Chapter 6

Creative Thinking and Reflective Teaching in Prospective Teachers

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ABSTRACT

Reflective thinking skills are vital for the modern education in schools. Five important reflective thinking skills are identified so far in the scientific literature: Observation, communication, judgment, decision making, and team working. Additionally, creative thinking is becoming more and more regarded as a necessary part of the educational process. In this chapter, an attempt is made to clarify what a sample of prospective teachers in Greece believe about reflective teaching, while at the same time their knowledge and attitudes towards creative thinking are examined. Results indicated that respondents were not fully informed during their formal university education about creative thinking and reflective teaching, while they also lacked hands-on experience and relevant skills. Future research should further focus on cross-cultural differences regarding creative thinking attitudes and reflective teaching in prospective and professional in-service teachers.

INTRODUCTION

Contemporary teachers have to face a complex classroom reality with learners who have different cognitive-emotional backgrounds and skills. During the last decades a discussion on reflective and creative thinking in both students and teachers has opened a new field of research and practice (Russell & Munby, 2004; Sternberg, 1999). Although a variety of research approaches exist, the majority of researchers emphasize the need to develop awareness of reflective and creative thinking skills and procedures in different cultural environments so as to communicate openly and emphatically with the students (Kizel, 2012). In the literature, an unanswered question arises concerning what really student teachers and professional teachers believe about reflective and creative thinking.

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The main objective of this research focuses on clarifying a sample of prospective Greek teachers’ beliefs about reflective teaching, while their knowledge and attitudes towards creative thinking are also examined. Before outlining such research findings, a theoretical background of reflective thinking is provided to clarify this process. This chapter also introduces some research findings in relation to teachers’ reflective thinking skills and knowledge, besides examining creative thinking in education from a research perspective. The Greek student teachers’ attitudes and beliefs regarding reflective and creative thinking aspects are discussed here and some future research directions are given.

REFLECTIVE THINKING IN FOCUS

Historically, the first to identify reflection in cognition was Dewey (1933). Dewey mentioned that reflection is the “active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the future conclusions to which it tends” (Dewey, 1933, p. 7). Schön (1983) was the first to introduce ‘reflection-on action’ and ‘reflection-in-action’, which are concepts that are used in order to explain how professionals (including teachers) meet the challenges of their work. This attempt is accomplished through a kind of improvisation that is improved through practice (Schön, 1983). Another attempt to define reflection stated that it is “an important human activity in which people recapture their experience, think about it, mull it over and evaluate it. It is this working with experience that is important in learning” (Schön, 1983, p. 19; Boud, Keogh, & Walker, 1985). Schön (1987) again used the term “reflective thinking” as part of the critical thinking process. Until now, reflective practice, which is considered to be the most important source of personal professional development and improvement, has been examined through a plethora of models (Johns, 2004; Osterman & Kottkamp, 1993). One of the first proposed models presented three questions to describe and clarify a situation (1. What, 2. So what and 3. Now what?) that the practitioner-teacher has to ask in order to reflect on ways in which s/he can personally improve by learning from experience (the consequences of her/his response) (Borton, 1970).

A similar model for reflective practice that is based on the idea of transformation of information into knowledge emphasizes the concept of experiential learning (Kolb, 1984). After a situation has occurred, the practitioner reflects on the experience, gaining a general understanding of the previously encountered concepts, and then tests these general understandings in a new situation. The gained knowledge which is formed from a situation is continuously applied and reapplied, building on prior experiences and knowledge (Kolb & Fry, 1975).

Another model for reflective practice is based on the idea of single and more importantly double loop learning, which involves the modification of objectives, strategies or policies so that when a similar situation arises a new framing system is employed requiring the recognition and correction of perceived faults or errors (Argyris & Schön, 1978). In a similar approach, debriefing following some specific steps is proposed for reflective practice. Namely, the Gibbs’ reflective cycle or Gibbs’ model of reflection includes: Description, feelings, evaluation, analysis, conclusions, and action plan (Gibbs, 1988). Another model for reflection is based on the “looking in” on one’s thoughts and emotions and the “looking out” at the situation experienced. This approach is similar to the previous ones as the individual-practitioner accesses, understands and puts into practice information that has been acquired through empirical means. Additionally, the aesthetic, personal, ethical, empirical and reflexive aspects of the situation are introduced as patterns of knowing as part of the guided reflection (Johns, 1995; 2010). A more recent model