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Research Article

Pedagogical Decision Making through the Lens of Teacher Preparation Program

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Abstract

Pedagogical decision making is very important for professional teachers, it concerns belief, self-efficacy, and actions that teachers expose to classroom. This paper employed theoretical lens and education policy in Thailand to examine the preservice teachers' views about pedagogical decision making. Discussion helps school mentors understand preservice teacher to pedagogical decisions during the teacher. The implications of study can be used for science teacher education to promote 21st century instruction.

Keywords

preservice teacher, teacher preparation, professional development, pedagogical decision making

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Introduction

Teacher is key agent to transform students' learning to have knowledge, skills, and attributes which society needs. Based on the education reform and teacher education reform, the society need effectiveness and qualified teacher by different views. Science teacher is also to understand nature of education, create curriculum and instruction that meet the requirements of science education standards. They are now facing pedagogical knowledge and content knowledge in the rapid change era. The pedagogical decision making is very importance to their teaching which helps them to get success in science classroom.

Thailand had a long time of history to transform learning and culture. Based on the ways of learning in harmony to survive adapt knowledge in ASEAN community and globalization movements. Making quality people with appropriate methods need children who born in different contexts, diversity of root of learning in the complexity that are now challenging the 21st century learning. As we known, world of changing is still running and directly affected to process of education. It is a successful key to promote children learn to live with others and employ knowledge-based scientism offering social movements.

Education reform seems to do as key tools for describing what and how practicing in the quality of education. Knowledge, skills, and attributes play important roles that reformers should incorporate into education by appropriate process in both quantity and quality. Education Act B.E. 2542 and B.E. 2545 (revision) of Thailand aims to promote Thai society to be knowledge society and also open the windows of opportunity in education for all. The life long learning is an ideal philosophy to develop quality of Thai, leads us to economy-based knowledge as well as cooperatively competitiveness (Office of the Education Council, 2005). Education needs integration between life and society adaptation as well as philosophy of sufficiency economy, was initiated by His Majesty, the King Bhumibol Adulyadej of Thailand (Nuangchalerm & Chansirisira, 2012). Children have to incubate of what Thai's do and Thai's don't, good citizens, smart skills, having necessary skills, and self-reliance.

The concept of education reform will be practical, if we don't focus only knowledge and academic competition which is emphasize on subject matters. The policy maker, Ministry of Education and related education organizations try to generalize policy to practice by various kinds of methods. The most hidden agenda that we can drive quality of education in which we believed, we have to develop teacher competency in teaching profession. Its social impact will be great for making 21st century learners, knowledge-based society, and creative economy-based society. All of these teachers can do and change by effective instruction and pedagogical decision making (PDM) driven.

The educational policy and professional practices are implemented by Teacher Council of Thailand, which is currently distributed by university and school levels. Educational ideology in Thailand need to be succeeded by determined 3 standards (Thai's attributes, education management, and learning society). Three standards allowed Thai's children learn life with happiness and survive to others based on Thainess and global changes. They have to strong with head, heart, and hands that ready to learn together based on socially embedded in democratic skills (Nuangchalerm, 2014). However, ideology will be reached the educational goals, teachers are key element to reform. The educational reformers require teacher to shift their thinking so that have different ideas about what they should be trying to accomplish, interpret, and generate idea about classroom (Kennedy, 1999; Office of the Education Council, 2010).

Preservice teachers should have one of the most skills in pedagogy and content knowledge (Shulman, 1986). Pedagogical decision making is a key skill which teachers have to know and practice in the school, and it is also particularly important to be an effective educator. Decision making can reflect professional performance which determines of what teacher competence, different opinions of good teachers and good teaching can be distinguished (Nuangchalerm & Prachagool, 2010a; 2010b; Prachagool & Nuangchalerm, 2012). The study aims to represent and discuss how pedagogical decision making through the lens of teacher preparation program in Thailand. The study can expand our conception in the teacher preparation program as well as transformational teachers needed in the era of educational reform.

Pedagogy and Teacher Decision Making

Decision making in the field of teacher preparation program have studied, decision making is an intrinsic that a central feature of the teacher role in classroom management (Eggleston, 1979; Freeman, 1989). The decision may be done in differently motivated with role and responsibility (Shulman, 1992). Parker (1984) claimed that interactive decision making is the process of selecting and rejecting alternate courses of action during instruction. Teachers need to improve their skills of considering possible decision based on student behaviors in order to increase the quality of decision making. Teacher is a key role in classroom for managing quality and quantity in students' behavior, decision in classroom can shape students as well as teacher transform belief to profession. Thinking and decision making has been provided teacher educators with a collective wisdom of tools, strategies, and experiences that they can utilize to promote preservice teachers' ability to make complex teaching decisions. Clark and Lampert (1986) argued that teacher thinking and decision making cannot describe the sorts of decisions

teachers should be taught to make in any particular setting. Preservice teachers enhance their decision making through professional experiences.

The science and art of teaching are now calling for making professional teacher, pedagogical decision making (PDM) recognized in the thinking and decisions of teaching. Teacher preparation program in Thailand was managerially controlled in standard of teaching by Teacher Council of Thailand (TCT). University and college that concerned teacher production encourage to the standard and quality. Also, outcome-based education is determined which called Thailand Qualification Framework for Higher Education (TQF-HEd). Program for teacher preparation in Thailand needs to promote preservice teachers understanding contents and incubate successful pedagogy into classroom. To them, preservice teachers should have responsibility to self, society, and environment. Having necessary skills i.e., Thai, English, and foreign language, ICT, thinking skills, and inquiring mind (Quasthoff & Wild, 2014). They also should have love and care with children, colleagues, and relevancy (Teacher Council of Thailand, 2013). The preparation program cannot deny how to develop preservice teachers to understand philosophy of education, have managerial skills in classroom, creative and problem thinking in classroom, and classroom research. To meet the philosophy of teacher preparation program, Teacher Council of Thailand (2013) determined standard in teacher preparation program for 5 years in bachelor of education. Three standards are generalized to the program and details are provided. Curriculum- two components are curriculum structure and curriculum development, Productive process- five components are students selection, person who concerns the teacher preparation program, facilities, learning management and administration system, and quality assurance in education, Preservice teachers- four components are knowledge, school practicum, attributes, and teacher profession. The details in standards and criteria are described in Table 1

Table 1. Standards and Criteria for Teacher Preparation Program in Thailand

<i>Curriculum Standards</i>	
Standard	Criteria
Curriculum structure	<p>Teacher preparation program must engage students to enroll at least 160 credits.</p> <p>General education > 30 credits</p> <p>Teacher profession > 50 credits</p> <p>Core course > 74 credits</p> <p>Elective course > 6 credits</p> <p>Teacher profession should reach cognitive understanding, professional experiences, and competency. Cognitive standards consisted of language and technology for teachers, curriculum development, learning management, psychology for teachers, measure and evaluation in education, classroom management, research in education, innovation and ICT in</p>

	<p>education, and teacher profession. Professional experiences can be started while taking courses in university and during school practicum. Competency consisted of learning managerial skills, language and communicative skills, thinking skills, technology for learning skills, and moral and ethics, curiosity, and social service.</p>
Curriculum development	<ul style="list-style-type: none"> ➤ Curriculum development process should have curriculum making board; board committees included teacher profession and content relevancy; quality improvement of curriculum by outsiders; a report curriculum development process. ➤ Qualifications of curriculum makers should have qualification in curriculum requirement or related experiences. ➤ Curriculum development or revision should have policy and improvement plan.
<i>Productive Process Standards</i>	
Standard	Criteria
Students selection	<ul style="list-style-type: none"> ➤ University or college should have setting criteria for students selection as university requirements. ➤ University or college should have system to select students. ➤ University or college should assess basic knowledge of students. ➤ University or college should measure aptitude in teacher profession. ➤ University or college should have interviewing to measure teachers' characteristics.
Person who concerns the teacher preparation program	<ul style="list-style-type: none"> ➤ University advisor should hold at least master degree or assistant professor or having experiences in curriculum or lesson plan making. ➤ University instructor should hold at least master degree or assistant professor or having at least 10 year-experiences in teaching. ➤ University supervisor should hold at least master degree or assistant professor, having at least 1 year-experiences in supervision or at least 3 year-experiences in teaching, and being a role model. ➤ School mentor should hold at least bachelor degree, at least 3 year-experiences in teaching, and hold being a teacher profession.
Facilities	<ul style="list-style-type: none"> ➤ Classroom should have sufficiency, appropriateness, and learning materials. ➤ Laboratory should meet the requirement of course enrollment, sufficiency, and learning materials. ➤ Learning resources should have library which sufficiently served students by textbooks, journal, and academic materials. Having computer and information networking, and other learning materials that help

	students reach the goal program of study.
Learning management and administration system	<ul style="list-style-type: none"> ➤ Curriculum administration should have curriculum board committees and clearly worked of their roles i.e., plan learning management, assess students' learning, develop curriculum, and set extra curriculum. Instructors should be assessed in systematically by professional development requirements. ➤ Instructional strategies should have lesson plan and student-centered practices. ➤ School practicum should be conducted in school networks that meet the requirements of TCT and university should help school networks to develop program for teacher preparation in systematically. ➤ Extra curriculum in teacher profession should have administrative board committees, project plans, manual for instructors and preservice teachers, project monitoring, and its evidences.
Quality assurance in education	<ul style="list-style-type: none"> ➤ University or college should have board committees response to quality assurance in education. ➤ University or college should have activities as quality assurance in education is recommended. ➤ Having a report of quality assurance in education.
<i>Preservice teachers</i>	
Standard	Criteria
Knowledge	<ul style="list-style-type: none"> ➤ They enrolled fulfillment in course degree which certified by TCT. ➤ They pass the evaluation of teacher productive process by university or college.
School practicum	<ul style="list-style-type: none"> ➤ The program allow preservice teachers to school practicum at least 1 year-experiences ➤ The program have a report showing school practicum based on professional experiences standard as TCT recommended i.e., learning management ability in specific area, ability in learning assessment, ability in classroom research, ability in learning outcomes and improvement plan.
Attributes	Having attributes which teacher profession needed and certified by production teacher institute.
Teacher profession	They participate activities to promote teacher profession which is certified by university or college.

TCT has a positively pushed the standards and criteria to all educational institutes, aims to promote teacher profession in the current of education reform and transformational teachers. Three standards concerns professional decision making in terms of policy and minimum requirement of professional practices. However, standards and criteria seem rigid and difficult to change with traditional professional practices. The study found that sometime paper-based and practical-based report play its role in the TCT consideration to PDM as well as teacher

production institutes implemented. The philosophy of teacher production and professional teachers are difficult to design because of the old paradigm teacher is good knowledge transferring, but this era teacher is good in facilitator and motivator. TCT might want to recognize that standards and criteria provide same teacher brands in different purposes.

In addition, the continuity of education policy and political movement in Thailand are important factors influenced to PDM. PDM is so importance to preservice teachers who differentiating personality traits, pedagogical style, and various contexts in classroom. These help teachers make a successful profession and pedagogy (Getzels & Jackson, 1963). They had pedagogical theoretical background and profession as well as belief in teaching profession described knowledge elements which involves subject matter content, ways of teachers think within discipline and component of course (Bruner, 1963; Tom & Valli, 1990). Ministry of education launched too many project for school that teachers called overtime in classroom and education. Some of them tired and overloaded works, and waste time to do for classroom. When preservice teachers sweep taking in school practicum absorbed of what they see and hear, it changes their mindset in PDM and attitudes toward teacher profession. Due to, they had beliefs and practical knowledge apply to specific situations (Beijaard & Verloop, 1996).

Beliefs and Attitude towards Teaching

Educational policy is a key tool for accelerating quality of preservice and in-service teachers, but we transform and struck with political changes. The policy is not continuity and efficiency in the program. By the aims of education reform, we need to develop teacher as facilitator or motivator in learning to students as well. Teacher profession is a high standard profession, as we believed, which motivated high school students pay attention to entrance to faculty of education or parents supported them to be a teacher. Due to, high salary, socially respect, rapid promotion, and be a civil servant. The policy invites smart students to enter program as well and are now booming in Thailand.

The hidden agenda need smart students to be a teacher, it is works and recruit to the teacher preparation program. However, it may be not suitable for some students because they study without love or need to be teacher. It is a social learning fashion and influence to the program. If they love to be a teacher and understand of what good teacher should do and response to teacher standard, it would be smooth and smile with program. Some projects launched for grabbing high learning achievement, but beliefs and attitude may be ignorance. Students have to high score in science or mathematics, high competency in foreign language, good English communicative skills, and ability to learn in condensed program of study. To belief in teaching profession, TCT and educational

organizations make collaborative, creative, and motive aspects to shape teacher education. Preservice teachers require to active in academic and profession. Inquiry is invested to enhance their competency i.e., seminar, workshop, conference. These are causes promoting them in profession as well as 21st century classroom should be considered. These conceptions provide the lens of shaping belief and attitude to good teaching (Shulman, 1986). However, good teaching influence by various kind of variables not only knowledge, but also skills, experiences, policy, and so on can determine of professional and pedagogical decision making in the education reform era. Kitchener (1984) describes as involving the decision maker's intuitive and critical evaluative reasoning. Decision making is an integrative model by explaining the feeling/emotional dimension to the largely cognitive/rational decision making steps. The decision making relates ethics, the abstract idea of examining rules and the value of judgments (Smith, 2014). The professions provide an important public service especially teachers serve society by building children for future.

Professional making has to be someone who possesses, in addition to specified theoretical or practical expertise, a range of distinctly moral attitudes, values, and motives designed (Carr, 1999). Teaching profession must be emphasized and revised of the teaching standards or requirement of teacher council. Teachers need to allow all learners to think and act with developing independence and strive to encourage an informed appreciation of the fundamental values of a democratic society (Liljestrand, 2014). Teachers recognize that they work in collaboration with the children's parents or family to encourage their active involvement in education. Teachers' responsibilities will help prepare students for life in the society, in the broadest sense. Teachers have responsibilities to their colleagues as well as families and society.

According to Office of the Education Council (2010) proposed policy guidance for developing teachers and education in Thailand. Four ways that may be enhance quality of education through professional development and PDM driven. First, we need system and mechanism to promote teaching skills, managerial skills, and support system that can be reflected to effective instruction. Second, we need system to propagate teacher competency in the classroom management. Third, we need friendly environments that promote teacher decision making in school. Finally, we need incentive and psychological factors enhancing teachers. However, psychological and physical seem to important components that teachers need to have in the classroom and reflect to quality of education.

Pedagogical decision making helps science teacher make a pivot to science teaching as well as inquiry-based instruction and nature of science are. The study on PDM should be studied and implemented to teacher preparation program as

well as education needs reforming. It will help educator make a correlation between teacher education development and national education standards.

Conclusion

This commitment includes situations such as the development of teachers themselves, sharing this new knowledge with their colleagues and professional culture. Pedagogical decision making is a very important in teacher preparation program. Preservice teachers must have ethical and pedagogical dimension to promote profession, teachers have responsibilities to children, colleagues and the job, family and the society. It is particularly emphasized that teachers have a social mission to inform the public and increase the popularity of their profession. Preservice teachers should have abilities to solve problem and decision making, learn to be learning person, employ and imply ICT to classroom as well.

The challenge for teacher preparation program is to help new teachers recognize and identify the place and function of the authority of experience. Decision making cannot be ignored in the program because they have to bring it to professional experiences and consider as well. In response to this challenge helping preservice teacher to understanding and offering the guidelines for teacher education by their university course work and practicum in school (Clift & Brady 2005; Grisham, Laguardia & Brink, 2000). The understanding in the authority of experience associated with professional decision making which transformative learning is recognized (Mezirow, 1991; 1993; 1997).

The pedagogical decision making will be studied and discussed from theoretical study, involving classroom observations, and interviews preservice teachers. The theoretical lens and conceptual lens are used to examine the preservice teachers' views about pedagogical approaches and decision making strategies. Pedagogical decision making can make their paradigm of instruction as well as professional teachers. The significance of study will teacher educator understand preservice teacher to pedagogical decisions during the teacher preparation program.

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