consistent with Panmanee (2004). It was said that elementary school students had a higher level of creativity than students in other grades. Additionally, Schirrmacher (1998) determined that including creative thinking growth into the curriculum was the most effective technique for developing creativity in students. Panit (2012) proposed a variety of techniques to help students develop their creativity, including brainstorming, new perspective creation, completely unconventional principles, and understanding persuasion. Furthermore, according to Suchman (1964), a responsive culture and setting should be formed in which professors serve as responders rather than mentors, providing information only when students require it. Torrance (1959) focused on questioning and analyzing by encouraging students to question strange questions, and it should not be focused on only one correct answer because students could solve problems with their guesses while being stimulated to prove their guesses by encouraging them to observe and analyze through their experiences. As a result, students realized that their ideas were valuable, which encouraged them to think creatively.

## 5. Conclusion

This study first aimed to investigate preliminary information related to learning management results, current

situations, and school curriculum development needs to design a Thai language curriculum to enhance creative thinking for primary school students. It also explored the effects of implementing a Thai language curriculum to effectively improve primary school students' creative thinking. The findings demonstrated that implementing the curriculum enhances primary school students' creative thinking rather than learning through the traditional curriculum. More specifically, the results showed that the students in the experimented group scored higher in creative thinking than the controlled group. More specifically, the results first showed that the critical issue of schools that were not assured by the second external quality assurance revealed that the majority of schools still had fair fourth-standard results in the ability of analysis, synthesis, critical thinking, creative thinking, and considering thinking. There were approaches to solve the problems that entailed examining policy and practice outcomes. The results also indicated that the curriculum's principles, i.e., learner-centered classroom management, determination of creative thinking development in curriculum contents, learning environment that allows students to think and learn independently, intrinsic and extrinsic motivation, and variety and authenticity of evaluation, contributed to creative thinking for primary school students. Further, the findings suggested that implementing the curriculum can positively affect primary school students' creative thinking rather than learning through the traditional curriculum.

*5.1 General Suggestions*

Teachers should thoroughly study curriculum guidelines before creating a curriculum to develop a curriculum that promotes creativity.

Teachers should carefully follow each step of the curriculum implementation process to ensure that the intended objectives are met.

Students should be able to answer questions in order to manage creative classrooms freely. The attention should not be on the correct and incorrect responses. On the other hand, in the classroom, a collaborative environment should be encouraged.

*5.2 Further Study Suggestions*

Curriculum promoting creative thinking should be promoted in other subject areas.

There should be research on promoting creative thinking by using other methods at different levels.

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