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# The Needs of Private Primary Schools in Sai-Mai District for Academic Administration Development Based on the Students' Creative Thinking Skills

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## Abstract

This descriptive research aimed 1) to study the current and the desirable states of academic administration based on the concept of students' creative thinking skills in the private primary schools located in Sai-Mai district and 2) to present the needs of private primary schools in Sai-Mai district for academic administration development based on the concept of students' creative thinking skills. The data were gathered from March to May 2021 and then analyzed by using frequency distribution, percentage, mean, standard deviation, and $PNI_{modified}$

The results had shown that the current and the desirable states in the academic administration of private primary schools in Sai-Mai district based on the concept of students' creative thinking skills were at a moderate level and a high level, respectively. The findings also indicated that the highest priority needs index was the

curriculum development followed by the measurement and evaluation, the instructional management, and the development and use of educational technology media. While considering each aspect, 1) curriculum development found that the highest index was the elaboration. 2) measurement and evaluation found that the highest index was fluency. 3) instructional management found that the highest index was elaboration. And 4) the development and use of educational technology media found that the highest index was flexibility.

**Keywords:** Academic Administration, Creative Thinking Skills, Private Primary Schools

## Introduction

Creativity, an important thinking science, generates new ideas from the original concepts. It also helps improving, developing, and solving the existing problems, leading to the discovery of innovations and effective solution (Phunmanee, 2014) Creativity is the cradle of theories, ideas, innovations, and invention that exists in all human beings and can still be improved if it is continuously developed (Torrance, 1969 as cited in Rangsinun, 1989). The development of creative initiatives in conjunction with the provision of education is a means to increase the productivity of new knowledge and to solve the problems of human beings (Guilford, 1967). Therefore, developing systematic creativity and implementing it properly would be beneficial to both oneself and the nation.

The public and private sectors of Thailand are currently paying close attention to the development of students' creativity and setting a target for the provision of education as appeared in the National Education Act 1999, Chapter 1, Section 7, and in the twelfth National Economic and Social Development Plan 2017-2011. This adheres to develop the creativity and skill of people required for the 21$^{st}$ century life

of school-aged children in terms of critical thinking, creativity as well as the importance of extending skills in all areas (National Economic and Social Development Board Office of the Prime Minister, 2016). The development of students' creativity can be achieved with the participation of all sectors, especially the schools which are responsible for offering effective education to students amid rapid technological change. Therefore, creativity and innovation with a student–centered approach to students' educational achievements, skills, and competencies are needed (Office of the Private Education Commission, 2016).

The goal of the educational institution is to provide an education to develop the quality of students to meet the needs of society. The academic administration is the key responsibility of educational institutions at all levels (The National Education Act, 1999) and also be considered the heart of the school administration. The academic performance measures the success of the management of the administers and reflects the quality of the school. The development of creativity can be implemented by the academic administration, which could improve the creativity skills of students and lead to innovations. This follows the Educational Development Plan No. 12 (2017-2021) of the Ministry of Education which sets the strategic plan and goal that could respond to the important development in terms of education to results in the most efficient learning. The students will be able to practice their creativity and problem-solving skills, which are the essential skills needed in the 21$^{st}$ century. This plan aims for Thai people to have morality and ethics, ready for the change and development of the country in the future, and be able to respond to the developments in quality and in changing contexts. (Office of the Permanent Secretary, Ministry of Education, 2016)

According to the implementation of strategy to promote educational creativity during 2017-2021 of private primary schools at the Sai-Mai district, the result shows

that students have a relatively good thinking skills, yet they are still lack of critical thinking, presenting, and problem-solving skills, in which creativity can be applied to improve their abilities. As a result, the private primary schools in Sai-Mai district set a vision and mission to develop education providing students with essential skills needed for the 21st century that focus on developing students' creativity by administrators. But there is still a lack of implementation of projects or activities that focus on the development of real creative skills. For example, a painting contest organized by the school. The measurement of the activity focused only on the beauty and expressiveness of the images. Lack of measurements to assess students' creativity. So, teachers and all staff must work together in organizing the education of the school to achieve the goals.

Consequently, the school must set a clear policy in developing the creativity that enables the practice of related administers, teachers, and personnel to promote the creativity of the students. The school should arrange the guidelines for the development of the educational management and promoting the creativity of students through the development of the school's academic administration. The findings of this study will serve as a guideline for approaches in the development of academic administration of private schools in Sai-Mai district. The concept of creative thinking of students should be implemented and will be beneficial to the school's educational development further.

**Research Objectives**

1. To study the current and desirable states of academic administration based on the concept of students' creative thinking skills of private primary schools in Sai-Mai district.

2. To present the needs for academic administration development based on the concept of students' creative thinking skills of private primary schools in Sai-Mai district.
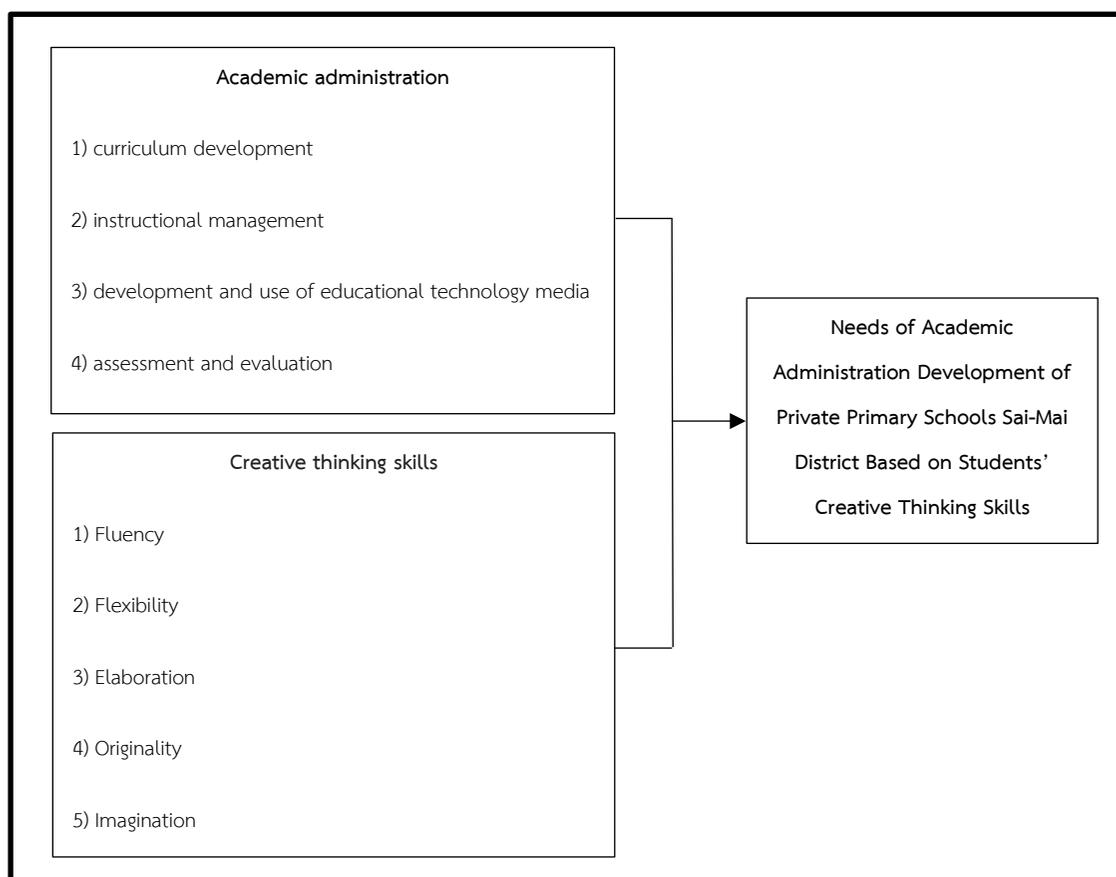
**Conceptual Framework**

After reviewing various related concepts, theories, and literature, two major concepts are underlying: These two concepts are academic administration and creative thinking skills. The diagram of the conceptual framework is shown below and followed by an explanation of the two concepts in brief.

1. **Academic administration** consists of four important elements. First, a curriculum development refers to curriculum purposes and learning experiences to develop a curriculum that emphasizes creative thinking skills. Second, an instructional management means conducting learning experiences that advocate students to become creative thinking. Third, the development and use of educational technology media refers developing digital infrastructures and developing technological media that foster student's creative thinking. Fourth, assessment and evaluation means assessing and evaluating student learning by focusing on the concept of creative thinking (Alqefari, 2010; Assawapoom, 2008; Cortina, 2011; Ministry of Education, 2007; Phapan, 2004; Phuphasert, 2001; Sangiamjit, 1999; Sergiovanni et al., 1980; Wayhachat, 2007; Wonganutarot, 2010)

2. **Creative thinking skills** consist of five important elements. First, fluency refers to thinking the answer to the point and the ability to generate a large number of ideas. Second, flexibility means thinking of modifying to create something new to h or the ability to express a variety of approaches or solutions to a problem. Third, elaboration is the ability to add details for expanding ideas to get a more complete meaning or developing existing things more effectively. Fourth, originality is the ability

to thinking of a new idea that is different from the original. And, Fifth, imagination is the ability to the synthesis of ideas through imagination and the creation of works. (Dedi Supriya, 1997; Gopalakrishnan, 2008; Hadani & Jaeger, 2015; Guilford, 1950; Guilford & Hoepfner, 1971; Sinthapanon, 2012; Susaorat, 2013; Suthirat, 2010; Torrance, 1974; Torrance, 1984)



**Academic administration**

1) curriculum development

2) instructional management

3) development and use of educational technology media

4) assessment and evaluation

**Creative thinking skills**

1) Fluency

2) Flexibility

3) Elaboration

4) Originality

5) Imagination

**Needs of Academic Administration Development of Private Primary Schools Sai-Mai District Based on Students' Creative Thinking Skills**

**Conceptual Framework**

**Research Methodology**

This research was quantitative. Objectives were to study the current and the desirable states of academic administration of private primary schools Sai-Mai district based on the concept of students' creative thinking skills. Secondly, this research was aiming to present the needs for academic administration development of private primary schools Sai-Mai district in terms of creativity.

**Target population and Sample**

The population comprised six private primary schools: Rabiabsuksa Schoool, Prataungtipvittaya School, Prataungtipvittaya School 2, Siriwatwittaya School, Panyotai school, and Sarasaswitaed Sai-Mai School. The number of sampled respondents was 124, selected through a simple random sampling method (Yamane, 1973). The samples comprised four licensees, two school directors, one deputy director, 28 heads of departments, and 88 teachers.

**Data Collection**

The questionnaire was sent together with the letter of request for data collection via post to six schools in the sample group; one for each school, totaling six sets of letters. The researchers received 124 returned questionnaires via post, accounted for 100 % of all questionnaires. The questionnaires received were then checked for completeness for further analysis and interpretation.

**Research Instrument**

The research instrument used in this specific procedure was a two-part five-level rating scale questionnaire. The first part was about the respondents' background and the second part was about the current state and the desirable state of academic

administration based on the concept of students' creative thinking skills of private primary schools in Sai-Mai district. For the construction and quality determination of instrument, the researchers reviewed the literature, which related to the academic administration and creative thinking skills concept, then, analyzed the academic administration frameworks and creative thinking skills to be defined as a conceptual framework, and created the questionnaire for three experts to assess the content validity. The criterion used to measure the index is IOC (Item-Objective Congruence), The test was given to three experts rated individual items so that the content met the objectives of the study. The IOC was calculated by assigning scores to three types of answers: congruent = 1, uncertain = 0, incongruent= -1. The result of IOC is 1.00, which is acceptable. The questionnaire was sent out for a trial, finding the confidence value of the questionnaire is at 0.96. Then, the questionnaire was proposed to the advisors for approval for the publication of the complete questionnaire.

## Data analysis techniques

The data were analyzed by using frequency distribution, percentage, mean, standard deviation, $PNI_{modified}$, and priority needs.

## Findings of the study

The needs of academic administration of private primary schools in Sai-Mai district that based on the concept of students' creative thinking skills were presented in the table below.

**Table 1** An overall research of the current state and desired state and priority needs of academic administration private primary schools Sai-Mai district-based the concept of student's creative thinking skills.

| Academic Administration | Issue | Creative thinking Skills | | | | | Total average | Priority needs index order |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | 1. Fluency | 2. Flexibility | 3.Elaboration | 4. Originality | 5.Imagination | | |
| 1. Curriculum development | C | 3.33 | 3.34 | 3.21 | 3.37 | 3.47 | 3.35 | 1 |
| | D | 4.40 | 4.40 | 4.28 | 4.41 | 4.27 | 4.35 | |
| | PNI$_{modified}$ | 0.323 | 0.316 | 0.333 | 0.307 | 0.230 | 0.301 | |
| 2. Instructional management | C | 3.48 | 3.52 | 3.46 | 3.55 | 3.61 | 3.53 | 3 |
| | D | 4.52 | 4.52 | 4.46 | 4.49 | 4.52 | 4.50 | |
| | PNI$_{modified}$ | 0.298 | 0.284 | 0.290 | 0.266 | 0.253 | 0.278 | |
| 3. Development and use of technology media | C | 3.51 | 3.52 | 3.41 | 3.56 | 3.59 | 3.52 | 4 |
| | D | 4.46 | 4.47 | 4.41 | 4.50 | 4.52 | 4.50 | |
| | PNI$_{modified}$ | 0.270 | 0.268 | 0.295 | 0.266 | 0.257 | 0.271 | |
| 4. Assessment and evaluation | C | 3.44 | 3.39 | 3.40 | 3.53 | 3.51 | 3.45 | 2 |
| | D | 4.47 | 4.42 | 4.43 | 4.51 | 4.47 | 4.46 | |
| | PNI$_{modified}$ | 0.299 | 0.304 | 0.303 | 0.278 | 0.274 | 0.292 | |
| Total average | C | 3.42 | 3.44 | 3.35 | 3.48 | 3.54 | 3.46 | |
| | D | 4.33 | 4.45 | 4.12 | 4.47 | 4.42 | 4.45 | |
| | PNI$_{modified}$ | 0.265 | 0.294 | 0.230 | 0.283 | 0.247 | 0.286 | |
| Priority needs index order | | 3 | 1 | 5 | 2 | 4 | | |

According to table 1, the overall current state, desired state, and priority needs of academic administration private primary schools Sai-Mai district-based the concept of student's creative thinking skills were found that the overall current state of academic administration private primary schools Sai-Mai district was moderate ($\overline{X}$ = 3.46). Taken each dimension into consideration, the average score of instructional management was higher than others ($\overline{X}$ = 3.53) and the curriculum development was

the lowest average score ($\overline{X}$ = 3.35). The overall desired state of academic administration based on the concept of student's creative thinking skills was high ($\overline{X}$ = 4.45). As for the individual aspects, the maximum and minimum mean values were the Instructional management ($\overline{X}$ = 4.50) and the curriculum development ($\overline{X}$ = 3.35).

The priority needs index pointed firstly to the curriculum development ($PNI_{modified}$ = 0.301), followed by the assessment and evaluation ($PNI_{modified}$ = 0.292), the instructional management ($PNI_{modified}$ = 0.278), and the development and use of educational technology media ($PNI_{modified}$ = 0.271), respectively.

For the individual aspects, 1) the curriculum development had the priority needs index maximum the elaboration ($PNI_{modified}$ = 0.333), followed by the fluency ($PNI_{modified}$ = 0.323), the flexibility ($PNI_{modified}$ = 0.316), the originality ($PNI_{modified}$ = 0.307) and minimum the imagination ($PNI_{modified}$ = 0.230). 2) the instructional management had the priority needs index maximum the fluency ($PNI_{modified}$ = 0.298), the elaboration ($PNI_{modified}$ = 0.290), the flexibility ($PNI_{modified}$ = 0.284), the originality ($PNI_{modified}$ = 0.266) and minimum the imagination ($PNI_{modified}$ = 0.253). 3) the development and use of educational technology media had the priority needs index maximum the elaboration ($PNI_{modified}$ = 0.295), followed by the fluency ($PNI_{modified}$ = 0.270), the flexibility ($PNI_{modified}$ = 0.268), the originality ($PNI_{modified}$ = 0.266) and minimum the imagination ($PNI_{modified}$ = 0.257). And 4) the assessment and evaluation had the priority needs index maximum the flexibility ($PNI_{modified}$ = 0.304), followed by the elaboration ($PNI_{modified}$ = 0.303), the fluency ($PNI_{modified}$ = 0.299), the originality ($PNI_{modified}$ = 0.278) and minimum the imagination ($PNI_{modified}$ = 0.274).

## Discussion

1. The assessment of the current and the desirable states of academic administration of private primary schools in Sai-Mai district that based on the concept

of students' creative thinking skills reflected the moderate level. The overall desired state of academic administration private primary schools Sai-Mai district-based the concept of student's creative thinking skills was high. This was similar to the previous research findings of Prasertvit (2019), which research the academic administration approach according to the creativity of the secondary school student that the overall research of the current and desirable state of academic administration was moderate and high as well. This was consistent with Assawapoom (2015) saying that most schools in Thailand failed to meet the standard criteria for indicators about creative thinking.

2. The needs for academic administration in the private primary schools in the Sai-Mai district, according to the ideas of students as a whole, can be sorted as follow;

2.1 The results of the assessment of the need for academic administration in the private primary schools in the Sai-Mai district, according to the ideas of students as a whole, can be sorted as follow;

2.1.1 The curriculum development was indexed as in need to be developed the most. Even though the standard of learning and indicator in terms of encouraging the improvement of creativity had been established in the core curriculum of Basic Education, the course development of the private primary schools in Sai-Mai district required a close focus on consistently developing and interpreting the curriculum clearly about methods and activities- schools that tend to get the best results for creative thinking in student (Ofsted, 2002). Fisher and William state (2014) that the focus of school on promoting creativity step-by-step from the curriculum would be able to create the creativity of the students. Bill Lucas, Guy Claxton, and Ellen Spencer (2013) also additionally stated that the curriculum that fosters creative skills used by the teachers were important in promoting the creative skills developed in the curriculum.

2.1.2 The assessment and evaluation were the second most index that needed to be developed for the development of the administration of the private primary schools in Sai-Mai district. Based on the creative thinking skills of the students, it had shown that the current assessment and evaluation of the private primary schools in the Sai-Mai district did not respond to the development of creative skills as the indicators in the elementary core curriculum had not determined the evaluation of the development of the originality and lack of the flexibility in assessing creative skills. This was consistent with Bill Lucas et al. (2013) stating that the assessment of creativity skills required a formative learning assessment during learning. Similar to Susan and Brookhart (2013) saying that in addition to assessment during learning, the goal of the originality evaluation was to create the understanding of the teachers and students about the thinking process and the performance, for the teacher to be able to accurately measure the improvement of originality of the students. The school should also improve the learning evaluation by focusing on participatory learning assessments to develop students' creative thinking skills (Buaphan, 2015).

2.1.3 The third most index needed to be developed was instructional management. The private primary schools in Sai-Mai district had implemented creativity skills into the instructional management by focusing on the in-class activities and creating the learning atmosphere. This was consistent with Bill Lucas and others (2013) saying that effective learning for students was a teacher-directed learning management approach. Ros McLellan, Maurice Galton, Susan Steward, and Charlotte Page (2012) said that teachers as the important roles in teaching would promote the creative skills of the students.

2.1.4 The index of the need for the development and use of educational technology was at the lowest improvement of academic administration of the private primary schools Sai-Mai district. According to the creative skills of students, even

though the development and the use of educational technology media had not been specified into the core of the basic curriculum, the results of research reflected that the development and use of technology media could be applied to other academic administration. This was consistent with McGuire (2015) stating that the implementation and development of technology media in the learning curriculum would help to improve creativity skills because multimedia tools have aided in the completion of class activities by promoting deeper comprehension. In addition, teachers could also provide students with opportunities to research and consolidate knowledge to develop a wide range of competencies by using technology to access information and self-knowledge.

2.2 The evaluation of the need in the development of the academic administration of the private primary schools in Sai-Mai district based on the creative skills of students in each aspect can be sorted as follow;

2.2.1 Elaboration was the most required aspect of curriculum development. The result of this was similar to the previous research of Prasertvit (2019) was found that the elaboration of the student was considered as one of the hardest aspects to be improved in the curriculum as it depended on the observation skills and integration with the experiences of the students. The curriculum used in developing this skill should encourage instructional management that allowed students to have time to reflect on their prior knowledge and to integrate them with new knowledge. Therefore, to develop the curriculum in this form, the development of the curriculum and instructional management should be in the same direction to promote the elaboration for students. This was in line with Lucas and others (2013) stating that the school and teacher should improve the curriculum together with the learning management to allow the students to have time to reflect on their prior knowledge and to integrate

them with new knowledge, which would result in more elaborate thinking that can build on the creativity of the students.

2.2.2 Flexibility was the aspect that required the assessment and evaluation the most. Similarly, the results of Prasertvit (2019) demonstrated that flexibility required the measurement and evaluation through the problem-solving process of students. The measurement and evaluation should have the flexibility to understand the opinions of students, consistent with Kate Shively and Jennifer Palilonis (2018) saying that the measurement and evaluation should consist of various evaluation patterns with no specific patterns. The assessment and evaluation patterns can be designed in the rubric table which can design the assessment and evaluation in various aspects. It also suggested that teachers and students must have a corresponding understanding of assessment and evaluation creativity before beginning the lesson.

2.2.3 The most aspect, required for an instructional management, was fluency thinking. The results of Prasertvit's research (2019) was found that fluency thinking was the most important aspect in teaching and learning management through answering the question and very effective for students with limited time through thetical activities. Therefore, the private primary schools in Sai-Mai district should establish a guideline for teaching and learning to develop think skills by organizing learning activities as well as creating a learning environment through hands-on practice for students. This was consistent with Elizabeth Krik and Carine Lewis (2017) which researched the primary students, found that if students were able to express themselves during learning, it could significantly affect the development of fluency thinking. Moreover, Patrick McGuire (2015) also said that organizing activities and creating a learning environment where students could take action, would help students in connecting the ideas and impacting the creativity of the students in the

same way that researcher around the world supported active learning for improving the thinking and creativity skills.

2.2.4 The development and use of educational technology mostly required an elaboration aspect. The private primary schools in Sai-Mai district should focus on the development of digital infrastructure and the development of technology media that foster the elaborate thinking of the students and to elaborate the creativity meaningfully and develop the existing ideas to be more efficient. This consistented with Dian Astuti Mahmudaha, Ucu Cahyana, and Agung Purwanto (2021) that researched the relationship between learning performance and the use of the mobile phone. The result was found that the students in the group which received the teaching with the implementation of mobile phones, were able to develop their thinking more elaborately than the group with the traditional way of teaching. Moreover, the research of Dessy Octaviani, Dwijanto, and Farid Ahmadi (2019) researched the primary students who had implemented the technological media into their studies. It was found that students who learned through the use of technology in their studies had a higher rate of elaborate thinking than those who did not.

## Conclusion

Based on the research on the current and the desirable states of academic administration of private primary schools Sai-Mai district based on the concept of students' creative thinking skills, according to the research, the overall current state of academic administration was moderate level and the overall desired state of academic administration based the concept of student's creative thinking skills was high. The corrent state of the curriculum development had the lowest average, and the instructional management had the highest average of the current and desired states so the academic administration of the private primary schools in Sai-Mai district

should develop curriculum development and focus on teaching and learning management at the same time achieving the desired state in these areas.

The need for development in the academic administration of the private primary schools in Sai-Mai district according to the creative thinking skills of the students was essential.

There should be the development on academic administration starting from the curriculum development, instructional management, the use of the educational technology as well as the assessment and evaluation. The development of the curriculum and the use of educational technology should be focused on the improvement of elaboration thinking. Instructional management should focus on the development of fluent thinking, the assessment and evaluation with emphasis on assessing the hands-on activities, and the performance of students should focus on flexible thinking, which all of the dominant features in the need for academic administration. Moreover, the development on other aspects should be conducted to promote the creativity and thinking skills of students that are the essential skills for the 21st century.

**Recommendations for a school administrator**

1. The board of directors should consider to support and promote the development of the curriculum development as the result of the need for development in the academic administration according to the creativity of the students was found that the aspect with the highest index required in improving the academic administration of the private primary schools in Sai-Mai district-based the concept of student's creative thinking skills.

2. The board of directors, stakeholders, and teachers should accelerate the development of the curriculum. There should be the curriculum development policy through the analysis of the need for curriculum development, improve the appropriate

curriculum and determine the objectives of the students to establish the curriculum for the school, as according to the results on current state of the academic administration of the private primary schools in Sai-Mai district, the curriculum development was the one with the lowest average.

### Recommendations for Future Research

1. According to the research, curriculum development in the aspect of elaboration was the most needed aspect to be done. This demonstrated that the development of academic administration had a limit in curriculum development according to the creativity of the students. Therefore, future research should be focused on the factor affecting the development of academic administration according to the creativity of students, and to benefit the development of academic administration according to the above concept.

2. The desire state of teaching and instructional management and in the development and use of educational technology media both had the highest average on the desire state, Therefore, future research should focus on achieving the desired state in these areas. An in-depth interview with administrators, teachers, and students should be conducted to study the factors affecting the development of academic administration and develop academic management development strategies for promoting the creativity of the students.

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