

Twenty first Century Learning Skills of Non-Teaching License Teachers

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Abstract

Twenty first century learning skills are necessary for our lives and vital tools to self-development. This study aimed to study 21st century learning skills of non-teaching license teachers. The instrument used was a questionnaire. Forty eight of non-teaching license teachers who enrolled program of professional standard in curriculum development were asked to answer the questionnaire, then presented in terms of percentage, mean, and standard deviation. The result showed that they had perception towards 21st century learning skills were at the high level. Discussion is need more criticized to teacher development and preparation.

Keywords: necessary skills, learning skills, teacher, teacher development, professional standard

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Introduction

Since 2003, Teacher Council of Thailand announced and regulated that to earn certification through the traditional route, teachers must earn a five years bachelor's degree in education. If teachers already have a bachelor's degree in any area outside teaching, but did not complete a teacher preparation program, there is an alternative pathway to earn teacher certification through training programs (SEAMEO Innotech Regional Education program, 2010 ; Prachagool et.al., 2016). If teachers lack of these standards or less requirements, it might need to reorganize teaching and learning process. However, the motivation of learning in teacher preparation program in Thailand right now and in the future is very high expectation, but some high proficiency students cannot enter to the program of teacher education. Then, they studied in any course or non-teacher program of study. Finally, 4-year graduated they re-entered to teacher profession by teacher training program which approved by Teacher Council of Thailand. The program allowed them learned how to be a good teacher ; have responsibility to self, society, and environment.

Additionally, the program for professional development for getting teaching license helps them to gain knowledge and understanding in the philosophy of education, classroom managerial skills, materials creation, creative and problem thinking in classroom, and classroom research (Darling-Hammond, 2004 ; SEAMEO Innotech Regional Education program, 2010). It can committed to society

that the program of teacher production which approved by Teacher Council of Thailand make quality of teachers in both contents and pedagogy. The nature of learners have changed and differed from previous society. That is a reason why school also need reforming in policy and educational administrators, nature of learning, learning environments, and support system. Due to nature of learning is developed, contents seem to be less emphasized, but skills are raised for modernized schooling. Contents will not be denied for school, but it still need for standard testing.

The education in Thailand is now rapidly changed by the educational philosophy, 21st century learning, policy of Education 4.0, and innovative competitiveness for preparing our children to be 21st century learners. Moreover, 21st century learning skills need to be implemented i.e., communication, collaboration, ICT, and thinking skills (Quasthoff and Wild, 2014). These changes are flipped by vital change agent through concepts of professional development. There are new thought, new practices in teacher education. However, Thailand had limitation in teacher production before entering to school, they have to hold teaching license for showing society that they are ready to be professional teachers as professional standards determined. Even though they passed many courses and learn much more contents in college or university, but professional contents and practices must be accepted by Teacher Council of Thailand. If they are not graduate in bachelor degree in non-teacher education program (5 yrs). They have to complete program for



professional standards and then Teacher Council of Thailand make a consideration their teacher qualification.

Increasingly, contents are presented in various kind of medias, students can access and learn from variety sources of internet. Learning skills are made to new fresh look of instructional dimension in this era. Twenty first century learning is now called for school in terms of changing world of knowledge and educational policy, the new approach of thinking and doing should be created. We have to prepare our children to face with many situations by providing vital tools and learning process appropriateness. Learning skills are proposed in terms of 4H4C4R approach, teachers and learners are expected and implemented by the process of education. Head, heart, hand, and health (4H) ; Communication, collaboration, creativity, and critical thinking (4C) ; Reading, writing, arithmetic, and research are elements of 21st century learning (Nuangchalerm, 2016). It can fulfill in the characteristics of smart citizens.

This study focused on the 21st century learning skills of non-teaching license teachers. Due to, these skills are widely distributed in all education level, aims to promote characteristics in 21st century teacher. Thus, teachers must be known and skilled as well as nature of adaptive and flexible learners (Saavedra and Opfer, 2012). However, non-teaching license teachers have less understanding

in education or no experiences in school practicum. They may not be 21st century learning skills which necessary for modern classroom management. These learning skills are invited them to new approach of rapidly changed by classroom design. Faculty of Education, Mahasarakham University launched program for non-teaching license teachers based on 11 standards of teacher profession. The study aims to explore 21st century learning skills of non-teaching license teachers. If they have no 21st century learning skills, it can predict that students may be less necessary skills to face with unpredictable society.

Methodology

The participants were 48 non-teaching license teachers who have been working for school and waiting for entering school system. They have to register program to fulfill their professional standard based on Teacher Council of Thailand regulation. The program for crediting in teaching license comprised of 11 standards. They attended in the teacher professional standards 5 (Curriculum development). The participants in this study can be summarized by sex, age, and educational level. Most of them are female (83.33%), ages between 20 and 25 years (75.00%), and educational level (97.92%). The demographic information of participants can be shown in in Table 1.



Table 1: Demographic information of participants

| | | |
|-------------------|-------------------|-------------|
| Sex | Male | 8 (16.67%) |
| | Female | 40 (83.33%) |
| Age | 20-25 yrs. | 36 (75.00%) |
| | 26-30 yrs. | 9 (18.55%) |
| | More than 30 yrs. | 3 (6.25%) |
| Educational level | Bachelor degree | 47 (97.92%) |
| | Master degree | 1 (2.08%) |

They were asked the 21st century learning skills with 25-item in 5 elements. The questionnaire was rated from 1 to 5 by meaning of lowest, low, medium, high, and highest, the questionnaire was developed from Siriluk et.al. (2014). Then let participants to express their perception by hand in hand. The level of perception was considered with Likert's five-point rating scale. Each respondent was asked to rate each item on some response scale. They could rate each item on a 1-5 response scale where ; 1 = lowest, 2 = low, 3 = medium, 4 = high and 5 = highest. Data were collected and then analyzed by statistical package to the level of their perception in terms of mean, standard deviation.

Finding

Non-teaching license teachers showing their 21st century learning skills is

in the high level. Finding can be showed the 21st century learning skills of non-teaching license teachers in Table 2. They had high mean score in all elements: critical thinking ; creativity ; communication ; ICT, medias, information technology ; and life and career skills in the following form those less score to high score. However, they had some opinion about their 21st century learning skills by different perception. They are ready to face with new era of professional teachers due to the uncertainty of educational policy, also the teacher production need more alternative ways for selecting new teachers to school. They had all elements of 21st century learning skills in high at all, but that's it, they focus on necessary skills in which teacher have to do and recognize in the field of teacher development.



Table 2: Level of learning skills of non-teaching license teachers

| Learning skills | Mn | SD | Level of skills |
|-------------------------------------|------|------|-----------------|
| Creativity | 3.94 | 0.70 | High |
| Critical Thinking | 3.92 | 0.68 | High |
| ICT, Medias, Information Technology | 4.08 | 0.69 | High |
| Communication | 4.05 | 0.66 | High |
| Life and Career | 4.23 | 0.64 | High |
| Mean score | 4.07 | 0.68 | High |

The descriptive analysis supported that they are ready to express 21st century learning skills as well. They are new generation that sensitive to rapidly changed learning environments, especially ICT and communication by various kind of learning tools. The data can be presented as below.

“...searching information need to incorporate in teaching and learning...” F1

“...designing and planning based on differences of instructional medias and information technology make a constructive and productive...” F3

“...effective communication needs language literacy and more knowledgeable...” F4

“...Good teachers is just modernized person, access to a variety of medias, and also accept moral and ethics...” F5

They are also focused on innovative thinking and innovation skills which is called for Thailand 4.0. The culture of teaching and learning should be adapted and implied by concept of 21st century learning. The data can be presented as below.

“...understanding individual differences helps us to comprehend students, and invite innovation to classroom are important...” F2

“... planning and designing instructional medias, and technology allow students to use and abuse for creative learning...” F6

“...Good teachers is just modernized person, access to a variety of medias, and also accept moral and ethics...” F7

“...responsibility in teacher role and good role model leads effective classroom...” F8

“...teachers must to have self-development, no need only knowledge, but also teaching culture for 21st century learning is recognized...” F9

Expression to new teachers in 21st century schooling can be revealed that they are agree to change classroom and instructional cultures. Learning skills in critical thinking ; creativity ; communication ; ICT, medias, information technology ; and life and career skills cannot be separated from professionalism. They have to create learning environments to meet requirements of



professional standards that 21st century learning are necessary skills for future ; uncertainty society ; creative problem-solving bases ; knowledge-based society ; and nature of learning of learners.

Discussion

Non-license teachers had high level at all elements that mean they are ready to direct into school. Twenty first century learning skills are vital tools not only teachers, but also students must be done. The new era of learning managements have been changing progress of ICT and technology engage teacher-student interaction than those the past and traditional classroom. It makes them to pay much more attention about information literacy, digital literacy, and also science literacy (Robin, 2008 ; Kereluik et.al., 2013). The learning environments are rapidly adapted to theory of learning, they are conditioned with many information and diversity of tools of learning (Lambert and Gong, 2010). They have a greater open access and distance communication, thinks to beyond philosophy and psychology of educational implication (Gut, 2011).

However, they have to had a criticized information providing more feedback to one another as well as efficiently and effectively communication (Archambault et.al., 2010). These skills need to elaborate the processes and strategies for collaborative problem-solving

skills. Also, learning skills will be improved if they had critical thinking, critical reflection, communication, and collaboration to use information technologies in creative contexts (Häkkinen et.al., 2017). The program of study for non-license teachers who aim to meet and pass requirements of professional standards as Teacher Council of Thailand regulation, they had high level of 21st century learning skills, it is not indicated that they had professional experiences or mind-set of professionalism. They have to incubate teacher profession in thinking, practice, and attributes.

Twenty first century learning skills must be concurrent with teacher professionalism. Responsibility, public mind, and being teaching are virtues and symbols of expected teacher who have a great academic skills, learning skills, and life skills. These skills cultivate the virtues of being teacher in this era (Smith and Hu, 2013). Self-development in cognitive, attributes, and skills be fulfill 21st century teachers. Learning and innovation skills considered to life long learning which professional teacher should be and should have (Rabi and Masran, 2016). Twenty first century learning skills are necessary, but not enough to be a good teacher. In terms of creativity ; critical thinking ; ICT, medias, information technology ; communication ; and life and career that are crucial skills. Teacher attributes and professional standards should be decided for teacher development and preparation as well as 21st century learning skills.



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