Chapter 9

Metacognition: Importance of Reflection in the Pre–Service Teacher Journey

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ABSTRACT

This chapter reminds the reader of the importance of “thinking about your thinking” or metacognition and reflection. The importance is magnified for the pre-service teacher as they seek to develop lessons that will engage and excite learners. Examining one’s own thinking allows a person to better understand their thinking and learning. It also encourages the learner to take ownership of their learning and cognition. For the pre-service teacher, the information gathered from “thinking about one’s thinking” can inform your practice and help lead to success in the classroom. Metacognition, or reflection, is useful for identifying areas of limitations and strengths in our teaching. The highlight of this chapter is the shared journal entries from an intern’s journey through internship. As a picture is worth a thousand words, these words of an intern using metacognitive skills to reflect on practice, experiences, and relationships through journaling are invaluable.

INTRODUCTION

Metacognition has been a topic of study for cognitive theorists, behaviorists, researchers, and educators. Simply stated, metacognition refers to “thinking about one’s thinking” (Desautel, 2009). Examining one’s own thinking allows a person to better understand their thinking and learning. It also encourages the learner to take ownership of their learning and cognition. For the pre-service teacher, the information gathered from “thinking about one’s thinking” can be invaluable to their success in the classroom.

According to theory, metacognition consists of two processes: 1) the knowledge of cognition and 2) the regulation of cognition (Hacker, 2009). The knowledge of cognition has three components: awareness of the factors that influence one’s own performance, knowing different types of strategies to use for learning, knowing what strategy to use for a specific learning situation. The regulation of cognition combines setting goals and planning, monitoring and controlling learning, and assessing results and...
strategies being used. The practice of reflection has been proven to aid a person in becoming a “thinking thinker” and in applying the knowledge of their cognition to positively regulate their cognition in a growth mindset (Dweck, 2007). For the pre-service teacher, being given time to reflect and examine one’s thinking can lead to more effective application of learning theories, strategies, best practices, as well as time management both in and outside of the classroom.

The pre-service teacher is taught the importance of harnessing “curiosity” of the learner when working with the natural desire of children to learn. Ostroff (2012) says that learning is what humans do best throughout their lives by wondering, exploring, experiencing, and playing. It is important for the pre-service teacher to embrace their curiosity and natural desire to learn and share this with their students in the classroom. Making pre-service teachers aware of the importance of metacognition and reflection can be an important step in fanning the flame of curiosity in learning for all.

Eleanor Duckworth (2006) put it so beautifully in *The Having of Wonderful Ideas* as she described her reason for the enjoyment of working with teachers. As a former student of Piaget, Duckworth believes there are two main aspects of teaching. The first aspect is putting students in touch with phenomena, or information, related to the area to be studied. Duckworth is adamant that this be the real thing not lectures, books, or notes about the subject but real authentic hands on interaction with the subject. The goal is for the student to think and wonder about it; therefore, it would make sense that the teacher during preparation should also be caused to think and wonder about it as well. The second aspect of teaching is the act of having students explain what they are thinking and wondering about (Duckworth, 2006). Again, this step is critical for teachers as well as we reflect and apply metacognitive skills to our planning, instruction, and assessment. The same steps that excite students about learning also excite teachers as they prepare the learning environment for students. The two aspects of teaching depend on each other, when anyone (teacher or student) is engaged in the matter, they try to explain it, and in so doing you seek out more phenomena that will bring deeper understanding.

Spalding and Wilson (2002) use the work of Dewey (1933) to argue that reflective, metacognitive thinking is critical to identifying, analyzing, and solving the classroom issues that characterize our thinking in the classroom. The added value for investing in this type of reflection and metacognitive thinking is a professional educator who uses a more systematic process to understand the ways in which people learn most effectively. Barry and King (1998) promote reflection as an essential skill for those educators desiring to go beyond simple “pondering” to using metacognitive skills in true reflection. A move from pondering to reflecting requires positive teacher attitude concerning open mindedness, genuine enthusiasm, and a willingness to be responsible as you consider all the consequences of the learning journey.

The following is a checklist to help a teacher elevate reflection to a higher level above “pondering” (Barry and King, 1998):

1. What went well about the lesson? And why?
2. What have you learned about your teaching? To what extent are these strengths in your teaching?
3. What did not go well about the lesson? And why?
4. What have you learned about your teaching? To what extent are these weaknesses in your teaching?

Metacognition and idea of reflecting on our own thoughts is not a new idea. John Flavell, a psychologist in the 1970s, introduced the term of “metacognition” (Fleming, 2014). Flavell used it to describe our ability to evaluate our own thinking. Metacognition, or reflection, is useful for identifying areas of limitations and strengths in our teaching. Schon’s (1983) work suggests that adult’s growth and develop-
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