THE CURRENT AND DESIRABLE STATES OF SCHOOL MANAGEMENT TO ENHANCING CREATIVE THINKING CHARACTERISTICS OF ELEMENTARY SCHOOL STUDENTS[*]

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Abstract: This study investigated the thinking framework of school management to enhance creative thinking characteristics of elementary school students, and to explore the current and desirable states of school management that help stimulate creative thinking characteristics of the elementary school students. The participants were school directors, vice directors, heads of administrations, teachers and students in 396 schools under Office of the Basic Education Commission. The participants were required to complete the questionnaires and the interviews. The results of this study revealed that there were five tasks of the thinking participate in framework of school management which performed following the planning, implementation and evaluation processes such as, Course Development Task, Learning Process Management Task, Measurement and Evaluation Task, Learning Sources Development Task and Student Affairs. These tasks may have encouraged all the characteristics reflecting creative thinking of the elementary school students: curiosity, persistence, freedom, imagination, innovative though, aesthetics, risk taking, creative problem solving and intuition. The results also indicated that the current state of school management was found at a high level ($\overline{X} = 3.73$, S.D. $= 0.67$), while the desirable state of school management was found at the highest level ($\overline{x} = 4.60$, S.D. $= 0.44$).

Keywords: School Management, Creative Thinking Characteristics, Elementary School Students.

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Introduction

Creativity is the thinking ability and power to create something novel that brings progression to the individual, organization, nation, and global society. It provides multiple approaches to problem solving. It also indicates the quality of individuals and the nation. It is thus an ability that should be developed in any individuals in this dynamic society with constant and rapid changes. The advances in technologies and internet network have led to changes in the society to become dynamic, and established the knowledge-based economic system and creative economics with competitions of intellectual and new ideas to generate values of goods and services. To develop people for their creativity is thus to enhance the competitiveness of the country, It requires the country to seek for different aspects of development. Therefore, development of people with creativity is considered the turning point of Thai society. In particular, creativity is the key of ideas to produce new works for social benefits. Creativity is neither confined only in the fields of art works, music, and sciences, nor possessed by talented individuals. Rather, everyone can be creative if he or she is properly developed or fostered, and this is possible in all disciplines. Other thinking skills can be involved including analysis, synthesis, and application, to provide new ideas or valuable work pieces.

Education provision in Thailand stipulated creativity development of students as in Section 7 of the National Education of 1999, the 2nd Amendment in 2002, and the 3rd Amendment in 2010 that determined the aim of education provision to promote creativity of students as " *A learning process shall aim at instilling a correct conscience relating politics and administration with the King as Head of State...a capability to make a living, an awareness of self-reliance, having creativity, longing for knowledge, and self-studying...*" (Department of Curriculum and Instruction Development, 2003) Creativity is an indicator to measure students' quality and competency based on the students' quality standards defined by the Office of the Basic Education Commission, and the Office for National Education Standards and Quality Assessment (Public Organization). Education provision for students should consider the social changes in the future and intend to enable students as population to live in this rapidly changing society with flexibility and creativity in living their life. However, it is currently rarely for teaching thinking skills to Thai children to become creative individuals. It is only a policy but without an explicit framework for implementation, an instruction framework and guidelines for teachers, effective tools for teachers, and even standards for reference of children with capability of effective thinking (Banchong *Amornchewin*, 2011). Learning in the school did not focus on how students should learn but on to much extent they can learn. The teachers' instructional process remains traditional style that students are told by the teachers and hence becoming consumers of knowledge provided by teachers. The process is inadequate to produce concrete outcomes. It is hence suggested to change educational trend so as to affect the practice, to substantialize education, to yield products in educational sphere and as creative products (*Paitoon Sinlarat, 2011*). A common problem in learning management involves school's emphasis on intellectual development but failure to focus on students' creativity because of school's perception of creativity and intellectual as the same thing (Meier and Stein, 1955, cited in *Aree Panmanee,* 2002). Students who display high IQ scores are not

necessarily creative. The previous teaching and learning process in Thai educational system had taken separate subject-based approach that led to discrete views on the problems or events, and hence unlikely to fully reach the real situation because separate thinking focusses on solving each particular point of the problem while neglecting other points and resulted in unbalance and other subsequent problems. Moreover, due to the teachers' lack of understanding in the meaning and the process of different forms of thinking, they are unable to produce instruction and activities plans. For the nature of learning, the best ways are to hypothesize the idea, design the experiment, do activities, think of solution, try out, make conclusion, and present the result, all by oneself. Through these, good learning can occur and individuals are encouraged to think out of the box. Children's good learning should emphasize on fostering creativity and it has to begin since childhood particularly in primary school students or those below 30 years of age. Three aspects to be highlighted include "life" "problem solving" and "creativity" as the bedrock for children's further learning, and extension to advanced learning. Children at this age are in less pressure of rules and regulations, and more freely to play than other ages, so it is better likely to promote creativity.

Schools are required to formulate appropriate plans and strategies to stimulate and reinforce children's development, provide facilities for smooth operation, and coordinate with networks and involve other concerns in promoting the trait of creativity in students. The researcher is interested to investigate the concept of school management to promote creativity trait of primary school students, and the current and desirable situations of school management to promote creativity trait of primary school. The information will guide the analysis of strengths, weaknesses, opportunities, and threats of school management, and further development of school management strategies to promote creativity traits of primary school students.

Objectives
The objectives of the study were:
1) To investigate the thinking framework of school management to enhancing creative thinking characteristics of elementary school students.
2) To explore the current and desirable states of school management to enhancing creative thinking characteristics of elementary school students.

Conceptual Framework
There were two frameworks of the present study: school management and creative thinking characteristics of elementary school students.

1. School Management
The school management based on the concept of National Education Act of B.E. 2542 section 39 (Office of the National Education Commission, 2545) that determine the school management into 4 sections, such as, Academic Administration, Financial Administration, Personnel Administration and General Administration. After analyzing each section that may have enhanced the creative thinking characteristics of the elementary school students, the researcher found that there were two sections of the school management that may have stimulated the creative thinking

characteristics of the elementary school students, such as the tasks of Academic Administration (Course Development Task, Learning Process Management Task, Measurement and Evaluation Task, and Learning Sources Development Task), and the task of General Administration (Student Affairs). The previous tasks were based on the concept of Newby (2000) that determined into 3 processes: Planning, Implementation and Evaluation.

2. Creative Thinking Characteristics of Elementary School Students

Sternberg (1999) and many psychologists suggested that there are nine characteristics of creative thinking of the elementary school students, 1) Curiousity, 2) Persistence, 3) Freedom, 4) Imagination, 5) Innovative though, 6) Aesthetics, 7) Risk Taking, 8) Creative Problem Solving and 9) Intuition.

Research Procedure

The present study was a descriptive research including two steps as follows:

Step 1

The researcher studied the concepts, theories and research about school management to stimulate the creative thinking characteristics of the elementary school students. Then the previous research must be analyzed in order to contribute the conceptual framework. After that the concept were evaluated by the five experts to be two issues of the thinking framework.

The first issue was a task of school management to encourage the students' creative thinking. There were five tasks: Course Development Task, Learning Process Management Task, Measurement and Evaluation Task, Learning Sources Development Task and Student Affairs which must be performed following these processes: Planning, Implementation and Evaluation.

The second one was the creative thinking characteristics of the elementary school students: 1) Curiosity, 2) Persistence, 3) Freedom, 4) Imagination, 5) Innovative though, 6) Aesthetics, 7) Risk Taking, 8) Creative Problem Solving and 9) Intuition.

Step 2

The current and desirable states of school management to enhance the creative thinking characteristics of the elementary school students were explored as follows:

2.1 Created the two issues of questionnaire as a Rating Scale form with five alternatives, 5 (highest), 4 (high), 3 (average), 2 (low), and 1 (lowest). The first issue was about the current and desirable states of school management. It was for the school directors (directors, vice directors, heads of administrations) and teachers. The second one was about the creative thinking characteristics. The elementary school students were required to complete this issue.

2.2 Two issues of the questionnaire must be evaluated for content validity by five experts who were chosen by purposive sampling. They were university professors and school directors with experience in teaching and managing in school at least five years or more. Moreover, they had to understand and be expert in the

creative thinking, measurement and evaluation, learning process management of elementary school and school management.

    2.3 Selected the questions that had an Index of item Objective Congruence (IOC) was over 0.80. In addition, the questions must be improved following the experts' suggestions before presenting to the advisor.

    2.4 Tried out the improved questionnaires, 30 papers of each issue in six schools of Office of the Basic Education Commission. Then the questionnaires must be examined in terms of reliability using Cronbach's Alpha Coefficient (Cronbach, 1970) at 0.95.

    2.5 The questionnaires were completed by the participants from 396 schools under Office of the Basic Education Commission that were chosen by Taro Yamane's (1967) suggestion. Two school directors (director, vice director, heads of administrations and teachers) of each school were required to complete the questionnaire on school management. The questions of creative thinking characteristics were done by two elementary school students of each school.

    2.6 For data collection, there were 331 out of 396 (83.59%) schools that retuned the questionnaires. There were 1,044 participants, 328 school directors, 331 teachers and 385 students. The researcher initially investigated the questionnaires in order to check the correction. Then the data was analyzed using the statistical package (frequency, percentage, average and standard deviation).

Findings

1. Thinking framework of school management to enhance creative thinking characteristics of elementary school students included Course Development Task, Learning Process Management Task, Measurement and Evaluation Task, Learning Sources Development Task and Student Affairs that performed following these processes, Planning, Implementation and Evaluation influenced the creative thinking characteristics of the elementary school students, curiosity, persistence, freedom, imagination, innovative though, aesthetics, risk taking, creative problem solving and intuition, as shown in Figure 1.

    2. The results also indicated that the current state of school management was found at a high level ($\bar{x}$ = 3.73, S.D. = 0.67). Learning Process Management Task, Learning Sources Development Task and Student Affairs were mostly performed ($\bar{x}$ = 3.76), followed by Measurement and Evaluation Task ($\bar{x}$ = 3.69) and least Course Development Task was performed ($\bar{x}$ = 3.68).

    As shown in Table 1, the desirable state of school management was found at the highest level ($\bar{x}$ = 4.60, S.D. = 0.44). Learning Sources Development Task was found the most desirable task ($\bar{x}$ = 4.63, S.D. = 0.46), followed by Student Affairs ($\bar{x}$ = 4.62, S.D. = 0.48). Course Development Task was the least desirable task ($\bar{x}$ = 4.57, S.D. = 0.47).

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│ School Management                                                     │
│ ┌───────────────────────────────┐  ┌──────────────────────────────┐  │
│ │ Management Process: PIE Model │  │ Tasks                        │  │
│ │ 1. P = Planning               │  │ 1. Course Development Task   │  │
│ │ 2. I = Implementation         │  │ 2. Learning Process          │  │
│ │ 3. E = Evaluation             │  │    Management Task           │  │
│ │       (Newby et al, 2000)     │  │ 3. Measurement and           │  │
│ │                               │  │    Evaluation Task           │  │
│ │                               │  │ 4. Learning Sources          │  │
│ │                               │  │    Development Task          │  │
│ │                               │  │ 5. Student Affairs           │  │
│ │                               │  │    (Office of the National   │  │
│ │                               │  │     Education                │  │
│ │                               │  │     Commission, 2002)        │  │
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Creative Thinking Characteristics
1. Curiosity
2. Persistence
3. Freedom
4. Imagination
5. Innovative though
6. Aesthetics
7. Risk Taking
8. Creative Problem Solving
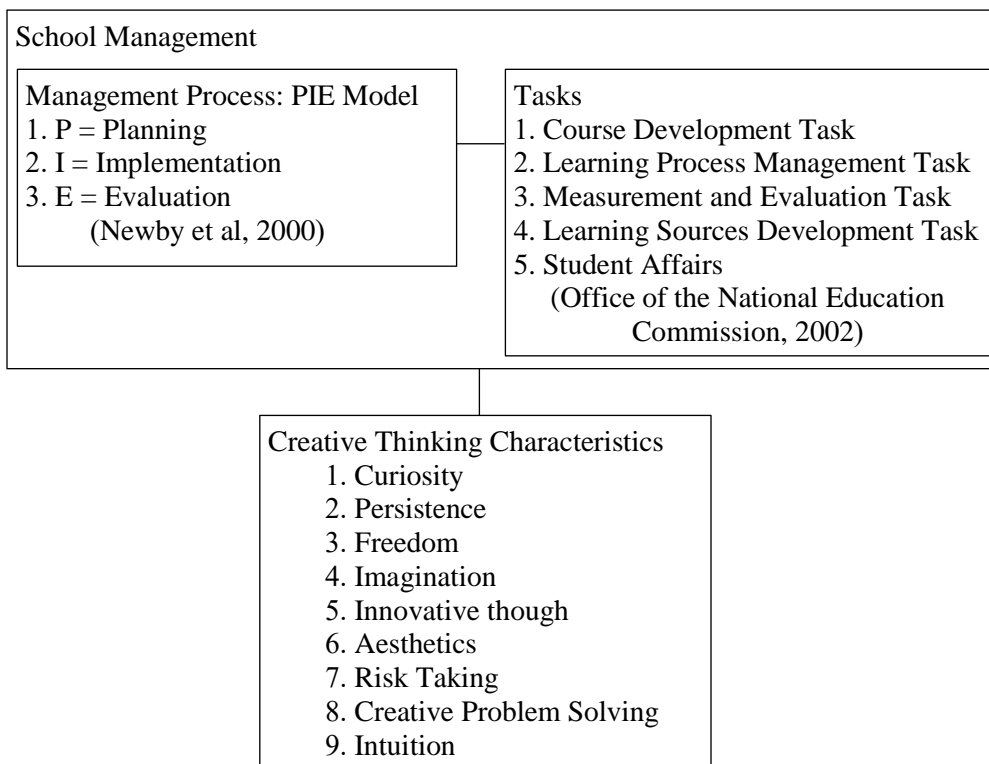9. Intuition

Figure 1: Thinking Framework of School Management

Table 1: Average and Standard Deviation of the Current and Desirable States to Enhancing of Creative Thinking Characteristics of Elementary School Students

Management	Current State		Desirable State	
	$\overline{X}$	S.D.	$\overline{X}$	S.D.
1. Course Development Task	3.68	0.66	4.57	0.47
2. Learning Process Management Task	3.76	0.68	4.61	0.46
3. Measurement and Evaluation Task	3.69	0.75	4.58	0.50
4. Learning Sources Development Task	3.76	0.72	4.63	0.46
5. Student Affairs	3.76	0.71	4.62	0.48
Total	3.73	0.67	4.60	0.44

3. As shown in Table 2, the creative thinking characteristics of the elementary school students were at a high level ($\overline{x} = 3.86$, S.D. $= 0.53$). Aesthetics was most performed ($\overline{x} = 4.06$, S.D. $= 0.62$), followed by Persistence ($\overline{x} = 3.98$, S.D. $= 0.64$). The characteristics that were least performed appeared to be Imagination ($\overline{x} = 3.64$, S.D. $= 0.74$).

Table 2: Average and Standard Deviation of Creative Thinking Characteristics of Elementary School Students

Creative Thinking Characteristics	$\overline{X}$	S.D.
1. Curiosity	3.92	0.62
2. Persistence	3.98	0.64
3. Freedom	3.92	0.66
4. Imagination	3.64	0.74
5. Innovative though	3.73	0.70
6. Aesthetics	4.06	0.62
7. Risk Taking	3.88	0.69
8. Creative Problem Solving	3.77	0.63
9. Intuition	3.79	0.63
Total	3.86	0.53

Discussion

The study results provide 2 themes to be discussed as follows.

1. The Conceptual Framework of School Management to Promote Creativity Trait of Primary School Students

The conceptual framework of school management to promote creativity trait of primary school students consisted of 5 missions of school management, i.e. curriculum development; learning process management; learning measurement and evaluation; learning resources development; and student activities. School management process involved planning, implementation, and evaluation to promote the development of 9 traits of creativity, i.e. 1) curiosity, 2) persistence, 3) freedom, 4) imagination, innovative thought 6) aesthetics, 7) risk taking, 8) creative problem solving, and 9) intuition. This attributes to the socio-economic changes that influence the development of the country and its citizens. Accordingly, education provision is required to develop and equip learners with the knowledge and capability to proceed their livelihood in this high level of social change. Promoting their creativity traits will serve as an immune for their living with creative thinking, inventing, and problem solving which is in line with the policy to develop the quality of individuals and society as stated in the 11th National Economic and Social Development Plan (2012 – 2016).

2. The Current and Desirable Situation of School Management to Promote Creativity Trait of Primary School Students

2.1 The current situation of school management to promote creativity trait of primary school students was found at high level on average, suggesting that schools placed an importance on promoting creativity trait among students as an essential trait for the 21th Century, as it gave students the immune in terms of thinking, working, and problem solving for living their life under the rapid change of global society. The majority of schools placed priorities on the missions of learning process management, learning resources development, and student activities. Since these missions directly involved student development by bringing the policy and plan to implementation, students were offered with knowledge, first-hand activity, and development of

thinking process, practice of problem solving, and becoming individuals with creativity traits. This depends on the design of learning process management by teachers and school support. According to Robinson (2001, cited in Emma Gregory, 2013), it was concluded that learning management drives student to think creatively. Management of learning can take multiple forms and if it is to ensure the future success of students, teachers need to pay attention and teach student to think actively and creatively. Development of learning resources is another mission that received attention for most of the schools and it affected primary school students' creativity trait. This is because schools provided the data, messages, and information resources to back up student's self-thinking and learning. These resources included individuals such as local sages, resource persons in different disciplines. The man-made resources are for example, public libraries, museums, zoos. There are also natural resources for learning such as natural tourist destinations, waterfalls, marine, or even the country fields. Other learning resources as social activities include those of traditions and beliefs, such as, Nak procession, rain ritual, buffalo racing, Songkran festival, and other regional cultural traditions. All of educational facilities both internal and external learning resources must be accessible to students according to the national Education Act of 1999. Activities are to be arranged for students to learn from doing activities and have hands-on experience and practice to be able to think and do, and that they recognize and apply such body of knowledge to their daily life. (Academic Review, 2005). Student activities in primary school are those identified in the Basic Education Core Curriculum of 2008 which comprised 2 activities: boy scout/girl guide/youth red-cross activity, and assembly/club activity. These learning activities required students to design their activities of interest and carry out by themselves. Schools can promote students' creativity trait by offering a range of activities that allow students to design and make a choice of activity on their interests.

2.2 The desirable situations of school management to promote creativity traits of primary school students was at the highest level, on average. Top Ranking was learning resources development, followed by student development activities, and learning process management, respectively. Since the educational standards of the Office of the Basic Education Commission was defined with the management of learning through learning resources as one of the achievement indicators and for the whole school, it is thus easier to implement than other missions. In addition, student activities, boy scout/girl guide activities are already clearly defined in the curriculum with scopes of activities management and measurement/evaluation, so schools have less to do in the design of activities. Assembly/club activity was set up on students' interest, it can work well, and it is possible for schools to have additional activities as school identity or measures in this part.

The curriculum and evaluation are important and interrelated. Curriculum directs the experience management and student development however received less attention in school management because the Basic Education Core Curriculum was clearly identified and schools can only make small adjustment in the part of local wisdom. Because of the frequent changes of the Ministry of Education's policies, schools then put the more focus on the development of learning process management than curriculum adjustment. Many schools are still lack of understanding on how to initiate

integrated curriculum and there exists no policy or support from their affiliated office in this part.

3. Primary School Students' Creativity Trait Produced by School Management.
The findings suggested the top rank of creativity traits in aesthetics. In the society, the nature and culture-related information are increasingly disseminated through media. The Ministry of Education also promoted students to show more their ability in arts, music, and dancing art as seen in the student's art and craft contest in 2014 instead of academic contest in order to focus more on the contests of activities for expressing and doing. The secondary ranking was the creativity trait in persistence and freedom, followed by imagination. This may be due to the root of Thai culture that expects children to pay respect to and obey elders, so they dare not to think beyond what they were told by senior people. Raising style in the family is another factor that helps promote creativity trait of students. Schools have to take into consideration these factors in the design of learning management and create learning atmosphere. As suggested by Chutima Wongpralub (2010), promoting creativity is possible by the reform of learning management to correspond students' learning; the promotion of classroom atmosphere to encourage students to exercise their thinking; the arrangement of a range of activities to raise students' curiosity, seeking knowledge, positive attitude towards new things, satisfaction, and enjoyment with the use of thought, with high level of flexibility and imagination, as the desirable traits of individuals who live well in any changing societies.

Recommendations
Based on the investigation of the current and desirable situations of school management to promote primary school students' creativity trait, recommendations were provided below.

1. Policy Recommendations
1.1 As the findings suggested, school management on curriculum development was at the lowest level, schools should thus formulate an explicit policy in promoting creativity trait among primary school students. Specific curriculum to promote creativity trait should be identified. It is noted here for consideration with respect to the teaching and learning for the early childhood that children at this age can perform well in imagination, so school management should also simultaneously aim to enhance creativity trait of this group. Promoting creativity should be carried out at every level in school.
    1.2 Family's raising environment also affects creativity trait of primary school students. Therefore, schools should have a plan to involve parents and community in the management of education to foster students' creativity traits.

2. Recommendations for Further Research
The research result revealed that primary school students were reported with lowest level of creativity trait in imagination. It was also found that the early childhood is the age doing well in imagination. Schools should also manage to provide education to promote creativity traits in this age group as well. Accordingly, it is suggested to

conduct a study on how to effectively promote creativity traits in early childhood students.

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