

Program Development of Enhancing Creativity Teachers' in Basic Education Commission Office, Thailand

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ABSTRACT

New educational management are the emphasizes as learning process to develop knowledge and creative thinking skills of the students. The objective this study aimed to address of program development of enhancing creativity teachers'. Mixed method research via EDFR. Collections to study documentary, interview and evaluation with the experts, survey by questionnaires with the samples, and knowledge testing with the teachers to the data. The study revealed that the needs assessment of enhancing creativity teachers' of most levels, the highest needs to showed of elaboration, fluency, respectively. Program of enhancing creativity teachers' of principle, objective, contents, activities, and evaluation. The results of implementation in program of enhancing creativity teachers' on creative abilities and skills into scores after training were significantly higher than before training at level of .05., satisfaction to the program of most levels, relation between creative abilities and skills and satisfaction have to positive.

Keywords:

Factors program, enhancing creativity teachers', Basic Education Commission Office.

INTRODUCTION

Education management is important for the development of human resources quality to have high potential and readiness to adapt, organizing learning activities that focus on knowledge, ideas, abilities, social responsibility, and being virtuous. Education is main mechanism of a development, supporting, cultivating ideas and knowledge to the civic community as a whole of Thailand 4.0. For every nation, education is undeniably the key mechanism to develop, promote and embed ideas as well as knowledge to their citizens, and society as a whole. (Office of the Education Council,2017) Therefore, education tends to be the core factor for country's long term competitiveness. In this sense, design of education is the crucial link that can lead to human and society development. Educational management is ability of the exclusives a driving efficiency and quality goals. One of the most important considerations in the context of modern education design is global dynamics that occurs as the world stepped into the 21st century. An impact of such transformation can be seen in the various aspects ranging from as society and economics, environment and politics. (Jedaman. P., & Others, 2017) The learning activities it consists of arranging content and activities in accordance with learners' to interests and aptitudes, taking into account individual differences, skills training, thinking processes, management, coping with situations, applying knowledge to prevent and problem solving, organizing activities for learners to learn from real experiences and practice to be able to do, think, act, continuously inquiring, teaching and learning by blending knowledge in different areas in a balanced proportion, including instilling good morals and values, promoting students' desirable characteristics in all subjects. His-chi, H., Ying-Hsin, L. and TengYing, L.(2004) to encourage and support teachers to create an atmosphere, environment, learning materials and facilitate students to learn and be knowledgeable, creative, and student-centered learning management. The strategic development and management are preparing people, creating people, an innovation, linking access to technology and being in the change. This requires systematic management used of the education-driven planning to the successful and can be converted to practice as procedure for the problem solving and development, identity change

include the cultural change that can propel the country to the first world of Thailand 4.0. Education is the main mechanism for development, supporting, cultivating ideas, knowledge to civic community. Key competency variable and long-terms potential, by the design, education is the main solution of a development to be related in the human and society. (Adisak Mungchu, Pornchai Jedaman, and Others, 2021) The key context of contemporary educational design to the dynamics change from the transition in the 20th Century to the 21st Century. The currents of the change have impacted both to the social, economic, environmental, cultural and educational that the factors of transition, such as revolution “Arab Spring” through use of technology, stepping in socio- economy include the cultural, education, management and organizing political. (Jedaman, P., & Others, 2017) Creative thinking is the process of expanding ideas from existing concepts to new ideas in order to find the best solutions to problems that arise, which to new original, workable, appropriate. (Praphansiri Susaraj, 2013) a developing skills for teachers to organize learning activities to create mass experience and develop skills for students, giving students knowledge and skills in creativity. Quality management development, development of new teachers with quality and creativity of effective learning management. In this research to program development of enhancing creativity teachers’ in Basic Education Commission Office, Thailand have 3 mains in the objective this study were followed:

- a) To study the needs assessment of enhancing creativity teachers’ in Basic Education Commission Office, Thailand.
- b) To developed to program of enhancing creativity teachers’ in Basic Education Commission Office, Thailand.
- c) To study the results implementation in program of enhancing creativity teachers’ in Basic Education Commission Office, Thailand.

RELATED STUDY

Education system in which a group combines human and material resources to supervise, plan, strategies, and implement structures to execute an education system. Education is the equipping of knowledge, skills, values, beliefs, habits, attitudes with learning experiences. The education system is ecosystem of professionals in educational institutions, such as government ministries, unions, statutory boards, agencies, and schools. (Cohen, J.M. and Uphoff, N.T,1980) Educational ecosystem, management involves of the planning, organizing, implementation, evaluation, integration of institution. Educational management is a goal oriented activity. The development of the program was the result in teachers for developing themselves to be knowledgeable, competent, good attitude, creative skills, able to apply experiences and process techniques that have been developed in learning management to result in students' as creative thinking to their fullest potential. Praphan Khanmol (2020) the results of the development of a competency-enhancing program for assessing reading, critical thinking and writing for secondary school level to consisted of 7 components as, 1) principles, 2) goals, 3) reading, analytical and writing assessment competence, 4) materials used to enhance reading, critical thinking and writing competency assessment, 5) capacity building activities to assess reading, analytical thinking and writing, 6) learning materials, 7) measurement and evaluation. Naphat Sricharoenpramarm (2019) to development of a learning program based on the Sufficiency Economy Philosophy to promote the thinking skills of teaching professional students to the results of the analysis of learning management program development to promote student creativity consisted of 1) principle, 2) objective, 3) content, 4) development method, 5)

evaluation. Creativity is the inherent nature of human beings for living, planning and adapting to both objective and non-objective thinking environments. Maddux, C.D. (2002) the greater the thinking, the more positive, more valuable for oneself and the community. The 21st century skills that everyone must learn are reading, writing, arithmetic's and one of the key goals is Creativity, where learning in the 21st century is learning for one's own life. (Wijarn Panich, 2012) The management of student-centered learning and the conceptual framework for learning has an important goal in developing students' creative potential. (Good, T.L. and Brophy, J.E., 1986) Therefore, it is very important to manage learning to develop people to be able to think, pretend and problem solving. Jeremiah, K. (2013) a creativity is something that exists in human beings, which some people have and some people have little, creativity and ability. By creativity, in addition to being born individually, it can also arise from the accumulation of experience and problem solving. creativity it is the ability to gather knowledge and original ideas and create them into knowledge of their own thoughts, able to think outside the box, positive thinking, constructive thinking, creative thinking, by the results of creativity. It must be something new. Also, the study a focusing the needs assessment of enhancing creativity teachers' into flexibility, fluency, originality, and elaboration, developed to program of enhancing creativity teachers' on principle, objective, contents, activities, and evaluation, assessment to appropriateness and feasibility of implementation in the program, including the results implementation in program of enhancing creativity teachers' form a training to look at the creative abilities and skills and satisfaction to the program, relation between knowledge and satisfaction into the results.

METHODOLOGY

This a mixed method research into qualitative and quantitative research via research process of Ethnographic Delphi Ethnographic Future Research (DEFER) a focusing program development of enhancing creativity teachers' in Basic Education Commission Office, Thailand.

Key Informant and Samples.

The key informants into assessment of the program development of enhancing creativity teachers' were 7 experts they all were by purposive sampling and snowball sampling. The samples to survey of 384 teachers in Northeast on Basic Education Commission Office, Thailand they all were by multi-stage random sampling technique, include 20 teachers in Det Udom Network Group of Primary Education Service Area Office, 5, who applied to participate in the development and training.

The Instruments.

Research instruments were to issues 1: questionnaire on semi structure into the needs assessment of enhancing creativity teachers', issues 2: interview questionnaire on structure into program development, issues 3-4: questionnaires on semi structure into program development of 2 issues such as developed from the results of interviews with experts, issues 5: questionnaire on semi structure into assessment to program development to review, improve, evaluate and certify by question nature of close ended question, issues 6: questionnaire on semi structure into satisfaction to the development program, and issues 7: the assessment of creative abilities and skills is divided into two parts: individual activities, and group activities to use of before and after training. Also, the questionnaires of 5 rating scales have to item of objective congruence and tools confidence.

Data Collection.

1. Study, analyze and synthesize documents and research related to the program development of enhancing creativity teachers', to create a research conceptual frameworks.
2. Conduct to an opinion poll with a questionnaire into 384 samples of the teachers, and Collect all the data in quantity and analyze it for study the needs assessment of enhancing creativity teachers'.
3. Proceed to program development form interviews and questionnaire with 7 experts by Ethnographic Delphi Ethnographic Future Research (EDFR) as to, 1)first round: interview in orders to know trends in determining factors to program and contents of modules, the data obtained from the interviews were analyzed and synthesized, 2) second round: the questionnaires were asked to the same group of 7 experts interviewed. Each expert weighed the significance of each trend and analyzed the questionnaire to classify the data to find consensus, 3) third round: the questionnaire was directed to the experts where each expert weighed the significance of each trend and analyzed the questionnaire, in this round the experts received statistical feedback as a collective group, appended with the answers, their original position and the mark indicating the individual expert's position in the questionnaire. The findings were based on the results obtained from the third round of EDFR as a criteria, which, once concluded from expert opinions, were used to create a program of enhancing creativity teachers' and then carry out further research and summarize.
4. Examine the suitability and feasibility and summarize the results of the program of enhancing creativity teachers' acceptance. And evaluation to the suitability and feasibility with 7 experts to group discussions and evaluate of the results.
5. The results implementation in program to conduct training and development with 20 teachers, by before the training and development to evaluate with the assessment of creative abilities and skills, and after the training and development to evaluate with the assessment of creative abilities and skills for comparing the evaluation results to find the difference. And to assessment of satisfaction to the program by questionnaire to collect all the data and analyze the results including studying the relationship between competence and satisfaction.

Data Analysis.

Data analysis was analyzed by descriptive statistical analysis including percentage, mean, standard deviation, modified priority needs index (PNI_{Modified}), median and interquartile range, the difference test by t-test, and correlation relationship (r).

THE FINDINGS

The results to program development of enhancing creativity teachers' in Basic Education Commission Office, Thailand were followed:

a) Needs assessment of enhancing creativity teachers'.

The levels and needs assessment of enhancing creativity teachers' into 4 aspects of flexibility, fluency, originality, and elaboration to shown as table 1.

Table 1. Mean, standard deviation, levels of current and needs assessment.

Enhancing creativity teachers'	Current condition			Needs Assessment			PNI _{modified}
	Mean	Std.	Levels	Mean	Std.	Levels	
Flexibility	4.25	0.66	High	4.51	0.55	Most	0.062
Fluency	4.16	0.68	High	4.50	0.61	High	0.083
Originality	4.14	0.79	High	4.49	0.66	High	0.081
Elaboration	4.16	0.66	High	4.52	0.61	Most	0.086
Totals	4.18	0.70	High	4.51	0.61	Most	

On table 1. Needs assessment of enhancing creativity teachers' into 4 aspects of flexibility, fluency, originality, and elaboration of most levels (Mean of 4.51, Std. of 0.61), when to considering the areas with the highest need, i.e., elaboration (PNI_{modified} = 0.086), fluency (PNI_{modified} = 0.083), originality (PNI_{modified} = 0.081), respectively.

b) Program of enhancing creativity teachers'.

1. Results to analysis factors program of enhancing creativity teachers' including principle, objective, contents of 4 modules and 12 indicators, activities, and evaluation towards Ethnographic Delphi Ethnographic Future Research (DEFER) in cycle 3 overall on median and interquartile range to shown as table 2.

Table 2. Median and Interquartile range of factors program.

Factors program of enhancing creativity teachers'	Experts Opinions			
	Mdn.	Levels	I.R.	Congruence
Principle	5.00	Most	1.00	congruence
Objective	5.00	Most	1.00	congruence
Contents of 4 modules and 12 indicators	5.00	Most	1.00	congruence
activities	5.00	Most	1.00	congruence
evaluation	5.00	Most	1.00	congruence
Totals	5.00	Most	1.00	congruence

On table 2. Factors program of enhancing creativity teachers' including principle, objective, contents of 4 modules and 12 indicators, activities, and evaluation have to Median of 5.00, Interquartile range of 1.00. Also, in factors program of summaries were followed:

1.1 Principle:

Educational administration must focus on knowledge and ideas, competence and social responsibility. Program of enhancing creativity teachers' in applying knowledge and skills that will result in teachers developing themselves to be knowledgeable and competent, good attitude, creative skills, able to apply experiences and process techniques to received from the development of learning management that will result in students a thinking creatively to their full potential.

1.2 Objective:

Enhancing creativity teachers' in Basic Education Commission Office, Thailand form training and development.

1.3 Contents:

The contents of 4 modules and 12 indicators such as 1) flexibility modules of 3 indicators to, (1) adaptation to the situation, (2) out-of-the-box thinking, (3) creative problem solving, 2) fluency modules of 3 indicators to, (1) language and phrasing fluency, (2) relationship fluency, (3) expression fluency, 3) originality modules of 4 indicators to, (1) work humor, (2) problem-solving intelligence, (3) finding innovative ways to perform tasks, (4) inspiration, and 4) elaboration modules of 2 indicators to, (1) the ability to observe, (2) the ability to provide details.

1.4 Activities:

Including challenge assignments, development relationships, coursework and training have to the development process of self-study learning, workshop, site-visiting, and on the job training.

1.5 Evaluation:

Assessment of creative abilities and skills and satisfaction to the program as the assessment before- development, between development, after- development.

2. Results to suitability and feasibility of program of enhancing creativity teachers' to shown as table 3.

Table 3. Mean, standard deviation, levels of suitability and feasibility.

<i>Suitability and feasibility of program</i>	<i>Suitability</i>			<i>Feasibility</i>		
	<i>Mean</i>	<i>Std.</i>	<i>Levels</i>	<i>Mean</i>	<i>Std.</i>	<i>Levels</i>
Principle	5.00	0.00	Most	5.00	0.00	Most
Objective	5.00	0.00	Most	5.00	0.00	Most
Contents						
- Flexibility modules	4.98	0.17	Most	4.98	0.05	Most
- Fluency modules	4.96	0.13	Most	4.98	0.05	Most
- Originality modules	4.80	0.33	Most	4.98	0.17	Most
- Elaboration modules	4.98	0.05	Most	5.00	0.00	Most
Activities						
- Challenge assignments	4.76	0.44	Most	4.67	0.48	Most
- Development relationships	4.76	0.44	Most	4.98	0.17	Most
- Coursework and training	4.96	0.13	Most	5.00	0.00	Most
- On the job training	4.85	0.37	Most	4.90	0.31	Most
Evaluation						
- Before- development	4.89	0.33	Most	4.76	0.44	Most
- Between- development	4.98	0.17	Most	5.00	0.00	Most
- After- development	5.00	0.00	Most	4.96	0.06	Most

On table 3. Suitability and feasibility of program of enhancing creativity teachers' were principle, objective, contents of 4 modules, activities of 4 process, and evaluation of most levels.

c) Results implementation in program of enhancing creativity teachers'.

Results implementation in program of enhancing creativity teachers' into 2 aspects of creative abilities and skills, and satisfaction to the program were followed:

1. Creative abilities, skills form before and after training and development to shown as table 4.

Table 4. Mean, standard deviation, and t-test.

<i>Creative abilities and skills</i>	<i>Mean</i>	<i>Std.</i>	<i>t</i>	<i>Sig.</i>
Before	3.60	0.69	2.369*	.05
After	4.50	0.60		

* significantly.05.

On table 4. Creative abilities and skills form before and after training and development, by the teachers' into scores after training were significantly higher than before training at level of .05.

2. Satisfaction to the program enhancing creativity teachers' into 4 aspects of contents, process, medias, results to shown as table 5.

Table 5. Mean, standard deviation, and levels to satisfaction.

<i>Satisfaction to the program enhancing creativity teachers'</i>	<i>Mean</i>	<i>Std.</i>	<i>Levels</i>
Contents	4.55	0.53	Most
Process	4.57	0.52	Most
Medias	4.56	0.50	Most
Results	4.65	0.48	Most
Totals	4.57	0.51	Most

On table 5. Satisfaction to the program enhancing creativity teachers' into 4 aspects of contents, process, medias, results of most levels (Mean of 4.57, Std. of 0.51), when considering each aspect in descending order, the side with the highest mean was results levels (Mean of 4.65, Std. of 0.48), process (Mean of 4.57, Std. of 0.52), medias (Mean of 4.56, Std. of 0.50), respectively.

3. Relationship between creative abilities and skills with satisfaction to the program enhancing creativity teachers' to shown as table 6.

Table 6. Relationship between achievement to creative abilities and skills with satisfaction to the program.

<i>Factors</i>	<i>Relationship</i>	
	<i>Achievement to creative abilities and skills</i>	<i>Satisfaction to the program</i>
Achievement to creative abilities and skills	-	0.79**
Satisfaction to the program	0.79**	

** significantly .01.

On table 6. Relationship between creative abilities and skills with satisfaction to the program enhancing creativity teachers' have positive to statistical significance at level of .01.

DISCUSSION

Program development of enhancing creativity teachers' into needs assessment of enhancing creativity teachers' of most levels, the highest needs to showed of originality, fluency, elaboration and flexibility, respectively. Program of enhancing creativity teachers' of 5 factors were principle, objective, contents of 4 modules into 18 indicators, activities, and evaluation, and the program have to appropriateness and feasibility of implementation. The results of implementation in program of enhancing creativity teachers' on creative abilities and skills into after training were significantly higher than before training at level of .05., satisfaction to the program of most levels, relation between creative abilities and skills and satisfaction have positive to statistical significance at level of .01. This is due to educational administration must focus on knowledge and ideas, competence and social responsibility. Program of enhancing creativity teachers' in applying knowledge and skills that will result in teachers developing themselves to be knowledgeable and competent, good attitude, creative skills, able to apply experiences and process techniques to received from the development of learning management that will result in students a thinking creatively to their full potential. Naphat Sricharoenpramarm (2019) a learning program based on the Sufficiency Economy Philosophy to Promote Thinking Skills, of the students in the experimental group had a statistically significantly higher score than the control group at the 0.01 level. About the learning program is at a very high level. Lamyuan Waitham (2020) to development of a program for enhancing teacher competency in analytical learning management consisted of 4 components and 12 indicators, and the overall appropriateness was at the highest level. Also, creativity is a natural response to human beings who want to experiment with their own abilities , to use their imaginations in various subjects, and people who are able to express their creativity are highly satisfied, self and always have the motivation to come up with solutions to improve themselves. (Glickman, C.D., 2001) Hall, L (2009) to discussed the importance of creativity as the ability of a person's brain to think in multiple directions or multi-answer thinking that produces new and different ideas, and the ability to see the relationship of things with stimuli as a stimulus to continually generate new ideas. Teacher talent a building and personnel let them become forward-thinking. (Jellen, G. and Urban, K.,1986) And can lead to the changes that occur with creative works as thus creating a new culture and adapting the various supporting factors of the school that enable everyone to express their creativity widely. The whole school is filled with creative people. Such an idea will only come to fruition when the school's supreme leader must have new ideas and new skills. Guilford, J.P. (1988) when it comes to creativity, creativity is often understood and focused on originality. In fact, creativity comprises other aspects of thinking as well. (Vichai Vanphat, 2014) But originality is the key aspect that drives the start up. But the success of creativity requires other aspects of thinking. Creativity is the ability of the brain to think in many directions, known as divergent thinking such as originality, fluency, flexibility, elaboration. Support and promote the development of creative teachers with self-assessment and self-development, encouraging and raising awareness for teachers to develop their own thinking. Enhancing creativity teachers' in the policies must be clearly defined to require teachers to take in the development of creativity, set criteria for passing the development of policy making, and use them as one of the criteria for performance evaluation. To foster a sustainable learning organization.

CONCLUSION

Program of enhancing creativity teachers' including 1) principle to educational administration must focus on knowledge and ideas, competence and social responsibility. Program of enhancing creativity teachers' in applying knowledge and skills that will result in teachers developing themselves to be knowledgeable and competent, good attitude, creative skills, able to apply experiences and process techniques to received from the development of learning management that will result in students a thinking creatively to their full potential, 2) objective in enhancing creativity teachers' form training and development, 3) contents of 4 modules and 12 indicators such as 1) flexibility modules of 3 indicators to, (1) adaptation to the situation, (2) out-of-the-box thinking, (3) creative problem solving, 2) fluency modules of 3 indicators to, (1) language and phrasing fluency, (2) relationship fluency, (3) expression fluency, 3) originality modules of 4 indicators to, (1) work humor, (2) problem-solving intelligence, (3) finding innovative ways to perform tasks, (4) inspiration, and 4) elaboration modules of 2 indicators to, (1) the ability to observe, (2) the ability to provide details, 4) activities including challenge assignments, development relationships, coursework and training have to the development process of self-study learning, workshop, site-visiting, and on the job training, and evaluation into assessment of creative abilities and skills and satisfaction to the program as the assessment before-development, between development, after- development. Creative abilities and skills form before and after training and development, by the teachers' into scores after training were significantly higher than before training at level of .05. Satisfaction to the program enhancing creativity teachers' into 4 aspects of contents, process, medias, results of most levels. Relationship between creative abilities and skills with satisfaction to the program enhancing creativity teachers' have positive to statistical significance at level of .01. It's necessary a focusing the promotion and development of teachers to developed skills in learning management into capacity such as especially to creativity teachers'.

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