

THE ROLES OF UNIVERSITY TEACHERS IN BUILDING TEACHER STUDENTS' CAPACITY OF REFLECTIVE PRACTICE THROUGH THE PROCESS OF EXPERIENTIAL LEARNING

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Abstract. *As the carried-out research study shows, proper interpretation of the concepts of reflective learning, the reflective practitioner and the experiential learning theory in the context of higher teacher education provides a solid theoretical background for the analysis of the teaching-learning process of pre-service teachers' reflective practice and the support to be provided by teacher educators. By employing the method of the scientific literature review, the current research paper aims to investigate the roles of teacher educators within the framework of the afore mentioned theories that are considered to ensure adequate assistance to pre-service teachers in their becoming reflective practitioners. As the results show, in order to carry out effective facilitation, teacher educators should acknowledge and adopt a wide variety of roles while developing pre-service teachers' capacity of reflective practice.*

Keywords: *experiential learning; pre-service teachers; reflective practice; teacher educators' roles; university.*

Introduction

The phenomenon of reflective practice in pre-service teacher education has been constantly approached from different perspectives in recent scientific studies (Collin et al., 2013). It is well supported in the literature that reflection is a process (Dewey, 1933, 1938; Jay & Johnson, 2002; Lane et al., 2014). The investigations into different aspects of reflection, such as its depth (Lee, 2000), dimensions (Jay & Johnson, 2002), levels (Larrivee, 2008), types (Grushka et al., 2005) share a conceptualisation that reflective practice is a cognitive process that can range from a lower level through to a deep, even transformational, level. Current studies provide the evidence that pre-service teachers, especially beginning teachers, lack proper skills needed to reflect on their practice or do it in a superficial way (Cavanagh & Prescott, 2010), while on the other hand, reflective practice is proved to be developmental, and can be enhanced through the employment of appropriate models (Korthagen & Vasalos, 2005; Ryan & Ryan, 2012) and assessed with the help of instruments specially

devised for this purpose (Thorsen & DeVore, 2012). Nearly all the studies imply the need for providing proper guidance in promoting the development of student teachers' capacity to reflect on their practice (Schön, 1983, 1987; Brockbank & McGill, 1998; Ostorga, 2006; Larrivee, 2008; Elliot-Johns, 2014; Rodgers & LaBoskey, 2016) which is closely interrelated with its facilitation. While approaching the teaching-learning process of reflective practice in higher education, one of the most popular and frequently cited educational theories is Kolb's Experiential Learning Theory (1984) the main assertion of which is that learning is knowledge creation through the transformation of experience and proposes the model relating the process of reflection to learning. Whilst there is a large, broad and diverse base of literature on reflective practice in pre-service teacher education, the discussion on the roles of teacher educators in facilitating the development of their students' reflective practice is theoretically limited. Therefore, the question arises that can be stated as a research problem: how the adoption of Kolb's model of experiential learning enables the development of teacher students' reflective practice and what roles teacher educators have to play so that their students' capacity to reflect on their practice could be increased? *The object* of the research is the roles of teacher educators in facilitating reflective practice of student teachers in the context of experiential learning theory. Drawing on D. A. Kolb's theory of experiential learning, *this article aims* to disclose the roles of teacher educators in incapacitating pre-service teachers to reflect on their practice.

In the first part of the article the theoretical background for understanding reflective practice in the context of pre-service teacher education with the reference to the conception of reflective learning, the notion of the reflective practitioner and the model of experiential learning are revealed. The second part of this paper explores the roles teacher educators perform during the teaching-learning process of pre-service teachers' reflective practice based on Kolb's model of experiential learning.

This study employs *the methods* of scientific literature review and the theoretical analysis of D. A. Kolb's theory of experiential learning (1984).

Understanding pre-service teachers' reflective practice at university in the context of the model of experiential learning

In exploring the literature on reflective practice within the context of pre-service teacher education, the concepts of reflective learning, the reflective practitioner, and experiential learning are usually approached and become relevant, since they help to gain a better understanding of reflective practice. All of them put the notions of reflection and experience at their heart. The central idea behind such a positioning is grounded in the proposition that learning is, in

effect, learning from experience by reflecting on it (Moon, 2004). The elaboration of the role of reflection and experience as the underlying notions proper interpretation and implementation of which would ensure meaningful learning in the formal setting of pre-service teacher education is based on their potential to enable student teachers not only to build proper professional knowledge during their course work and practicums, but also to develop them as reflective practitioners who are able to successfully apply the knowledge gained in future practice.

As for the concept of *reflective learning*, it is most often used to define teaching/learning, during which reflection is applied as one of the main means to analyse the experience. Brockbank & McGill (1998) in their work on reflective learning in higher education define *reflection* in two senses: as the process or means by which an experience, in the form of thought, feeling or action, is brought into consideration, while it is happening or subsequently; and the creation of meaning and conceptualization from experience and the potentiality to look at things as other than they are, the latter part embodying the idea of critical reflection (p. 66). Treated in this way, reflection is supposed to contribute to transformative learning of students (ibid., p. 79). The concept of *reflective practice* is closely interrelated to *reflective learning*. Drawing on Barnett's (1992) proposition that all students at university can engage in reflective practice, the latter becomes a means by which learners can potentially achieve critically reflective learning. In this respect reflective practice becomes a core attribute of critically reflective learning (Brockbank & McGill, 1998: p. 73). For Moon (2004), *reflective practice* is a professionalized form of reflective learning when reflection is used as a means for dealing with ill-structured and/or unpredictable situations in carrying out professional or other complex activities (p. 80). Primarily being defined by John Dewey, in the literature *reflective practice* is mainly associated with works of Donald Schon (1983, 1987) for whom reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline. In his theory Schon also developed the concept of the *reflective practitioner* who, according to Schon (1983: p. 68), in an uncertain or unique for him situation experiences "surprise, puzzlement, or confusion" and reflects on both the phenomena before him, and on his prior understandings implicit in his behaviour. Going on, the reflective practitioner "carries out an experiment which serves to generate both a new understanding of the phenomena and the change in the situation" (ibid.). In this way, one becomes a researcher in the practice context who is able to construct a new theory of the unique case (ibid.). So far it could be seen that the concept of *reflective practice* embraces the concept of *reflective learning* and is related to the concept of experiential learning which emphasises the significance of experience for

learning. The two concepts of learning, that is the concept of reflective learning and the concept of experiential learning, are closely interlinked with each other (Moon, 2004). As Moon puts it:

Any activity or exercise that enhance reflective learning will be useful to support experiential learning and any exercise <...> that is more directly concerned with experiential learning will involve reflecting learning anyway. <...> reflection is the means by which awareness of experience is recognized and is made explicit and generalizable to other situations (ibid., p.158).

The main ideas underpinning the concept of *experiential learning* are revealed in the follow-up discussion.

While approaching the teaching-learning process of reflective practice in higher education, one of the most popular and frequently cited educational theories is Kolb's Experiential Learning Theory (ELT) (1984). Although being criticised for its insufficient attention to the actual process of reflection itself (Moon, 2004), it still remains among the theories widely referred to within the setting of higher education. D. A. Kolb called this *experiential learning* since experience is the source of learning and development. As Kolb (1984) asserts, "Learning is the process whereby knowledge is created through the transformation of experience" (p. 38). According to Kolb, the process of learning follows a cycle consisting of four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation (see Fig. 1).

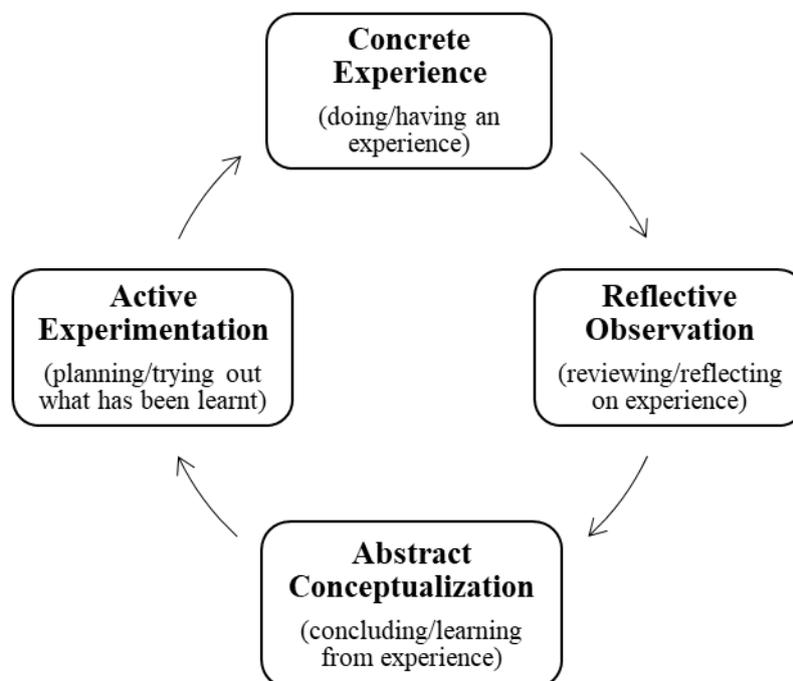


Figure 1. Kolb's Model of Experiential Learning (According to Kolb, 1984)

D. A. Kolb provides a definition of learning that is essentially reflective: “learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it.” (Kolb, 1984: p. 41). Kolb’s model highlights the importance of the component of reflection in the learning cycle. The essence of this model is the learning cycle when experience is turned into concepts (theories, conceptions), which in turn become guidelines for choosing new experiences. The learning cycle may be entered at any point, but learners will best learn the new task if all four stages are proceeded. According to this theory, students must pass through the cycle a few times. Then it can be called a spiral of cycle. ELT follows constructivist views of learning in that it is the process of connecting new experiences and knowledge to the learner’s pre-existing personal knowledge.

The overview of the concepts discussed in this part clearly shows that the skills and dispositions needed by pre-service teachers as reflective practitioners, the ones who actively reflect on experiences in order to develop professionally, can be developed in the process of critical examination of experience gained from practice. The role of teacher educators as facilitators in this process is central. Kolb's experiential learning cycle provides feedback on what practical results (as a continuous development of personal practice) reflective practitioners create.

The roles teacher educators perform in the teaching-learning process of reflective practice through Kolb’s model of experiential learning

Based on the theoretical considerations discussed in the first part of this paper, a more careful analysis of the roles teacher educators perform in fostering pre-service teachers’ capacity of reflective practice while adopting Kolb’s model of experiential learning is carried out. The aspects relevant to this process are summarised in Table 1. and more explicitly discussed below.

Kolb's experiential learning cycle starts with examining *concrete experiences* carefully chosen for their learning potential. It can be a new experience of the situation encountered by pre-service teachers in the learning how to teach process or a reinterpretation of the existing learning experience or the experience gained in teaching practice. Teacher educators facilitate their students by actively involving student teachers mainly through reflection-in-action in problem solving, discussions, practical exercises, for example making a presentation, debates, case studies analysis, imitation of the situation, a review of colleagues’ experience in this way enabling student teachers to view their experiences from different perspectives. These considerations highlight the roles of teacher educators as *organisers* and *enablers* who through a carefully

organised teaching-learning process would actively engage student teachers in it and provide them with the possibilities to gain proper awareness of reflective practice making it a skill. Relating to prior knowledge and practices student teachers engage in a cognitive inquiry through which they find meanings from the experience and can identify new ways of acting. At this stage, it is extremely important for student teachers to understand the whole cycle of experiential learning they are going to be engaged in, its stages and the results it might lead to, which requires from teacher educators to introduce Kolb's experiential learning cycle to student teachers. In this respect, teacher educators perform the role of *informers*.

Table 1 **Summary of relevant aspects related to the facilitation of pre-service teachers' reflective practice** (developed by the paper authors)

Stages of learning	Description	The facilitator's role	Helpful strategies and activities
Concrete experience	An experience and examining what happened/engaging directly in an authentic situation.	Experiences are carefully chosen for reflection. Actively involves students.	Problem solving, discussion, practical exercises, e.g. making a presentation, debates, case studies, imitation of the situation, a review of colleagues' experience.
Reflective observation	The experience is reviewed and reflected upon to examine what was experienced and the results that occurred.	Actively engages students in posing questions. Asks students for observation. Arranges discussions with others.	Writing a short report on what took place, giving feedback to other participants, completing learning logs or diaries, discussions, working in small groups.
Abstract conceptualization	The experience is conceptualized to understand why this happened and what the results imply.	Presents models. Gives theories. Gives facts.	Working with theoretical materials, sharing the content, self-analysis of the text, clear presentation and structuring of ideas.
Active experimentation	The new thinking is applied through active experimentation or plans are made for what will be done differently next time.	Helps the learner notice the connections between one context and another, between theory and the experience. Encourages this examination repeatedly. Gives learners time to plan.	Case studies, role play, using real problems, practical works, imitating activities, group discussions, projects, individual assignments/tasks.

The *reflective observation* stage in Kolb's experiential learning cycle is supposed to be essential since student teachers reflect on their experience by gathering information in order to understand and expand it. At this stage, pre-service teachers step back from the task to review what has been done or experienced. Teacher educators actively engage students in encouraging them to pose questions: "How am I analysing what happened? What do events/ thoughts/ feelings mean? How am I interpreting them? How am I thinking about them?" In doing so, student teachers are enabled to describe and evaluate their experience, as well as analyse their behaviour, attitudes, objectives, feelings, in this way giving meanings to the situations. In this respect, teacher educators become *encouragers*. Teacher educators ask student teachers for observation and arrange discussions with others for the insights to be shared. At this stage teacher educators become the *promoters* of quality reflection. Writing a short report on what took place, giving feedback to other participants, completing learning logs or diaries, participating in discussions, working in small groups are supposed to be effective activities at this stage. All these activities are to be carried out either through reflection-in-action or reflection-on-action and, first of all, require from students the powers of observation. Therefore, teacher educators have to draw students' attention to what effective observation is and foster student teachers' ability to notice and pay close attention to things in this way becoming *fosterers*. At the reflective observation stage student teachers start looking for the interrelationship between theoretical knowledge and conceptions already gained. This provides the information necessary for the next stage - abstract conceptualization.

At the *abstract conceptualisation* stage, the experience is conceptualized to understand why this happened and what the results imply. It involves interpreting the experiences and reflecting upon them by relating them to student teachers' existing theoretical and practical knowledge, developing explanations or hypotheses that can be generalized, and integrating new information into practice. Through reflection-on-action student teachers learn from their experience, develop new ideas, foresee the perspectives which would enable them to solve the problems in the future. Teacher educators should recognize and encourage the opportunities for reflective practice to take place by providing relevant theories, presenting models and giving facts. In doing so, they are to adopt the role of *supporters*. Working with theoretical materials, doing self-analysis of the text, sharing the content with others through clear presentation and structuring of ideas are beneficial activities for student teachers' framing and explaining their experiences or any other knowledge student teachers have developed.

The final stage of the learning cycle is *active experimentation*. It is the testing of what was learned in the experience and the application of new ideas to a similar or different practical situation. Students teachers employ reflection (actually, it is mainly reflection-for-action) to create plans for further learning experiences or consider what will be done differently next time and refine or revise the way a new experience is to be handled. Case studies, role play, using real problems, practical works, imitating activities, group discussions, projects, individual assignments/tasks are the activities to be employed at this stage. Teacher educators at the active experimentation stage should become *assistants* and *mediators* in order to help their students to notice the connections between one context and another, between theory and the experience and encourage this examination to be performed repeatedly, allocating sufficient time for students to plan. All this will lead to the next concrete experience.

Thus, teacher educators perform a wide variety of roles while increasing students' capacity of reflective practice. The ones elaborated in this paper and summarised in Figure 2 are supposed to be more characteristic while adopting Kolb's model of experiential learning. They are. It is also very important to notice, that all of them are not strictly limited to one particular stage of Kolb's model and may be adopted at different stages of it as well.

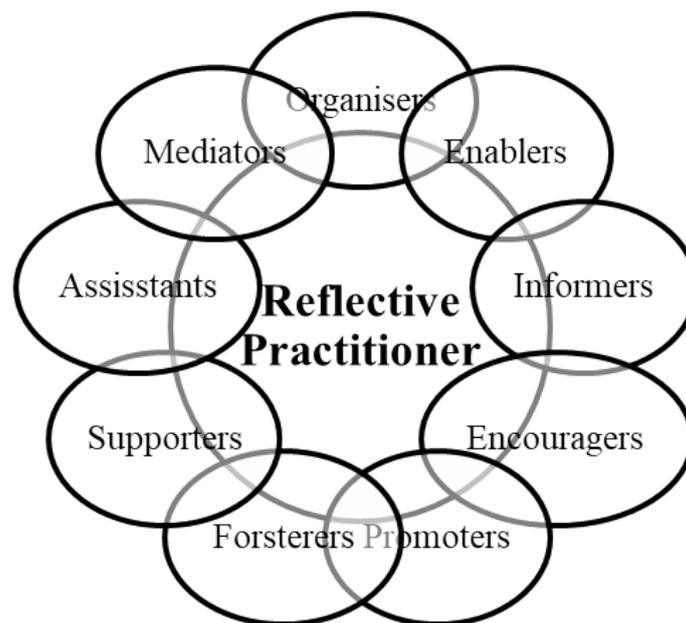


Figure 2. **Roles of Teacher Educators in facilitating reflective practice through Kolb's model** (developed by the paper authors)

Both Kolb's learning stages and cycle enable teacher educators to critically evaluate the learning contingencies relevant to pre-service teachers, and to develop more appropriate learning opportunities for their reflective practice. As

Kolb asserts, two aspects can be seen as highly significant: the use of concrete, 'here-and-now' experience to test ideas; and use of feedback to change practices and theories (Kolb, 1984: p. 21-22).

The above discussed ideas are closely interrelated to the underlying role of teacher educators as facilitators while developing their students as reflective practitioners, which needs to be clearly perceived and adopted. In order to be able to choose effective teaching methods and strategies needed for the development of teacher students' capacity to reflect, allocate adequate support, time, resources, opportunities, and create the environment, which would encourage reflective thinking to become a habit of mind in prospective teachers' learning process and their future professional lives, teacher educators have to become reflective practitioners themselves. This is closely related to the overall understanding of teachers as facilitators' role. Only by clearly understanding the importance of the reflective practice concept in pre-service teacher education and regularly engaging in careful considerations of their own professional practices through self-examination and self-evaluation so that they could be improved, teacher educators will be able to perform other roles described in this article.

Conclusions

The concepts of reflective learning, the reflective practitioner and the experiential learning in the context of higher teacher education provide a solid theoretical background for the analysis of the teaching-learning process of pre-service teachers' reflective practice and teacher educators' roles in it.

The skills needed by pre-service teachers, especially beginning teachers, to reflect on their learning how to teach and teaching practice itself are quite poor, therefore, teacher educators have to provide appropriate support for their development. The four stages of Kolb's experiential learning model are a helpful framework for building and monitoring reflective-practice based learning of pre-service teachers. The main role of teacher educators is to facilitate this process by applying reflective ways that would provide student teachers with the opportunities to analyse and learn from their experience and develop them as reflective practitioners. In order to carry out effective facilitation, teacher educators should adopt a wide variety of roles characteristic while developing pre-service teachers' capacity of reflective practice through Kolb's model of experiential learning. Finally, in order to fulfil all these roles properly, teacher educators have to become reflective practitioners themselves.

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