Development of Future Classroom: A Case Study of Buriram Rajabhat University Demonstration School

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ABSTRACT

The purposes of this research were 1) to develop the teachers of Buriram Rajabhat University Demonstration School 2) to examine the results of teacher development in creativity-based learning management. The samples were 15 elementary school teachers. The research tools were workshop, knowledge exchange, and supervision by the mentor system, and the data was collected by interviews.

The research results revealed that:

1. The overall knowledge and comprehension of teachers of Buriram Rajabhat University Demonstration School about creativity-based learning prior to the teacher development was at a high level ($\bar{x}$=3.93). Each aspect was considered and arranged in order from the highest to the lowest mean as follows: atmosphere and learning resources arrangement ($\bar{x}$=4.26), classroom management to promote students' creative thinking ($\bar{x}$=4.08), and life skills building activities ($\bar{x}$=3.75).

2. The overall knowledge and comprehension of teachers of Buriram Rajabhat University Demonstration School about creativity-based learning after the teacher development was at a greater level ($\bar{x}$=4.21). Each aspect was considered and arranged in order from the highest to the lowest mean as follows: atmosphere and learning resources arrangement ($\bar{x}$=4.46), classroom management to promote students' creative thinking ($\bar{x}$=4.12), and life skills building activities ($\bar{x}$=4.05). There was a recommendation that the class could learn through technology including learning on the computer, virtual web-based learning classroom, and digital collaboration.

Keywords: Classroom management, creative thinking, creativity-based learning

Significance of the study

Since 1999, Thailand has reformed education to change the teaching and learning system from the traditional curriculum-based teaching to student-centered learning. This change has aimed to develop learners to have the ability to learn and work in the new environment. However, schools and educational institutions at all levels have still retained the traditional style of teaching methods. Although the traditional teaching style helps build students' critical thinking skill, the students are at a disadvantage being unable to develop crucial professional and personal skills for the 21st century environment.

Traditional learning focuses on children memorizing whereas new learning aims at children's need to have learning skills to distinguish information including communication skills, teamwork skills and more importantly, creative skills caused by differences. The schools have shaped students into similarity in many ideal aspects such as haircut, subject, test, and answer despite the fact that the children who are creative will seem to become inferior students in the traditional education system.

Torrance's research revealed that creativity is as necessarily significant as analytical thinking. The problem is, not only are narrative study and memorization tests unhelpful to promote creativity, they also destroy it. Creativity should be developed and considered the main goal to which parents, teachers and related-parties should be aware of, pay close attention and give special support. Hence students will have the opportunity to develop their creativity the nation really need at the present (Punmanee, 2014).

Creativity-Based Learning (CBL) is another pattern of student-centered teaching-learning management. The main structure of creativity-based learning has been developed from Problem-based Learning and the guidelines for the development of Edward de Bono's parallel thinking. The results of the research on creativity-based learning discovered that learners had developed skills in finding knowledge, thinking skills, presentation skills, group work skills and time management skills. According to Rauchaiphanit (2015), creativity-based learning model consisted of 8 processes as follows:

1) Inspiration by multimedia and learning director
2) Searching, learning and playing games to stimulate curiosity
3) Face-to-face instruction
4) Training on setting problems and solving problems individually
5) Training in team work with projects
6) Creative presentation and criticism
7) Various forms of competition
8) Assessment of learning achievement with constructive evaluation

The philosophy of Buriram Rajabhat University Demonstration School saying that "organize learning experiences and environments to encourage children to grow in all aspects in a balanced manner" is in line with the development principles which are the basis of personnel quality development in the learning society. Not only can thinking-based learning development improve students in the school, it can also advance students practicing teachers. Other local schools are considered the school mission for demonstration of educational management at the early childhood and elementary levels. This collaboration can upgrade classroom research, academic services to communities, improvement, dissemination and activity development, and teaching innovation.

Research Objectives

The two research objectives were:

1. To develop the teachers of Buriram Rajabhat University Demonstration School

2. To examine the results of teacher development in creativity-based learning management

Research Methodology

1. The research samples

The research samples were 14 primary school teachers of Buriram Rajabhat University Demonstration School in the academic year 2018.

2. Scope of the research

The scope of the research was teacher development in creativity-based learning management by using strategies of workshop, knowledge exchange, and supervision by the mentor system.

3. Research methodology

The four steps of research methodology were as follows:

3.1 Planning

The researcher arranged a meeting with the target group to create understanding in the planning of operations and create awareness of self-development, creativity-based learning management. The areas of discussion were as follows:

3.1.1 To analyze the current conditions and problems of the school

3.1.2 To locate 3 strategies of the research namely workshop, knowledge exchange, and supervision by the mentor system

3.1.3 To plan the implementation of the 3 strategies in the 1st round in the form of a table which consisted of strategies, objectives, timing, people involved, data collection, tools and data resources

3.2 Process of operation

3.2.1 The researcher organized a two-day workshop

3.2.2 The samples created the curriculum and activities for creativity-based learning.

3.2.3 The samples implemented the curriculum and activities for creativity-based learning in the second semester of academic year 2018.

3.2.4 The researcher conducted knowledge exchange and supervision by the mentor system with the samples.

3.2.5 The researcher delivered the evaluation of knowledge and understanding of the samples.

3.3 Observation

The research samples were evaluated in the following areas:

3.3.1 The comprehension evaluated by using assessment test and observation form

3.3.2 The capability of curriculum and activity planning evaluated by using observation, interview and assessment test

3.3.3 The learning activities evaluated by using observation, interview and curriculum assessment

3.3.4 General comprehension

3.4 Result reflection

After the development, the researcher arranged a meeting to discuss about the development conclusion to examine the success and the defectiveness for further development.

4. Research instrument for data collection

The research instruments included assessment test, observation form and interview. The statistical analysis was determined by percentage (%), mean ($\bar{x}$) and standard deviation. The qualitative data was analyzed by descriptive method and composition.

Research Results

Research results were presented according to research objectives as follows:

1. The overall knowledge and comprehension of teachers about creativity-based learning was at a high level ($\bar{x}$=3.93). Each aspect was considered and arranged in order from the highest to the lowest mean as follows: atmosphere and learning resources arrangement ($\bar{x}$=4.26), classroom management to promote students' creative thinking ($\bar{x}$=4.08), and life skills building activities ($\bar{x}$=3.75) respectively.

2. After the creativity-based learning workshop, the samples implemented the strategies in their classrooms for one semester and the results were followed up by the school administrators. The two areas of the results after the development were as follows:

2.1 The overall knowledge and comprehension of teachers about creativity-based learning was at a greater level ($\bar{x}$=4.21). Each aspect was considered and arranged in order from the highest to the lowest mean as follows: atmosphere and learning resources arrangement ($\bar{x}$=4.46), classroom management to promote students' creative thinking ($\bar{x}$=4.12), and life skills building activities ($\bar{x}$=4.05) respectively.

2.2 The results of interviews for further development

The two aspects for further development were as follows:

2.2.1 Learning process management to promote students' creative thinking

2.2.1.1 School administration should focus on encouraging curriculum development, arranging atmosphere and learning resources, and internal supervision. Learning process problems to promote creative thinking ability was considered an urgent issue and should be solved immediately by organizing activities to enhance living skills, arranging atmosphere and learning resources, personnel development, and curriculum development.

2.2.1.2 The school administrators should encourage and support teachers' morale and arrange an internal supervision

2.2.1.3 The teachers organized activities to promote the creativity elements of learners including fluency, flexibility, elaboration and originality.

2.2.2 Atmosphere and learning resources arrangement

2.2.2.1 Interior atmosphere creation should be started by creating a good mental climate such as a brain gym activity, practicing thinking skills by discovering facts, problems, concepts and answers, and answer checking.

2.2.2.2 Emotional climate should be focused and supported by paying attention to the students' work, avoiding competition, creating a friendly relationship, paying attention to the problems of students, using authentic examples that students have the potential to understand, promoting integration, avoiding traditional assessments that lack of flexibility, and supporting a variety of exotic questions.

2.2.2.3 Physical Climate should be shady, clear and clean. The local wisdom should be used as resources for learning management.

3. Life skills building activities

The teachers must deliver creative thinking development activities, implement learning management in classroom, and create teaching materials

including student development evaluation in terms of originality, fluency, flexibility and elaboration.

Discussion

1. The overall knowledge and comprehension of teachers about creativity-based learning after the development was at a high level. Each aspect considered and arranged in order from the highest to the lowest mean were as follows: 1) atmosphere and learning resources arrangement, 2) classroom management to promote students' creative thinking, and 3) life skills building activities respectively. Learning management is considered a part of academic administration that school administrators must develop to meet standard. This involves in curriculum work, management of teaching plans, teaching schedule, and evaluation (Wonganutaroj, 2003). Buriram Rajabhat University Demonstration School places importance on the development of the atmosphere and learning resources to facilitate learning management. It allows students to be comfortable and content when learning. This contained in 3 quarters as the followings:

1.1 Interior atmosphere creation

The teachers should focus on 1) brain gym activities for creative thinking and 2) practicing thinking skills by discovering facts, problems, concepts and answers, and answer checking. When preparing students for the activity, the teachers need various examples to accelerate the students' creative thinking and its benefits. Good examples should regard social interests or something in connection with students' daily basis. The students will learn question formation and problem solving which are parts of problem solving skills and creativity. When implementing, students will have the ability to solve the problems and participate in the activity with their creativity (Pongvorn, 2012).

1.2 Emotional climate

The teachers should pay attention to the students' work and problems, create a friendly relationship, avoid competition and traditional evaluation, and support a variety of exotic questioning.

1.3 Physical Climate

The school areas should be shady, clear and clean, and place a local wisdom learning directory that helps students to absorb and develop their creative thinking skills at all times. This was consistent with Lipman (2003) who stated that in thinking skills teaching, the teacher should allow the students to develop the functions of the brain, increase and understand the scope of knowledge, and consistently check their own ideas. Punmanee (2014) stated that organizing activities for enhancing life skills was considered a meaningful learning management for the benefit of students by developing brain skills to generate creativity including originality, fluency, flexibility and elaboration as regards the theory of the intellectual structure of Guilford (1968). In conclusion, creativity is a brain ability to think in many directions which is called multiple thinking characteristics or divergent thinking.

2. Factors in success of the development of future classrooms that emphasize thinking-based learning management were as the followings:

2.1 The roles of school administrators in driving thinking into the classroom were: 1) to have awareness and a vision of developing learners with thinking process 2) to create the democratic atmosphere in classroom 3) to have

knowledge and understanding of the thinking process 4) to promote and support teachers' morale 5) to deliver internal supervision (Office of the Basic Education Commission, 2006) and 6) to bring modern technology to establish more effective learning management process such as internet access (Klaisang, 2017).

    2.2 The curriculum must be improved in accordance with the authentic condition of the students in the digital world and the Thailand 4.0 era. Due to the advancement of various learning materials, it has changed the format of the lesson and began to connect to the internet with web-based learning programs and an online lesson. Various learning tools have evolved to change and the lessons have had a tendency to support the development of lessons in the form of more applications. These promote and develop learning on the computer, web-based learning, virtual classroom, and digital collaboration. The teachers must seek and see the need to apply technology and innovation in the teaching process. Techakupta and Yindeesook (2017) asserted that to reform education and learning resulting in being a Thai person in the 21st century could be generated by acting as if a learner were a detective who pursues knowledge and information. It was in line with the statement of National Education Commission Office (2002) in National Education Act BE 1999 (amended) that aimed at teaching and learning to encourage students to be creative, constantly pursuing learning and continuing to learn by themselves. In terms of students, they have to knowingly adjust themselves to have the characteristics of living in the modern world of 21st century (Panich, 2012).

Recommendations

    Two areas of recommendations are as follows:

    1. Recommendations for application

      1.1 Application in policy

        1.1.1 School administrators should utilize the research results in learning management to support students' creative thinking abilities as a framework of the school vision indorsing creative activities.

        1.1.2 School administrators should create a learning management process to promote the creative thinking ability of students in educational institutions, and the administrators can apply knowledge to enhance the quality of education.

      1.2 Application in practice

        1.2.1 School personnel should be developed to have knowledge, understanding and skills in teaching-learning and classroom management to facilitate creativity-based skills development.

        1.2.2 Creative abilities should be promoted especially in terms of students' life skills, atmosphere and learning resources management, internal supervision and curriculum development.

    2. Recommendations for further researches

    The researches on model of learning process management to promote creative-based thinking ability of students could be conducted in the demonstration schools in other universities.

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