PROFESSIONAL DEVELOPMENT OF GEOGRAPHY TEACHERS THROUGH PCK

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Abstract- Appropriate pedagogical content knowledge (PCK) teachers are able to interpret the subject matter and find different ways to explain and make the material accessible to learners. The purpose of this research is to know the effort in developing professional geography teacher through PCK. The results show a complex nature of pedagogical content knowledge as a much-needed form of professional development such as knowledge of a specific topic, person and situation. This shows that professional development programs through PCK cannot be limited as well as providing input to teachers who teach certain materials. Instead the program must be in line with the professional practice of teachers that provide expert teachers in certain materials must also understand in setting learning strategies based on teaching experience.

Keywords- Pedagogical content knowledge (PCK), professional, teacher, geography

Today, many educational research leads to teacher professional development. The importance of professional teacher development knowledge is responded by Jennifer Merriman Bausmith and Carol Barry (2011) in terms of pedagogical content knowledge. Shulman (1987) states that there are four knowledge needed in teaching: pedagogical knowledge, content knowledge, pedagogical content knowledge, and contextual knowledge.

Teachers, especially early in their careers, usually use textbooks to determine what content is taught to their students and to get a representation of the content to be taught (Chiappetta, Sethna, & Fillman, 1993; Wang, 1998). One aspect that novice teachers may need is the development of their Pedagogical Content Knowledge (PCK) on the subject they will teach. It is also important to develop good PCK for effective teaching (Ragonis & Hazzan, 2008).

Pedagogigal Content Knowledge (PCK) is a skill that allows teachers to represent, in an effective way, teach their students, for example by using metaphors (Woollard, 2005). The more representations teachers have, the higher their chances in the knowledge of learners according to different student learning needs. Teachers early in their careers may have no or low PCK (Rovegno, 1992; Van Driel, Verloop, & Vos, 1998) and can find content representations in teaching materials such as textbooks. This does not mean that novice teachers can not teach, but that they may not have the correct representation weaponry of their content (Shulman, 2012). It is important to understand whether teachers can find support for their developing PCK in their chosen textbooks.

The above problem shows how a teacher can not form professional skills personally but requires a colleague or organization. The importance of professional development forms of teachers can be built through collaboration, collegial interaction, and relationship development. the opportunity for teachers to participate actively and collaboratively in the professional community is an important component of high quality that is useful for professional development (see also Hawley & Valli, 1999).

At the same time, however, there is research on the impact of such professional development (Vescio, Ross, & Adams, 2008). In particular, Hargreaves (2010) argues that the teacher community often suffers from weak leadership that coaching and collaboration often turn original teacher questions into fabricated rituals or collegiality imposed that actually make teachers less inclined to collaborate. Bausmith and Barry (2011) that the teacher community tends to ignore issues related to teaching and learning subject matter even though the research literature has shown the importance of focusing on learning subject matter in teacher professional development programs (Fishman, Marx, Best, & Tal, 2003; Kennedy, 1998). Because PCK includes an understanding of teachers how students learn, or fail to learn, certain subject matter, PCK development is an important goal to focus on the program.

Value in Education

Learning is filled with values, values in education both explicit and implicit, because teaching involves evaluation, judgment, and choice in teaching the material. Embedded in our culture, values are a culture of knowledge that is learned gradually through interaction with people and institutions (Myhre, 1982). Value is built on cultural aspects, such as ideologies, ideals, and conflicting interests.

Value is not like idealism and ideology, because value always implies choice, choice of principle (Greene, 1978, p.49). Cultures are characterized by conflicting interests, some of which can receive attention for a while and then fade away. Values reflect interest but are different, as fixed with individual interests once have faded from the public interest. Values remain, for they have penetrated the essence of one's definition of oneself 'to be personal value (McKinney, 1980, p. 204). Hence value can not represent what a person should do, but value does not exclude some action and sensitivity for morally relevant situations (Peters, 1970, p 232). It is important, however, not all values are moral values. Skulason (1988) distinguishes three types of values: (1) moral values relating to issues such as quality of life, freedom, and dignity; (2) worldly values such as power, power and fame; and (3) those spiritual values cover areas such as understanding and art.

Although philosophers have argued about values in education for several thousand years, recent educational researchers have noticed that some values are more likely to be influential in education. Values have been mentioned in the curriculum (Jackson, 1968), moral education (Giroux & Purpel, 1983), unlearned curriculum (Overley, 1970), and implicit curriculum (Eisner, 1979). Some researchers have attempted to describe the unspoken or hidden value (Giroux & Purpel, 1983). This work shows that students learn more than officially stated in the curriculum, and some can be called misconceptions in education.

Geography as a lesson content

In relation to humans (Daldjoeni, 2014; 1). The focus of geography study has long been inseparable from the surface of the earth and human life that is above it. Since the time of Eratosthenes (276-194 BC), geography is still defined as the science that describes the earth's surface (writing about the earth).

Maryani (2015: 33) describes the notion of geography since the time of Ptolomy (150 BC) namely that, Geography is a science that provides views and information about the location of places on the surface of the earth through the map. From this simple notion, Von Humboldt (1845) synthesizes the object of general geographical study into a specialization through questioning, mapping, and regionalization. William Hughes (1863) develops further, he sees that geography does not merely describe places in the earth's surface, but also aims to search, discover, classify, compare, and generalize.

Entering the 21st century, the CCGE (Canadian Council for Geographic Education) defines geography as a science that seeks to organize the Earth's surface, the process of interaction between physical elements and human elements, describes the place or space of the earth, and directs the interaction process between places for the creation of life which is better, effective and efficient.

Further, pragmatically, geography is defined as a science that interprets the reality of regional differences on the surface of the earth as they are, not only in the sense of specific differences but also in the sense of the whole phenomenon in every place different from that in others (Suharyono and Moch Amien, 2013: 19).

The Center for Curriculum and Bookkeeping (2013: 1) in his book on Basic Competence of Geography, defines geography as: the study of the causal relationships of the various phenomena and events occurring on earth, both physically and in relation to living things and their desires through spatial, ecological, and regional approaches. The results of geographic studies are directed to the interests of program, process, and development success.

In describing, understanding, identifying, evaluating and addressing development issues, geography is assisted by a number of technologies such as maps, remote sensing, and Geographic Information Systems (GIS). From the last understanding of the function of the education of geography subjects is to educate students to be able to overcome the problems of development and love the country.

Knowledge of teacher Pedagogy Content

Knowledge of pedagogical content has two main components, namely content and pedagogy (Grossman, 1989; Gudmundsdottir, 1988). Content in the pedagogy of content knowledge must be rearranged into consideration of students, classrooms, and curricula. This reorganization revolves around the teacher's personal values and values embedded in them. Thus, in pedagogical knowledge, the content does not stand in isolation. Indeed, the quality of pedagogical content will be obtained by experienced teachers (Shulman, 1967, pp. 8).

By mentioning the study reported to 1997, Bausmith and Barry (2011) provide a rather limited explanation of the research on PCK. More importantly, it states that this study "Generates tremendous insights into what experts are teaching across disciplines. Not only PCKs are specifically related to topics in the discipline, but also research on PCK usually does not produce a description of "expert teaching" or as if there would be an ideal or an optimal way to teach a particular subject matter (cf. Shulman, 1987) . In contrast, this study has demonstrated the complex nature of PCK as a form of professional knowledge of teachers, people, and specific situations (Abell, 2007; Kind, 2009; Van Driel & Berry, 2010). Furthermore, Hashweh (2005) proposes to consider PCK as a pedagogical construct repertoire obtained by teachers when repeatedly teaching certain topics.

Even in one school, the same teacher can experience that an effective way to teach "forcing" on for example monday morning in class XI may not be half effective Wednesday afternoon in another class XI. An expert teacher, should be sensitive to such differences and flexible enough to adapt his approach, to how students respond. Thus, PCK includes knowledge to improve students' learning in various ways.

Impacts for Professional Teacher Development

By focusing on "online video lessons taught by expert teachers indexed by Standard Jan H. Van Driel and Amanda Berry (2012) it appears that Bausmith and Barry (2011) see PCK as enacting a set of specific guidelines for teaching certain subject matter, which can be captured on the video of "Master of experts" and then used as input in large-scale professional development programs. Although the creation of an online library of video lessons can serve a particular purpose, these resources will have limited value in this case assisting the development of the teacher's PCK. Regardless of the discussion of who will qualify as an "expert teacher," it can be seen from research that this approach is unfair to the way teachers actually develop their PCK. Such research has shown that PCK development has never forgotten a linear process (eg, teacher knowledge development precedes changes in behavioral teachers, which are then implemented in practice, and ultimately leads to specific student outcomes; Guskey, 1986). First development begins in the context of teacher-specific professionals and is influenced by factors such as the characteristics of school culture and its students, the time available, and local support for professional development (Little, 2006). In fact, individual teachers perceive these factors differently, even when they work in the same school (Kennedy, 2010). Finally, teachers usually hold strong personal beliefs about what kind of problems they see as good teaching, how they think students are learning, and what standards they want to emphasize in the curriculum (Van Driel, Bulte, & Verloop, 2007. In short, researchers think that programs aimed at PCK development, like other recent forms of professional development, must be based on constructivist and situative theories rather than on behavioral approaches (eg Borko et al., 2010) .Of course, we agree that teachers should focus on student learning, and in countries where the national curriculum or a set of standards (such as the United States General Core Standard) is implemented, student learning needs to be directed at such standards.To declare, however, that this can be achieved by professional development providers who "might help schools translate such a lesson and work to harmonize pe efforts local learning to college and career preparedness standard "(Bausmith & Barry, 2011, p. 177) ignores the complexity of PCK development and the fact that there are many ways in which teachers can develop PCK, tailored to the context of student needs.

CONCLUSION

It can be concluded that the development of PCK can be through the learning strategies, techniques and methods chosen by the teacher, the effort tyersebut aims to improve understanding of how students develop insights in certain subject matter. The literature of the study clearly shows that PCK development is a complex process that is very specific based on context and situation. Current conditions illustrate that professional development programs aimed at teacher PCK development should be regulated in ways consistent with teacher professional practice, including opportunities to apply innovative learning strategies and specific materials, both individually and collectively and experientially. This study also shows that the extent to which geography teachers can contribute to the development of PCK. Examples of good, "good" or defective learning practices may serve as inputs, as well as evidence from research literature and other resources. In this context, collaborative learning among fellow MGMP (subject matter teachers) can have a very useful role in helping teachers to explain and discuss the idea of teaching topics and studying specific topics, thereby contributing to the identification of PCK collectively, ie the general form of practical knowledge professional teachers on teaching certain subjects. At the same time, of course the space for each teacher to adjust shared knowledge and equip it with their own situation.

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