There are four levels of reflection (Hatton & Smith, 1995):

- **descriptive writing (not reflection):** reports of events, this is what I did, no attempt to provide reasons
- **descriptive reflection:** providing reasons for why they did something based on what they already know, can be single or multiple factors
- **dialogic reflection:** stepping back and engaging in a form of questioning and discourse with oneself exploring several possible reasons and considering possible alternatives
- **critical reflection:** taking into account broader historical, social, and political factors (diversity, values, class issues, etc.)

Dewey (1933) has very specific ideas about what counts as thinking, and he clearly defines different types of thought, including reflective thinking. It is what Dewey calls “reflective thought” (p. 2) that is the focus of teacher research and teacher practice. Reflective thought involves consecutive, connected thinking that enables us to create our own beliefs as opposed to unquestioningly adopting the beliefs of others. This is important because what we believe impacts not only our other beliefs, but our behaviors as well. In reflective thought, we arrive at our beliefs based upon the evidence we have considered, and this often occurs when we are confronted with a situation that confuses us or causes us to doubt what we already know. We are compelled to take action and search for evidence to make meaning of the experience. The inquiry that is part of reflective thinking cannot give us the answer, but it can suggest a course of action that can be tried and evaluated. This type of thinking allows us also to consider factors that are not immediately present, as well as those in the future. Dewey contends that this type of thinking must be trained and developed to be effective. Teaching is based on our natural tendency to be intellectually curious, and a teacher’s own intellectual habits are critical to the learning environment. Reflection involves thoughtfulness and deliberation, and can be described as a series of five steps, that start with experiencing then defining some sort of difficulty or problem. Possible solutions are generated, then tried, observed, and evaluated. The solutions may or may not be accepted depending on the extent to which they solve the problem. This process is what enables us to make
meaning of our experiences. Dewey describes this as combining what we know with what we do not know (p. 118). He also discusses the importance of specific attitudes that facilitate reflective thought, specifically open-mindedness, whole-heartedness, and responsibility. Open-mindedness is described as the willingness to consider more than one position or point of view. Whole-heartedness refers to giving your focused attention and enthusiasm to the topic at hand. Responsibility involves being aware of the outcomes of your actions and thinking. Dewey suggests that teachers strive to cultivate these attributes in their students. Interestingly, these habits of thought are also at the heart of inquiry-oriented teaching practice.

In *The Reflective Practitioner*, Schön (1983) developed a theory of reflection-in-action. Schön described the outcomes and implications of reflective practice as well as a discussion of how reflective practice might impact the educational bureaucracy. In *Educating the Reflective Practitioner*, Schön (1987) revisited and deepened his discussion of the theory of reflection in action as artistry in professional practice in contrast to the more scientific technical rational approach. Knowing in action occurs when a competent practitioner uses the knowledge gained through practice to anticipate, frame, and solve problems encountered in the process of practice. This is not factual knowledge, but rather is fluid and is easy to demonstrate but difficult to describe. Knowing in action gives way to reflection in action when the practitioner encounters uncertainty, uniqueness, and conflicting values. Reflection in action comes into play when knowing in action does not work. The practitioner intentionally tests different solutions until one works to alleviate the problem. This is not a process of blind trial and error. As with Dewey, previous experience guides subsequent experiences and informs thinking. Reflection in action can lead to the development of new knowledge in action, as new solutions become part of the repertoire of the practitioner. Schön described the process of educating the reflective practitioner within the practicum model in detail, using examples in the practice of architecture, music, and clinical psychology. In the reflective practicum, the student begins to learn the principles of a particular practice
including terminology, materials, and conventions by working with a more experienced practitioner, observing knowledge in action, and implementing reflection in action. Through this process preservice teachers learn how to think and act “like a teacher,” and they begin to think of themselves as teachers.

References


