

Teachers' Experiences in Developing Educational Innovation: A Case Study of Primary School Teachers in Education Service Area Two of Nakhon Sawan Province, Thailand.

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Abstract : *This research investigates the factors motivating school teachers to innovate, as well as exploring the challenges for school teachers to create educational innovation. A phenomenological qualitative research study was conducted with 16 teachers, 3 education advisors, and 3 school principals. In-depth interview was chosen as the main data collection technique. The preliminary results of the research show that there were main factors that motivated school teachers to develop educational innovation, which are getting inspiration from their students, educators and school principals, knowing the importance of innovation. Factors that lead school teachers to not develop educational innovation, which consists of discouragement from educators, not receiving clear instructions from training courses, not getting support from schools and having workloads that were too heavy. The unmotivated factors led the researcher to set up a focus group to gain suggestions from educators, which consist of giving more encouragement, encouraging teachers to be positive thinkers, doing a survey and discussing interesting training topics, setting up a social network community, setting up a time for discussion between education advisors and teachers, setting up a team to do the school's works that would reduce the workload. This study could be the starting point which leads education advisors and school principals to provide teachers with the necessary support to increase innovation in the future.*

Keywords : Education Innovation, Innovation Development, Creating Innovation, Innovation Development Difficulties, Motivation Creating Innovation

Introduction

It is well known that education is one of the most important factors for developing a nation, and that education is commonly and formally divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship. The methodology of teaching is called pedagogy. The study indicates the progression of the world. It can be seen that the world evolves at all times. Developing and inventing something new is a particular cause of the progress of the world (Smith, Nemser and McIntyre, 2008, p. 570).

In the world of education, innovation comes in many forms. There are innovations in the way education systems are organized and managed, exemplified by charter schools

(alternative school) or school accountability systems. There are innovations in instructional techniques or delivery systems, such as the use of new technologies in the classroom. There are innovations in the ways teachers are recruited, prepared, and compensated. (U.S. department of education, 2004)

Some teachers think that their responsibility is only teaching but they may overlook some important points, such as creation and innovation which are also important for teachers and it should be a part of teachers' responsibilities. How can education breakthrough if it never creates or innovates? While many charter schools and charter organizations are making huge improvements in educational outcomes for students, most are not new or different. Many of the proposed improvements in teacher education and evaluation, student assessment, and school design in traditional public schools do not seem to be novel (Lenz, 2010). So, the challenges that face improving learning and life outcomes require true innovation. Need solutions that are both different and better.

Everyone can gain knowledge everywhere all the time, but nowadays the world needs something new. Pure theory still can be the basis of innovation. Innovation is needed all over the world. Likewise, in education, teachers are the important key to reach the goal by developing innovation such as curriculum, new theories or teaching designs.

Education service area 2 provides training courses to train the teachers to be innovation creators to develop education in each school. They have invested in this every year but the results are still questionable, as why some primary school teachers not decided to create any innovations? However, some primary school teachers do create new innovations for their classes, schools and education service area.

Therefore, this research investigates the factors motivating school teachers to innovate, as well as exploring the challenges for school teachers to create educational innovation.

Research Objective

The objectives of this study are to investigate factors motivating school teachers in developing educational innovation; to investigate the challenges impeding school teachers in creating educational innovation; and to propose some solutions and ways to improve the situation from the perspective of education advisors and school principals.

Research Questions

Based on the objectives, there were three research questions:

1. Why do some school teachers develop their own educational innovation?
2. Why don't some school teachers develop their own educational innovation?
3. What are possible ways in which education advisors and school principals can increase the number of educational innovations?

Literature Review

Teachers' Responsibilities in Developing Educational Innovation

Teachers also have an important responsibility, which is creating educational innovation which includes instruction media, new teaching techniques and classroom research. Jongpradapkeart (2010) claimed that teachers need to do research and innovation to develop their work to be accepted by society because a 'teacher' is a highly-respected professional who always improves cognitive development and social development. Teachers need to do

research to find new ways for improving students' learning and development. The research is a method that allows them to improve student learning with the most trustworthy result. The teachers and education personnel regulations act (Cooze, 2006) provided that teachers need to do research for academic promotion. In principle, the position and perceived academic standing of teachers will be considered by submitting their work for assessment which is research and academic performance.

Challenges and Obstacles of Teachers Doing Their Work

The teacher's challenges could come from many dimensions including education procedures and education human resources. Clark (2010, News and Features from the National Education Association) said that parents also could be obstacles for teachers, teachers wish for the kind of parent involvement that supports learning. Elusive parents usually have a reason for their mysterious ways such as language fluency and time management.

Lopez (2009) referred to challenges teachers encountered in teaching students from other cultures as follows: attitudes of students toward tolerance of other races, cultures, cultural misunderstandings/social cues; cultural differences on behavior (eye contact, etc.) and differences in signs of respect, honor; culturally related traditions or standards that prevent or hinder a student's compliance with class or school rules and regulations, religious and moral beliefs that might influence the child's behavior when playing with or relating to other children on the playground; culture differences that impact learning; dealing with parents and their cultural ideas, expectations, acceptance of their children's transition time. Sometimes dealing with my being female to a certain male who finds that a cultural problem.

Innovation and Education Innovation Development

Innovation is a term of education which appeared in the Ministry of Education's terminology of education book page 95, the word innovation comes from Latin which is 'Innovare' which means to renew or to modify (Jaisaart, 2008). Hughes (1971) gave a definition of innovation that is adopting a new approach into practice after experimenting and developing from 3 steps, which are: 1) invention, 2) development, and 3) implementation. According to Morton (1971), innovation means renewal; this represents an improvement of old things and develops the potential of the individual and organization.

Beattie (2006) divided the importance of educational innovation into six main areas which consist of: the base notion of created innovation comes from motivation and interest in some areas; innovation designs to solve a problem; innovation can reduce some expenses; innovation can lead the learner to gain knowledge faster; encourages teachers and students to be creative and develop thinking processes; and innovation increases the quality and quantity of work.

Education Service Area 2

The Education service area's emphasis is on human resource development in many factors which are teachers who have to develop knowledge and practical competencies; educated teachers about creative thinking to support and evaluate students individually; teachers who can use instructional media by themselves and can use the technology as well; teachers are evaluated by other school teachers (including from the same school and outsource teachers) and supervisors; developing school administrators; and educating teachers to be professionals who can develop innovation, to have the apparent reward in the education field.

Research Methodology

A qualitative research approach was considered the most effective one for this study.

Lea (2015, p. 5) claiming that “The design is the structure of any scientific work. It gives direction and systematizes the research. The method you choose will affect your results and how you conclude the findings”. The knowledge claims in this study, therefore are what school teachers view as situations about developing educational innovation. To explore their inner experiences, a qualitative approach seems to fit this study. The type of qualitative strategies and theoretical perspectives of this study is a phenomenology study. Creswell (1998) suggested the phenomenological strategy could help to understand the essence of experiences about a phenomenon. Its discipline originated from philosophy, sociology and psychology. The researcher of a phenomenological study could have long interviews with up to ten people and he or she could analyze statements to find out the meaning, themes and general descriptions of the experiences. The researcher, therefore, considered that as this study involved both the study of Psychology and Sociology, focusing on understanding of what were school teachers’ experiences in creating educational innovation, phenomenological qualitative study was the most appropriate approach in this research study.

Data Collection

According to Creswell (2007, p. 117), “data collection offers more instance for assessing research design within each approach to inquiry”. Creswell suggested a circle of interrelated activities which consisted of 1) locating a site and individual, 2) gaining access and making rapport, 3) sampling purposefully, 4) collection data, 5) recording information, 6) exploring field issues, and 7) storing data. The data collection circle is shown below in Figure 1.



Figure 1: The data collecting activities circle
Source: Creswell, 2007, p. 117

To identify the population and informants in this study, the researcher followed the steps of data collecting activities suggested by Creswell (2007) and the detailed descriptions are presented below.

Locating a site and individual: the researcher determined the number of population and their locations.

Table 1 Number of school teachers who were informants per each district

| District | Number of School teachers |
|---------------|---------------------------|
| Banphotphisai | 4 |
| Ladyao | 4 |
| Meawong | 2 |
| Meapern | 2 |
| Shumtabong | 2 |
| Total | 15 |

As presented in Table 1. The researcher tried to intersperse the number of school teachers to ensure that all districts were under education service area 2.

2) Gaining access and making rapport provided a formal letter explaining about the details in the study, research objective, and data collection methods. Also, consent letters by the Faculty of Education, Burapha University were sent to all informants in this study.

3) Sampling purposefully, this step aimed to identify the Informants' characteristics and then identify teachers who met the criteria.

Around 10 to 20 teachers, who were willing to be informants in this study, returned their completed consent forms. The researcher set up the criteria of potential informants. These consisted of; 1) informants must be teachers working under education service area 2, 2) the researcher invited 5 teachers who had received reward in producing Education innovation in the last 5 years as well as those who did not receive any awards in educational innovation in the last 5 years.

4) Collection data: the researcher discussed with each informant and called for the interview at their workplace. The researcher also asked them to recommend a private, quiet room so that the conversation would not be interrupted. Before the interview, the researcher had developed good rapport with the informant in order to develop trust and gain the most useful information from them.

5) Recording information: the researcher asked for each informant's permission before recording the conversation. The researcher also took notes during the interview in case some useful non-verbal communications was displayed.

6) Exploring field issues: the researcher tried to notice and solve possible challenges which may have happened during the interviews and focus group.

7) Storing data: the researcher backed up the interviews both on 2 personal computers as well as uploading them into online storage in the evening after interviewing and doing the focus group interview.

Data Analysis

Guba and Lincoln (1989, p.181) claimed that “after the data collection is finished, the next step that researcher need to do is data analysis”. The suggestions for narrative analysis present a general template for qualitative researchers of phenomenology; there have been specific structured methods of analysis which were proposed by Stevick-Colaizz-Keen (Moustakas, 1994). In this study, the researcher followed steps of data analysis which was the Stevick-Colaizz-Keen method as providing the most practical useful approach in phenomenology (Moustakas, 1994).

The data analysis approach of Stevick-Colaizz-Keen method was discussed by Creswell (2009, pp. 193-194), as follows: “**First**, Describe personal experiences with the phenomenon under study. The researcher begins with a full description of this or her own experience of the phenomenon. This is an attempt to set aside the researcher’s personal experiences (which cannot be done entirely) so that the focus can be directed to the participants in the study. **Second**, develop a list of significant statements. The researcher then finds statements (in the interviews or other data sources) about how individuals are experiencing the topic, lists these significant statements (horizontalization of the data) and treats each statement as having equal worth, and works to develop a list of non- repetitive, non-overlapping statements. **Third**, take the significant statements and then group them into larger units of information, called “meaning units” or themes. **Fourth**, write a description of “what” the participants in the study experienced with the phenomenon. This is called a “textural description” of the experience- what happened-and includes verbatim examples. **Fifth**, write a description of “how” the experience happened. This is called “structural description,” and the inquirer reflects on the setting and context in which the phenomenon was experienced. **Finally**, write a composite description of the phenomenon incorporating both the textual and structural descriptions. This passage is the “essence” of the experience and represents the culmination aspect of a phenomenological study.”

Discussion

In responding to the first research question, it has been found that the teachers who developed education innovation have inspiration from many factors, which are: 1) their students; 2) support from educators; 3) perceiving the ease of advancement in education innovation and technology; 4) seeing their own potential in solving educational challenges; 5) aware of the importance of education innovation; 6) personal interests; 7) support from the family; 8) experiencing teaching problems; 9) seeing professional development opportunities; 10) getting inspiration as role models and 11) devoting themselves to help society.

In discussing the findings relating to the first research question, most informants expected to develop self-ability and students’ ability at the same time. Moreover, developing educational innovation is a possible way to get promoted by the school principal or from the Ministry of Education. In addition, positive thinking toward problems and finding the ways to handle encountered problems are the factors motivating teachers to develop at least one educational innovation.

Obviously, this study found that factors which motivated teachers to develop their educational innovation were problems in their classrooms, teaching problems, time management problems, or students’ poor performance. In addition, some teachers personally liked producing one. It seems to be their own self-directed learner attitude. Many of this

group of teachers is lifelong learners. This has been supported by Watson (2003, p. 3), who defined “lifelong learning” as:

...a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment, in all roles circumstances, and environments.

Response to Research question Two: This research question revealed that the teachers who decided not to develop education innovation had many problems and had different perspectives from the group of teachers in research question one. Some of the teachers in this group tried to do their best but gave in to the many obstacles which they faced. Some of them were waiting for the appropriate time to develop education innovation again. The twelve factors that made teachers stop doing their education innovation and decide not to develop education innovation were: 1) discouragement from other people; 2) finding the difficulties in developing education innovation; 3) not receiving clear instructions regarding the proposes and how to develop educational innovation; 4) not being able to expect help from education advisors; 5) not seeing any possibility in transferring trained knowledge to their education innovation work; 6) lacking the energy to develop education innovation; 7) having personal problems; 8) not getting support from schools; 9) having too many education responsibilities; 9) limited budget; 10) teaching unmotivated students; and 11) having workloads that were too heavy.

Possible answers which could address the second research question ‘Why don’t some school teachers develop their own educational innovation?’ include most teachers who had not submitted any educational innovation were those who were disheartened from their hard work and feeling spiritless for not getting the necessary support. This study found that there were certain difficulties which impeded them from producing one. These were the lack of the necessary know-how. It was reported that some teachers did not know how to work on a computer or search for information from the internet. Not being able to do some research on the internet, teachers could neither educate themselves nor produce their educational innovation. Moreover, knowledge management in a school was a problem viewed by some teachers. They could not adapt or apply what they had learned from their training courses to things they wanted to do. Furthermore, they were not comfortable enough to make themselves understand the difficult terminology taught by their instructors or suggested by the education supervisors. Things, such as a gap between education supervisors and the teachers, discouraging words given by their principals, co-workers, and other educators were also important barriers stopping these groups of teachers from producing one educational innovation. Some even decided to give up halfway through the process of producing one. Last but not least, teachers’ lack of time management and limited students’ learning ability were listed as negative factors for teachers to do one since they could not have much energy left at the end of their hard-working day.

Despite the above discouraging factors, some teachers reported that they only wanted to take a rest and waited for the time they could gain their energy back and continue completing one. Additionally, some teachers planned to propose one once they had enough budget and inspiration or enough motivation to go on. This has been supported by Reeve (2005, p. 20), who defined “A framework to understand the study of motivation” as the figure 2 below:

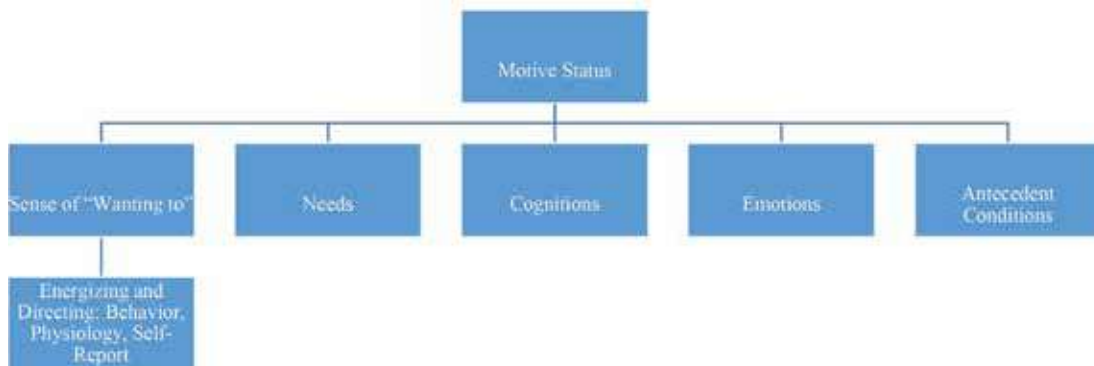


Figure 2: A Framework to Understand the Study of Motivation

Source: Reeve, 2005, p. 20

Response to the final question about what are the possible ways which education advisors and school principals view as solutions to increase the number of educational innovations, it was found that the education advisors and school principals were quite astounded by the teachers' perspectives. Although, it was found that the education advisors and school principals were willing to solve the teachers problems by recommending the following: 1) principal discusses and encourages school and teachers to do their best in this profession; 2) raising and giving some rewards to outstanding teachers to be role models for other teachers; 3) leading teachers to be positive thinkers; 4) recommending teachers to know the possible ways to find knowledge, such as searching from the internet, quality books and asking others; 5) encouraging teachers to be aware of the good results of developing education innovation; 6) making an attitude adjustment of the school principals, to know that education innovation is very important and it can help students and schools to be better; 7) principals need to do their work with honesty and manage the school budget appropriately; 8) do a survey before setting up a training course about which topics or activities teachers are interested in; 9) meeting with instructors about the appropriate way to present in the training course. Try to use simple words to explain while teaching; 10) developing a handbook for teachers in the topic 'Educational theories' and 'important words which teachers should know' and send to every school; 11) setting up a 'Line group' (instant messaging) or developing a specific blog or forum about education innovation development to make discussion easier between teachers and education advisors; 12) setting up a time for discussion between education advisors and teachers; 13) setting up activities to strengthen the relationship between teachers and advisors; such as trips or visiting each other; 14) education advisors try to gain more knowledge and be self-directed learners; 15) setting up a team do the school's work that would reduce work and could make teachers have more inspiration to work; 16) opening teachers' minds to discuss with school principals about education tasks, teachers can request to work in the appropriate area of each teacher.

It could be seen that from the education advisors' recommend and the school principals' view as solution ways toward teachers' obstacle in developing educational innovation are very helpful for school teachers, if all of educators could work as a team and having good communication between each other that may exactly reduce all teachers' problems in developing educational innovation and that would be the advantages not only for all educators but also students. Shonubi and Akintaro (2016, p.1906) wrote in The International

Journal of Social Sciences and Humanities Invention on topic of The Impact of Effective Communication on Organizational Performance as follow:

“...The importance of communication shall be looked at from the study of Moorhead and Griffin (1989) which state that manager transmits information for a variety of reasons as highlighted in Obamiro (2008): 1) to achieve coordinated action 2) to express feelings and emotion 3) to share information regarding: - organizational goals, - task directions, - results of efforts, - decision making, 4) to achieve effective control, 5) to encourage staff participation in decision making, 6) To create a good public image and reputation for an organization”

HRD intervention

The researcher as a student studying in the Human Resource Development Program would like to share some solutions towards unmotivating factors as presented above which lead teachers to decide not to develop educational innovation.

Teachers' minds and health problems are one of the problems which were reported by the school teachers, examples of these problems are discouragement from other people, lack of energy to develop education innovation, and having personal problems. Happiness affected work quality, some teachers do not develop education innovation because they lack the energy or fatigued from working for several years. Nonetheless, some of the teachers who worked for many years still continued to develop educational innovation. In the human resource development field, psychology would be very useful in improving this situation. Positive reinforcement from school principals and co-workers are very important for people who are disheartened, some examples for giving positive reinforcement are recognizing them or giving them a reward to make them feel that they are still recognized by other people. Another suggestion is setting up a small exercise place in the school so they can do activities together. Not only can school teachers be healthier but also, they can have better relationships with co-workers.

Teacher's knowledge in developing education innovation problems and education innovation training course problems are the problems that school teachers most talked about, including they found that developing of educational innovation is very difficult, they can't receive clear instructions regarding the proposes and how to develop educational innovation and do not see any possibility in transferring trained knowledge to their education innovation work. In the HRD field, these kinds of problems may be solved by training programs, such as 'attitude adjustment programs that means we need to educate school teachers by letting them do some basic or simple innovation. These would be helping them to have more confidence to develop more educational innovation. Some solutions for the problems about teachers who are not receiving clear instructions from the trainer and their lack of knowledge to develop educational innovation would be solved by well-organized selection of the trainer process.

Good selection of the trainer would help Education Service Area Two to reduce these kinds of problems. It can be seen that the human resource development field, especially the training and development part are very crucial and relate directly to the education circle, it could help educators to manage and more easily find solutions for all of the problems. Human resource development could help educators and also enhance the knowledge, skills, and attitudes of individuals to do particular and complicated work and job tasks. In addition to having good selected trainer, teamwork is important for succession of doing all education job. HRD field also emphasis on team building. Werner and Desimone wrote about

‘teamwork’ as following “...team building is as process used to improve a work group’s problem-solving ability and effectiveness.” (2012, p.495)

Recommendations for Further Research

Since the main limitation of a qualitative study is not being able to generalize the findings to others schools or other Education Service Areas in Thailand, it would be beneficial to develop research topics investigating situations of educational innovation production in other local Education Service Areas.

Another limitation of a qualitative study is the data collection technique which could mainly gain subjective data from the in-depth interviews. After finding out factors encouraging and discouraging school teachers to produce education innovation, it would be also be better to do some quantitative studies to survey the viewpoints of the majority of school teachers under this Education Service Area.

Third, it can be seen from the research findings that problems concerning poor management skills, time management, and knowledge management are very important for working in the education field. It would be great if educators could investigate which training courses are effective, necessary and suitable for teachers.

Fourth, it can be seen that discouraging words from other people was one of the reasons causing teachers to stop developing educational innovation. This shows that, good knowledge involving psychology is influential for teachers’ energy in developing educational innovation and doing their work. It would be a benefit if further studies should find out which positive reinforcement and cognitive dimensions are suitable for school teachers.

Conclusion

Teachers’ abilities in producing educational innovation are a fundamental factor for the growth of national education and it is one of the teachers’ responsibilities to generate them. This study provides evidence that some primary school teachers in Education Service Area Two of Nakhon Sawan province neglected to figure out certain needs for their professional development and improve their potential to develop educational innovation. This study also gathered solutions and ways to improve the situation from the viewpoints of school principals and education supervisors. The researcher of this study hopes that the findings presented in this study could more or less enhance the national education quality through the improvement of school teachers’ capabilities in using their full potential to do their work which lead to the overall development of national human resources.

School principals’ perspectives in managing school budgets are the main factors which lead each school to be successful. The researcher was concerned about the answers of the school teachers which reported about budget managing of the school principal. It can be seen that some of the school principals focused on enhancing the school’s environment and spent the education innovation budget to enhance the school’s appearance. For example, renovating the meeting room to be more luxurious, buying many big trees, and building a big new building. The question is what the first main objective of the school is? the answer should be ‘to educate students’. So, it would be better if all the principals allocated the school budget appropriately.

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