

EFFECTS OF ONLINE - MEDIA TRAINING INTEGRATED WITH ACTIVE LEARNING ON THE DEVELOPMENT OF 21ST CENTURY SKILLS FOR TEACHERS IN RANONG PROVINCE, THAILAND

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Abstract

According to Thailand education policy, 21st teachers expect to acquire the right content knowledge in their subject and the teaching techniques. Therefore, this research aims to develop teachers' 21st century skills by integrating online media with active learning. The samples were 60 teachers, from 4 schools in Mueang Ranong, La-un, Kapoe and Kra Buri district. Interview and questionnaire were used to collect data. The results showed that all those teachers had developed their knowledge and skills which could be used to further develop the teaching and design activities for the students as well.

Keywords: Online - media training, Active learning, 21st Century skills

1. INTRODUCTION

The education management of Thailand has a paradigm shift according to 12th National Economic and Social Development Plan (B.E. 2560-2564), based on the National Strategic Framework (B.E. 2560 - 2579). This is a master plan of country development towards the Sustainable Development Goals: SDGs, including the restructuring of Thailand to the Thailand 4.0. The Country's reform and the situation of the world that changes quickly make people closer with advanced information and communication technology. This impacts students' learning in schools at all levels across the country, especially, to propel Thailand's policy in the digital era. Thais are expected to have creative aspect and to use of digital technology to their full potential in order to develop the potentials of innovation, information, human and other resources which drive the economic and social development to the stable, prosperous and sustainable country (Ministry of Information and Communication Technology, 2016; National Strategy Committee, 2016; National Economic and Social Development Board, 2017).

This policy makes teachers and educational personnel have to adapt themselves to the dramatically change in accordance with the National Education Plan (B.E.2560 – 2579). They deliver the right content knowledgeable in the subject they teach and use the teaching techniques for enhancing students to create their own knowledge from the activities or experiences they face from different resources in order to learn about team working. Teachers should be able to design learning activities appropriately, provide suitable environment of learning. The process described will be achieved by having the cooperation from all sectors. The guidelines and the possibility of the development of teachers in the 21st century require both policy and self-development. This will make teachers be truly teachers in the digital age (Passakorn Ruengrong, et al 2014; National Education Plan (B.E. 2560-2579).

According to the report of the United Nations Development Group (2013) entitled *The World We Want*, the United Nations Development Group (UNDG) found that nearly 600,000 people pointed out that what people want the most is good education and bringing science and technology into education in order to improve the

quality of people's lives better. From the study of the important agenda of education in the 21st century, it was found that the key issues that would need to be developed at all levels are to focus on human resource development for the 21st century, improving the quality of education by doing teacher development. In this meeting, educators have a brainstorming session of the analysis of Thai Studies in the 21st century on March 11, 2014. In addition, to create the learning process that promotes students to have knowledge, skills and right attitudes on education (UNDG, 2013).

The purpose of active learning is to have students share ideas or experiences which will lead to the change of learning behaviors. Activity-based learning is a learning management performs through various activities which are not focus on the memorization of students, but encourage students to take action and practice, also to play an important role in self-study in order to think analytically and learn from hands on activities which students have an opportunity to participate in building new knowledge, interaction and collaboration with peers. This helps students to learn about mutual-responsibility, self-discipline, team working. By this way of learning, teachers act as facilitators who support students' learning with the integration of activity-based learning that helps promote students' morals and ethics. In addition, activity-based learning can also be combined with the use of learning media and technology, for example, computer and online media at the same time.

The researcher was sponsored by the academic service project for the educational quality and local development under the mentoring of university, network of upper southern higher education. Our research team, which was based at Faculty of Education, Suratthani Rajabhat University, chose Ranong province because it is a remote area and it is difficult for teachers to travel to the city for training workshops. Therefore, it is anticipated that this project can provide teachers with the knowledge and skills in management education in the 21st century, which will lead to fulfill students' potential in learning for a sustainable manner.

2. OBJECTIVES

To develop the 21st century skills for the teachers by integrating online media training workshop with active learning for teachers in Ranong province

3. LITERATURE REVIEW

Training is a personnel development to meet standards and prepare for the changes that may occur in the future. Sujittra Tananan (2010) noted that there are 4 guidelines of the development of human resources, including training, education, development, and learning which is consistent with the concept of Nadler (1990) indicated that the apparent scope of the development of human resources that consists of three activities which are training, education and development. The training of personnel in the organization (Wexley & Latham, 1991) basically has three aims including 1) to improve the level of ones' self-awareness 2) to enhance ones' job skills and 3) to enhance ones' motivation. The most popular training methods are: on-the-job training, classroom training and virtual classroom (Byars and Rue, 2011). The concept of Leonard Nadler (2004) outlined the 9 steps of training workshop comprise 1) determine the necessary of the training 2) determine the qualification of the participants 3) set up the purpose of the training 4) technique of the training 5) create atmosphere of the training 6) create the training curriculum 7) choose the training materials 8) conduct the training and 9) evaluate and follow up.

To develop the whole education system by educational innovation of online media in the 21st century, it must be the reliable and effective innovation that can improve the quality of the education system, Section 67 of the National Education Act 1999. Such innovation provides education or activities that affect effective and efficient learning and motivate students' learning. That provision of educational technology and innovation education is the needs to encourage the production and development of valued educational technology. Educational innovation has been developing for solving the problem in the form of research, study, experiment. Today, there are several educational innovations including, 1) e- learning 2) Virtual classroom 3) Online Social Networking 4) Instructional assisting robots or Intelligent Robotics 5) Virtual Reality (Vilailuk Ratanapientamma and Piyanun Preungnoi, 2016).

Active learning can communicate with others by using different types of media in order to change the behaviors towards the goals set. In addition, with the advancement of technology and modern communication, student can receive information and communication quickly. This makes active learning more popular. Active Learning is a teaching model focuses on developing the learning process, encourage learners to apply their skills and connect their knowledge to solve problems or engage in future careers. The principle of active learning is adopting teaching methods and various teaching techniques to design lesson plans and activities that motivate learners to participate in the classroom. Consequently, that promotes interaction between learners and learners and learners with teachers. Active learning is an instructional innovation that encourages learners to have characteristics consistent with the changes in the modern era (Bonwell and Eison, 1991)

Trilling & Fadel (2009) and Vichan Panich (2012) stated that 21st century skills consist of core subjects, consisting of English, reading or language arts, World languages, Arts, Mathematics, Economics, Science, Geography, History, Government and Civics. In addition to these subjects, schools must move beyond a focus on basic competency to promoting understanding of academic content at much higher levels by weaving 21st century interdisciplinary themes into curriculum. The curriculum is composed of Global awareness, Financial, economic, business and entrepreneurial literacy, Civic literacy, Health literacy, Environmental literacy. Learning and innovation skills are being recognized as the crucial skills that are prepared students for increasingly complex life and work environments in the 21st century. A focus on creativity, critical thinking and problem solving, communication and collaboration is essential to prepare students for the future. To be effective in the 21st century, citizens and workers must be able to create, evaluate, and effectively utilize information, media, and technology. Therefore, students need to learn about information literacy, media literacy, and ICT literacy. Furthermore, students need to develop thinking skills, content knowledge, and social and emotional competencies to navigate complex life and work environments. Life and career skills include flexibility & adaptability, initiative & self-direction, social & cross-cultural skills, productivity & accountability, leadership & responsibility.

The skills of the 21st century to all lifelong learners are the 3Rs x 7Cs. The 3Rs skills consist of Reading, (W)Riting, and (A)Rithematics and 7Cs skills consist of Critical thinking and problem solving, Creativity and innovation, Cross-cultural understanding, Communications, information, and media literacy, Computing and ICT literacy, Career and learning self-reliance (Rotherham & Willingham, 2009).

4. METHODOLOGY

This research was based at Faculty of Education, Suratthani Rajabhat University, which provides teacher training and educational services for school networks at three provinces: Suratthani, Chumporn and Ranong, in the upper South of Thailand. Ranong province was chosen because it is a remote area and it is difficult for teachers to travel to the city for training workshops.

4.1. Population and Sample

Population: school teachers from 4 schools in Ranong province

Sample: 60 teachers in Mueang Ranong, La-un, Kapoe and Kra Buri district, Ranong Province, gained by on purposive sampling

4.2. Research Procedure

It is composed of three steps: the survey of background and teachers' needs, teachers' training workshop, and follow up and evaluation of teachers, which follows the steps of Leonard Nadler (2004). The details of training workshop are explained as follows.

Step 1: The survey of background and needs of online media development training workshop for teachers in Mueang Ranong, La-un, Kapoe and Kra Buri district, Ranong Province. The researcher used interviews to collect data with administrators, teachers and students and analyzed the needs of teachers in order to develop online media training program for teachers with active learning. Duration, venue, content and activities of the training workshop were managed.

Step 2: Teachers' training workshop with online media and active learning in Mueang Ranong, La-un, Kapoe and Kra Buri district, Ranong Province as shown in Table 1. After surveying the needs of administrators, teachers and students, researchers designed the curriculum of teacher training for 2 days in February 2018 with trainers from Suratthani Rajabhat University, Chulalongkorn University and Prince of Songkla University. The researchers used a behavior of training observation form and questionnaire after training to evaluate participants.

Table 1. Training workshops and 21st century skills developed

Topic of training	21 st century skills developed
Day 1: Active learning - Active learning pedagogies and practices - Types of online media - An application of online media	- Understanding of the knowledge content of online media and integration of active learning
Day 2: Online media - Quiver 3D augmented reality - Patlet	- Educational content - Brainstorming

- Plicker application	- Formative assessment
- Google classroom	- Classroom management

Step 3: Follow up and evaluation of teachers after training with online media and active learning in Mueang Ranong, La-un, Kapoe and Kra Buri district, Ranong Province. Researchers monitor and evaluate teachers' skills after training by interviewing and monitor teachers' tasks after training by interviewing and empirical evaluation.

5. CONCLUSIONS

The development of 21st century skills for teachers in Ranong Province using online - media training integrated with active learning can be concluded as follows:

1. The understanding of the knowledge content of online media and integration of active learning are at a high level of 80%.
2. The creativity and online media innovation skills, and integration of active learning are at a high level of 80%.
3. The computer and information, communication technology skills of online media and the integration of active learning are at a high level of 80%.
4. The ability to apply the knowledge in practice, to share the knowledge and give advice with colleagues as well as to implement in learning management are at a highest level of 80%.

6. SUGGESTIONS

To provide benefits for the participants and those who are interested, it should be studied on several issues including;

1. The study of the output of the training workshop by analyzing the conceptual framework, procedures, and means of training workshop better
2. The comparative study of the participants and non-participants of the training workshop and do a follow-up for a long period of time.

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