

# Reflective Practice: A Critical Analysis of Data-Based Studies and Implications for Nursing Education

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## ABSTRACT

Reflective practice has become part of the discourse of nursing education classrooms, conferences, and journals, and are popular features of nursing continuing education programs. Yet, the idea of reflective practice has become increasingly more disparate. This critical analysis examines data-based studies and provides an overview of reflective practice, discusses common themes that emerged from the studies, and identifies implications for reflective practice in the field of nursing education.

During the past decade, terms and phrases such as reflection, reflective practice, reflective teaching, and the teacher as a reflective, inquiring professional have become part of the discourse of nursing education classrooms, nursing conferences, and journals, and are popular features of nursing continuing education programs (Boud & Walker, 1998). When these terms and phrases are heard, they can bring about a range of responses from excitement and positive enthusiasm to gross ambiguity and bewilderment (Burton, 2000).

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Since Dewey introduced the concept of reflective practice to the field of adult education more than 60 years ago, various investigations and theoretical critiques have been completed to explore the role of reflection and reflective practice in nursing (Boud, Keogh, & Walker, 1985; Mezirow, 1990; Schön, 1983, 1990; van Manen, 1977). In addition to data-based (both quantitative and qualitative) and theoretical studies, a growing body of instructional literature suggests how nurse educators may become more self-reflective and foster reflective practice in their students.

In the broadest sense, reflective practice is a means of self-examination that involves looking back over what has happened in practice in an effort to improve or encourage professional growth. It is an imaginative, creative, nonlinear, human act in which educators and students recapture their experience, think about it, and evaluate it. Boud et al. (1985) stated that "we experience as we reflect, and we reflect as we experience" (p. 18). Reflective practice helps remedy what T.S. Eliot meant when he stated, "We all had the experience but missed the meaning" (cited in Tomlin, 1988, p. 42).

Although the rhetoric of reflective practice has permeated education literature in recent years, the idea of reflective practice has become increasingly more disparate. Authors and researchers define reflective practice by using their own lenses, worldviews, and experiences. In addition, various related concepts exist, such as action theory, critical social theory, praxis, problem solving, and cognitive learning theory. This conceptual and methodological umbrella only serves to further mystify and blur a consensus of meaning (Atkins & Murphy, 1993; Jarvis, 1992; Morrison, 1995).

In essence, practitioners and educators are being encouraged to engage in or promote reflective practice in their students but are shown very little evidence that it actually improves practice or results in learning. Despite

continued interest in reflective practice, little is known about the development of reflective capabilities, the possible negative outcomes of reflection, how reflection actually looks in practice from a data-based viewpoint, and what kind of learning results from reflective practice (Burnard, 1995; Durgahee, 1998; Greenwood, 1993; Henschel, 1999; Johns, 1995; Jones, 1995; Lowe & Kerr, 1998; Mallik, 1998; Newell, 1994). Therefore, this critical analysis examined data-based studies to identify the scope of reflective practice, fill in the gaps in the literature, discuss practical implications for fostering reflection in the educational process of nursing, and encourage nurse educators to practice reflection as a way to examine and enhance their teaching practices.

The following questions must be addressed regarding reflective practice:

- What are the conditions necessary to foster reflection in the nursing education classroom?
- What are the nurse educators' responsibilities and risks?
- How does reflective practice affect learning outcomes?

In addressing these questions, this analysis will initially provide a brief overview of reflective practice; secondly, describe how the data-based studies were selected; thirdly, identify common themes that emerged from the studies; and finally, identify implications for reflective practice in the field of nursing education.

## OVERVIEW OF REFLECTIVE PRACTICE

Dewey first introduced the idea of reflective practice in 1933, stating that "reflective thinking is closely related to critical thinking; it is the turning over of a subject in the mind and giving it serious and consecutive consideration" (p. 3). Dewey believed that reflection is not only a rational, intellectual act but also an act that involves the whole person, including his or her emotions. Dewey identified the following three attributes of reflective individuals: open minded, responsible, and wholehearted.

While Dewey was most interested in a monologic, asocial reflective process, Habermas (1970, 1971) argued that reflective practice has a social, as well as psychological, basis that does not stop at the individual, but rather may be dialogic. In addition, Habermas (1971) believed that "reflective practice is neither educationally nor politically innocent" (p. 91).

Several key educational theorists have recognized the contributions of Dewey and Habermas and continued the analysis of reflection. van Manen (1977), Schön (1983, 1990), Boud et al. (1985), Mezirow (1990), and Brookfield (1995) have all proposed that reflection is indeed a learning tool with implications for the teaching-learning process.

van Manen (1977) identified three distinct stages of the reflective process. The first stage concerns the effective application of skills and technical knowledge in the classroom environment. This stage is primarily concerned

with analyzing the effects of the teaching strategies used. The second stage entails reflection about underlying assumptions of a specific classroom practice and its effect on student learning. This implies teachers are evaluating their actions and beliefs. The third stage, one of critical reflection, involves questioning the moral and ethical dimensions of decisions related, directly or indirectly, to the classroom situation. This is where teachers make connections between situations they encounter and the broader social, political, and economic forces that influence those actions (Yost, Sentner, & Forlenza-Bailey, 2000).

Schön (1983, 1990) argued that professionals in their everyday practice face unique and complex situations, which are unsolvable by technical, rational approaches alone. Consequently, he posited an approach whereby professional learning could be facilitated by reflection. He differentiated among three different methods of reflection: reflection-in-action, reflection-on-action, and reflection-for-action. Schön (1990) stated that reflection-in-action is a spontaneous reflection in the midst of the action itself, also known as "thinking on your feet" (p. 26). Schön felt it is intuitive knowing implicit in the action that shapes "what we are doing when we are doing it" (Schön, 1990, p. 26). He went on to identify three salient features of reflection-in-action. First, reflection is conscious, although not often able to be articulated. Second, it is critical, and third, it gives rise to spontaneous, on-the-spot experimentation. In contrast, reflection-on-action involves thinking through a situation after it has happened. In this method, one consciously returns to the experience to reevaluate and decide what needs to be done differently. Reflection-for-action is the desired outcome of the first two methods of reflection and engages one in reflection to guide future action.

In defining reflective practice, Boud et al. (1985) described the analysis of feelings and knowledge, emphasizing the significance of using positive feelings and removing obstructive feelings. The authors proposed four terms to exemplify the process of reflection: association, integration, validation, and appropriation. In the context of learning, they believed reflection is a "generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations" (Boud et al., 1985, p. 23).

Mezirow (1990) identified six hierarchical levels of reflectivity (i.e., discriminant, judgmental, conceptual, psychic, theoretical, affective). Discriminant reflectivity is assessing the effectiveness of one's perceptions and being able to identify the reason one is reacting in a particular way and which relationships affect one's actions. Judgmental reflectivity is realizing that all individuals value judgments about perceptions. Conceptual reflectivity is the ability to critique one's own actions, and psychic reflectivity is acknowledging that one judges people based on limited information. Recognizing the forces that influence the way one thinks and acts, theoretical reflectivity

involves changing one's underlying assumptions, resulting in perspective transformation. Finally, affective reflectivity is becoming aware of how one feels about oneself and recognizing how one thinks and acts.

Brookfield (1995) encouraged reflective practice by examining one's practice through four complementary lenses as a way to become more attuned to the ambiguities and complexities of one's practice. These lenses are:

- One's autobiography as a learner.
- One's colleagues' perceptions, as they are "reflective mirrors" (p. 25).
- The students' eyes.
- The literature grounded in research, theory, and philosophy.

Brookfield believed reflection is important because it helps one make informed actions, develop a rationale for practice, avoid self-laceration, become emotionally grounded, enliven the classroom, and increase democratic trust.

Brookfield (2000) and Rose (1992) felt that the interest in reflective practice grew as a reaction to the technical rationality and competence-based initiatives popular in the 1970s. Nurses began to recognize that relying solely on technical and rational ways of knowing and competence-based practice was not enough to provide holistic, safe practice (Atkins & Murphy, 1993; Eccelstone, 1996; Kim, 1999; McCaugherty, 1991).

### SELECTION OF STUDIES FOR THIS REVIEW

To select studies for this review, computerized searches of the literature were performed during the spring and summer of 2002. Databases used were CINAHL, Dissertation Abstracts International, ERIC, and PsychInfo. Titles and abstracts were electronically searched for the following terms: reflective practice, reflexivity, reflective learning, and reflection. After initial articles were located, reference lists and discussions with colleagues were instrumental in locating other articles. Despite rigorous and systematic computer searches, many valuable articles were found serendipitously.

The search yielded 56 articles, 23 doctoral dissertations, and 10 books. The sample used in this review contained 20 articles, 12 dissertations, and 6 books that met the following inclusion criteria:

- Reflective practice was defined according to key theorists in the field of reflective practice, such as Dewey, van Manen, Schön, and Mezirow.
- A clearly delineated methodology section was evident.
- Emphasis was placed on reflective practice in an educational setting.
- Publication date was between 1992 and 2002.
- Publication was available in the English language.

Conceptual pieces on reflective practice were excluded from this review for three reasons: to address the paucity of data-based evidence that supports using reflective practice to promote professional development (Andrews,

1996; Paget, 2001); to assess the significance of reflection as a learning tool; and to identify research-based practical approaches for fostering reflective practice. This review was limited to the past 10 years due to the large quantity of studies in the literature and to provide the most current research on reflective practice.

A limitation of this article is that it is not an exhaustive attempt at reviewing the literature. However, it does provide examples of the recent data-based research pertaining to reflective practice during the past 10 years, allowing for current data-based studies to be compiled and overviewed.

Promoting reflective practice is based on the assumptions that one is willing and able to reflect, that one's memory is going to serve one well, and that positive outcomes are going to result from the process. Andrews (1996) asserted that implicit in reflective practice is the need to change behavior. He went on to suggest that reflective practice may pay dividends in terms of personal improvements and development in practice if one is willing to make changes.

### FINDINGS FROM THE DATA-BASED LITERATURE

Reflective practice was found to be applicable in diverse settings, beneficial, defined largely from students' perspectives, assessed primarily by qualitative methodologies, and defined in a variety of ways. These diverse settings included higher education, nursing, social work, science education, pastoral education, and management and leadership training. This diversity of educational settings confirms the range of opportunity and potential for fostering reflective practice in nursing education classrooms.

The benefits of reflective practice are many and have been widely recognized in the United States, Canada, United Kingdom, New Zealand, Australia, Finland, and Hong Kong. Studies identified positive outcomes of the reflective process as:

- Integration of theoretical concepts to practice (Davies, 1995; Scanlan, Care, & Udod, 2002; Wong et al., 1997).
- Increased learning from experience (Atkins & Murphy, 1993).
- Enhanced self-esteem through learning (Johns, 1995).
- Acceptance of professional responsibility (Johns, 1995) and continual professional growth (Coombs, 2001).
- Enhanced critical thinking and judgment making in complex and uncertain situations, based on experience and prior knowledge, thereby enhancing patient care (Brookfield, 2000; Clouder, 2000; Coombs, 2001; Mott, 1994; Smith, 1998).
- Empowerment of practitioners (Rogers, 1996).
- Increased social and political emancipation (B. Taylor, 2001).
- Improvement in practice by promoting greater self-awareness (Bonde, 1998).

- Helping students expand and develop their clinical knowledge and skills (Brown & Gillis, 1999; Day, 1993; Glaze, 2001; Hyrkas, Tarkka, & Paunonen-Ilmonen, 2001; Paget, 2001).

Although the benefits of reflective practice have been quantified, others problematize the idea of reflective practice in nursing. Lowe and Kerr (1998) used a quantitative approach to examine the learning of two nursing student groups and posited that exposure to reflective teaching methods did not increase learning or the use of reflection in the students' practice. They concluded that students learned just as well with the conventional methods of learning as they did using reflective methods. In addition, Rogers (1996) studied 529 clinical nurse teachers and found no relationship between the teachers' self-perceived engagement in reflective practice and self-appraisal of teaching effectiveness.

Interestingly, one of the most revealing findings about the different foci of these studies was that few of them assessed the reflective experiences of educators themselves (Hyrkas et al., 2001; Scanlan et al., 2002). Instead, what was found was that many studies examined reflective practice from the students' perspectives (Lowe & Kerr, 1998; Richardson & Maltby, 1995; Wong et al., 1997). Day (1993) and Jay (2001) believed this may be due to teachers' busy lives, which do not allow time for reflection, and the rationalistic culture of schools, which does not naturally encourage reflection.

The majority of the studies (87%) used a qualitative methodology, such as grounded theory (Davies, 1995; Smith, 1998), action research (B. Taylor, 2001; Wong et al., 1997), case study (Pearce, 1995; Pultorak, 1996), or ethnography (Genor, 2001). Some studies were quantitative (6%), while others used a mixed methodology (6%). The rationale for using the qualitative, rather than quantitative, approach may have been the nature of reflective practice and an attempt by the researchers to identify the meaning and uniqueness within the reflective experience for each practitioner. In addition, the quantitative approach may seem contradictory to the philosophical basis of reflection that argues against such technical, rational approaches (Duke & Appleton, 2000).

Johns and Freshwater (1998) suggested that it is an academic pastime to try to define exactly what reflective practice is and blame this desire to define things "exactly" on the rational perspective of society (i.e., an effort to "know the thing in itself" [p. 2]), thereby allowing the thing to be controlled and manipulated toward certain ends. However, Atkins and Murphy (1993) felt this lack of clarity challenges readers because it raises the question of whether all researchers share a common understanding of the term reflection, limiting the extent to which readers may make comparisons between works. Another concern regarding the lack of clarity in defining reflection is that, in practice, nurses may believe they are reflecting, when in fact they are not.

Most authors appear to agree that reflection begins with an awareness of an uncomfortable feeling. Reflective

practice involves synthesis, validation, and appropriation of knowledge, which are all integral to the reflective process and its outcomes (Boud & Walker, 1998). Reflection is not simply thinking about an event in an purposeless fashion (Burton, 2000).

### COMMON THEMES IN THE DATA-BASED LITERATURE

Several themes emerged from the literature that help answer the questions initially posed in this analysis:

- Conditions necessary for the process of reflection to be successful in nursing classrooms.
- Reflection as an ongoing process.
- The issues of time and value.
- Teaching strategies for and educator responsibilities in facilitating reflection.
- Levels of reflection and how they affect learning.
- An affective component to reflection.
- Issues related to power.
- Issues related to reflection in novice practitioners.

To validate these findings, several studies will be discussed in greater depth to provide examples of reflective practice in adult nursing education classrooms.

#### Conditions Necessary for the Process of Reflection to be Successful in Nursing Classrooms

Studies in this review demonstrated there are individual characteristics that may facilitate or impede the ability to reflect. Coombs (2001) identified flexibility, mindfulness, and creating the mood in oneself internally (i.e., being introspective and aware of one's thoughts and feelings) as "habits of the mind" (p. 10) or characteristics that promote reflection. Both Glaze (2001), in a study of advanced nurse practitioners, and Hyrkas et al. (2001), in a qualitative study of 9 teacher candidates in a master's level education class, found that reflection is not spontaneous but requires active contribution and motivation. Day (1993) stated that to be reflective one has to be imaginative and dynamic because reflection is not linear and demands creativity.

External to students, safe learning environments that are open, honest, and trusting enhance reflective practice. Davies (1995), in a grounded theory study with 6 first-year nursing students, found this to be true. Platzer, Blake, and Ashford (2000) confirmed this finding in a qualitative study examining the use of group work with RNs. They identified that the current culture or environment in which nurses and midwives work impose great barriers to reflecting on and learning from experience. In addition, previous rationalistic, educational experiences were found to be barriers to learning from reflection. These barriers affect the learners' willingness to expose themselves to others' judgment and their ability to be open to take responsibility for their own learning. Platzer et al. (2000) also found that reflective learning in a classroom may be unpleasant if other group members are not committed to it or are resistant to sharing their learning



and interacting with one another. Cotton (2001) stated that using reflective practice permits “private thoughts of nurses to enter the public sphere, where they are subject to surveillance, assessment, classification, and control” (p. 512).

### Reflection as an Ongoing Process

A second theme that emerged was that reflection is an ongoing process often initiated by a significant “trigger” event or a feeling of inner discomfort (Boyd & Fales, 1983). In a qualitative study of 12 practitioners, Mott (1994) found trigger events to be uneasy feelings or intuitive hunches that make one step back and reflect on what is happening in the situation. Mott believed intuitive ways of knowing are central to reflective practice. Bonde (1998) identified that both academic and vocational instructors viewed reflection as an ongoing process important to improving practice. Other studies also have noted the ongoing nature of reflection (Chandler, 2000; Collier, 1999; Ferry & Ross-Gordon, 1998; Glaze, 2002; McDonald, 2000; Paget, 2001).

Based on a qualitative research study involving 82 novice teachers, Pultorak (1996) posited that reflection is not only ongoing but also developmental. For 3 years Pultorak observed teachers and involved them in group work, journaling, and reflective interviews. He found that, according to van Manen’s levels of reflectivity, novice educators progressed from Level I toward Level III after they were informed of the significance and value of the reflective process and after they gained experience as an educator. Pultorak concluded that “reflectivity is a viable part in the growth and development of novice teachers” (p. 284).

### The Issues of Time and Value

Several studies identified challenges surrounding the issue of time and valuing the reflective process. Finding time to reflect (Bonde, 1998; Collier, 1999), as well as the timing of the reflection in relation to the issues being reflected on (Coombs, 2001) were identified. Is there an ideal amount of time to be allowed between the experience and the initiation of reflection? At what time during the educational process do students have the ability to reflect? In their quantitative study of RNs, Duke and Appleton (2000) found that reflective abilities developed over time and that some reflective skills are harder to achieve than others. Therefore, encouraging new students to participate in the reflective process may be unrealistic if they have had no previous experience with reflection.

Given the busy nature of nursing education and the fact that many nursing courses are content laden, finding the time to reflect, and to overcome the barriers related to reflective practice, challenges teachers and students (Teekman, 2000; Wellard & Bethune, 1996). Regarding time and valuing the reflective process, educators themselves do not take the time to pause and reflect, primarily because they do not see the value in taking the time to do this, either educationally or personally.

### Teaching Strategies for and Educator Responsibilities in Facilitating Reflection

Journal writing (Burrows, 1998; Hiemstra, 2001), reflective teaching portfolios (Huebner, 1997), and dialogue (i.e., a form of reflective conversation) (Chandler, 2000) are common strategies used to promote reflective learning. Paget (2001), Sax (1999), and Scanlan et al. (2002) found that when many strategies are used together they elicit reflection and help students make connections between content and practice. Wolf and Langner (2000) used stories and poems; Brown and Gillis (1999) used reflective thinking to develop personal professional philosophies; and Chandler (2000) used reflective conversation about educators’ own practices and social situations to foster technical, contextual, and social reflection.

As a result of a qualitative study using grounded theory to examine 6 first-year nursing students, Davies (1995) identified that “the reflective processes of clinical debriefing and journaling did impact the environment, the process, and the focus of learning” (p. 167). She also found that anxiety was reduced through peer support and cooperation. In addition, students moved from passive learning to more active learning when these strategies were implemented.

Nurse educators have many responsibilities in fostering the reflective process. They must begin by first seeing value and relevance in the reflective process. Second, they must explain the purpose of reflective practice and create an environment in the classroom and clinical settings that is safe so reflective practice will be increased. Third, Wong et al. (1997) suggested that teachers and students should be partners in the promotion of reflective learning, thereby fostering a collaborative effort to meet the established goals. Finally, time should be set aside not only for students but also for educators to reflect on their practice.

### Levels of Reflection and How They Affect Learning

Several of the studies reviewed for this article verified the levels of the reflective process as first defined by Boud et al. (1985), Mezirow (1981), Schön (1991), and van Manen (1977). In a qualitative study on conversation as a way of knowing, Chandler (2000) found that conversations moved from technical to interpretive (or contextual) and then finally to critical levels when reflecting on educational practices. Wong, Kember, Chung, and Yan (1995) found that reflective journals submitted by students evidenced three levels of reflection: nonreflector, reflector, and critical reflector. The nonreflectors, although very descriptive, reported only what happened. They did not demonstrate awareness of contextual factors and tended to be concrete, offering minimal evidence of abstract thinking. The reflectors attended to feelings, association, and integration. The critical reflectors were students who had attained reflection at the level of validation, appropriation, and/or outcome of reflection. Students in this category continuously examined the experience and themselves in a critical manner.

In a qualitative study of 6 high school principals, Coombs (2001) suggested the levels of reflective process be considered in terms of these developmental phases: suggestion, problem, hypothesis, reasoning, and testing.

### **An Affective Component to Reflection**

Another finding that continues to build on the qualities of reflection is the affective component of reflection. Affective learning, including emotions, feelings, and intuition, was found to be essential in many studies (Clouder, 2000; Collier, 1999; Duke & Appleton, 2000; Glaze, 2001; Johns, 1995; Mott, 1994; Sax, 1999). According to Brookfield (2000), critical thinking is a process of active inquiry that combines reflective analysis with informed action and has an emotive or affective component that is pivotal to the process. Brookfield contended that emotions are essential to the process of critical reflection. Yet, when discussing cognitive process, emotions and feelings are often denigrated in educational settings, despite their qualifying nature in the process of reason (Damasio, 1994; Goleman, 1995; LeDoux, 1998; E.W. Taylor, 2001). Davies (1995) stated that reflection is a complex process in which feelings and cognition are closely linked. Dewey (1933), Mezirow (1981), and Schön (1983) all confirmed that reflection is more than a cognitive process and involves emotions and feelings.

In many of the studies examined for this article, both emotions and reason were found to affect reflective practice. Atkins and Murphy (1993) posited that the internal environment of the individual who is reflecting must be in a mindful state to allow identification of feelings and emotions. Scanlan et al. (2002) performed a qualitative study to unravel the unknowns about reflective practice in classroom nursing education and found that emotions highly influenced reflection.

When fostering critical reflection, nurse educators must also foster affective learning and ways of knowing. They must recognize that affective ways of knowing are helpful during times of uncertainty and conflict, when rational ways of knowing are less informative.

### **Issues Related to Power**

Issues related to power between teachers and students are real and may present some obstacles to those interested in reflective practice. Brookfield (2000) noted that power is omnipresent in adult classrooms, inscribed in the practices and processes that define the field. He stated that the flow of power can be redirected, but it can never be denied or erased. Critical reflection on practice, as defined by Brookfield (2000), should focus on uncovering submerged power issues, as well as hegemonic assumptions that influence one's practice.

Because education is a social interaction between individuals, it is likely that teachers' and students' values and opinions will differ. How is this addressed if one is attempting to foster reflective practice? Argyris and Schön (1974) suggested that reflection should be open; involve genuine thoughts and feelings, both positive and

negative; and be firmly derived from personal and professional integrity and honesty. Based on these suggestions, how do nurse educators evaluate reflective practice? Should reflective assignments be evaluated and graded?

Wellard and Bethune (1996) addressed grading and issues of power in their study using the lenses of critical pedagogy and feminist poststructuralism. They believed reflective journaling is problematic when used as a pedagogical strategy. One of the problems they found was grading journal entries. Therefore, they moved away from grading the journals and, instead, provided feedback with written comments. In addition, because students were given a voice in the process of journal writing, the authors had several power relationships with which to cope. After students' journals are written, their real concerns are how educators are going to accept the information; how honest they can be; and how educators can hold this information against them.

Cotton (2001) argued that little attention has been paid to the negative aspects of reflection and that "conceptualizations of reflection are ambiguous and confusing and entail repressive forms of power that effectively silence and devalue individuals and groups that are viewed as marginal to the dominant discourse" (p. 518). Cotton contended that there is a need to problematize reflection as a historically and culturally specific construct to recognize the diversity of reflection among various individuals. Although negative aspects of reflective practice were discussed in several studies, they were not the main focus of any studies.

Page and Meerabeau (2000) noted that private issues may be inappropriate for reflection in a classroom, and Doty (2001) indicated there are ethical issues that should be addressed, such as inappropriate disclosure. In addition, Duke and Appleton (2000) indicated it may be problematic if students reflects beyond the teachers' expertise.

Another issue of power identified in these studies was the excessive use of educator power. Ferry and Ross-Gordon (1998) found that educators may pursue their personal agendas at the learners' expense. Educators also must realize their perspective is not the only perspective and recognize they may also learn from their students.

### **Issues Related to Reflection in Novice Practitioners**

Schön (1990) posited that reflective practice is a critical process by which beginners in a discipline can recognize consonance between their individual practices and those of successful practitioners. From the studies examined for this article, it appears that novice nurse educators neither value the reflective process nor see it as significant in improving their practice (Pultorak, 1996).

Several studies suggested reasons novice educators do not practice reflection. Novice educators may be:

- Mandated to participate in reflective practice as a way to evidence the ways their practice meets the standards set forth by their professional associations (Hardingham, 2001).

- Encouraged to practice a particular teaching approach that is poorly defined and understood, especially in a classroom teaching environment.
- Too busy and lack the time to reflect.
- Influenced by school cultures that do not encourage reflection (Day, 1993).
- Unable to see the results of reflective practice being acted on or prioritized (Page & Meerabeau, 2000).

Collier (1999) conducted a qualitative study of students during their student-teaching experience and found that 75% of them typically functioned from a reactive, rather than proactive, stance and, consequently, only participated in reflection if there was a problem. Therefore, Collier challenged teacher educators to capitalize on the university philosophy that educators are reflective decision makers who facilitate student learning. She found that experienced educators must orient and “sensitize” novice educators to be active, critical, and progressive reflective thinkers, and suggested that teacher education programs prepare individuals to reflect on their practice in the broader context of an ever-evolving personal worldview of teaching and learning. By doing this, novice educators may gain a more holistic perspective of their practice, as well as an understanding of what it is that guides their actions (Collier, 1999).

The studies reviewed in this article recommend that reflection begin with novice educators. Although few researchers examined the development of reflectivity in novice educators, many studies suggest novice educators can critically and holistically reflect and can be helped to learn the value of reflection in teaching and learning (Loughran, 2002; Pultorak, 1996) by using reflective journals (Hiemstra, 2001), reflective interviews (Durgahee, 1996), peer-observation conferences (Jay, 2001), and group seminars (Snowball, Ross, & Murphy, 1994).

As novice educators gain experience, they become able to move from accepting information to questioning and critiquing arguments, and become active learners (Duke & Appleton, 2000; Glaze, 2002). This process involves a questioning of practice, which is risky, may be painful and stressful, and is not easy. However, Argyris and Schön (1974) contended that this process promotes individual accountability.

### DISCUSSION AND IMPLICATIONS FOR NURSING EDUCATION

This analysis suggests nurse educators have the potential to facilitate reflective practice in both their students and themselves. When educators maintain trust, create a collaborative relationship with learners, focus on learner-centered education, engage learners both cognitively as well as affectively, and have sufficient classroom time, learners will be ready for reflection.

Although many issues related to reflective practice were addressed in this article, Higgins (2001) believed reflective practice is “blind to moral issues” and suggested moving toward cultivating a “practical wisdom” (simi-

lar to Aristotle’s *phronesis*) that addresses the moral and ethical issues previously neglected by Schön. Bleakley (1999) suggested moving toward holistic reflexivity, critical reflexivity, or reflexive awareness, to reformulate reflection as action and consider the ethical components previously not brought into focus.

### STRATEGIES FOR NURSING EDUCATION

What does all this mean for the teaching-learning process of nursing students? Nurse educators may begin by stepping back and embarking on their own reflective journeys to identify what guides their practice. Before nurse educators can facilitate reflective practice in their students, they must first believe in the value of reflective practice and then act as role models for their students and colleagues. Several studies reviewed for this article noted how expert practitioners’ role modeling of reflective practice was found to significantly affect practice (Coombs, 2001; Davies, 1995; Doty, 2001; Ferry & Ross-Gordon, 1998; Genor, 2001).

Nurse educators who understand that students are able to critically engage in an accurate analysis of the world, thereby gaining a greater understanding, political clarity, and self-awareness (Brookfield, 2000), are better able to prepare students for the complex world of nursing practice. Educators who define reflective practice, facilitate safe environments, openly communicate with students, and recognize the key to reflective practice is for students to recognize its value are more successful at facilitating reflection in their classrooms. However, at the same time, educators must not assume students know how to reflect, and must realize it is not easy to do. Students require guidance about how to be reflective. In addition, nurse educators who recognize that reflective practice is not the same as thinking, does not always lead to learning, and requires making judgments about what actions will be taken in a given situation were also found to be more successful, as evidenced in the studies reviewed.

Although everyone has the ability to be reflective (Schön, 1983), it is important for nurse educators to recognize that reflective practice may only work for some or in some contexts. Therefore, reflective practice should not be considered the only way to improve performance (Clouder, 2000).

Finally, a challenge for nurse educators is to stop requiring students to list or talk about their reflective journeys in a linear, modernist way. Instead, it is recommended that nurse educators take a more postmodernist perspective in which students are free to express their reflective journeys creatively in ways that makes sense to them.

### FUTURE RESEARCH

This article demonstrated that reflective practice is underresearched (Wilkinson, 1999). Future research must continue where these studies left off and examine



reflective practice from holistic, multidisciplinary, multicultural perspectives that also recognize the affective component of reflection. Studies must address the issues raised in this article and identify ethical considerations, power issues, and learning when incorporating reflective practice in nursing education classrooms.

Another concern not addressed in any of the studies analyzed is that one may only reflect on what one is consciously aware of, so reflective practice, as it currently stands, does not consider learning that occurs outside one's conscious awareness. Therefore, more research is needed to understand the role of unconscious knowing and how the reflective process affects it.

Using alternative designs and methods may also be helpful in augmenting the knowledge base regarding reflective practice. Expanding the use of quantitative approaches may help test the issues raised in this article and other conclusions drawn from the findings of qualitative studies. Hypothesis testing may be useful to identify the relationship between reflective practice and developmental stages of adult learners. In addition, how does previous experience affect the ability to be reflective? Instruments, such as the reflective marking grid developed by Duke and Appleton (2000), the levels of reflection described by Boud et al. (1985), and the questionnaire developed by Paget (2001) and grounded in the theory of Mezirow, may also be helpful.

The majority of the studies examined explored reflective practice from within the dominant ideologies. Only two studies used a feminist poststructural lens (Sharkey, 2000; Wellard & Bethune, 1996). Although there is growing influence of postmodern thought, it is surprising there were not more studies that examined reflective practice through different lenses. Other theoretical perspectives, such as feminist theory and critical theory, may also shed light on reflective practice. By exploring the social context, power issues, and sociocultural perspectives with these lenses, one may gain broadened insights into how reflection is evidenced in practice.

In the field of adult education, reflection has been widely addressed in the literature, but few authors provide a holistic view of reflection. Despite the search for empirical studies, most of the available literature remains theoretical. Therefore, educators must begin to conduct research in their own practice settings to determine the outcomes of the reflective process.

## CONCLUSION

During the past 12 years, reflective practice has been one of the most promoted subjects at adult nursing education conferences, in journals, and in professional education arenas. Reflection is an effective teaching method that facilitates assessment of past experiences and underlying assumptions, and helps nurse educators and practitioners identify what guides their practice. In addition, reflection helps narrow the gap between theory and practice, ultimately enhancing practice.

Before progressing into the future, nurse educators must reflect on the past to clarify this vague process and identify essential practices for reflection to be fostered in nursing education classrooms, as well as nursing practice. Reflective practice is a challenge not only to educators but also to students. In an effort to rise to this challenge of educating and promoting reflective practice, nurse educators must value the implications of reflection for improving practice and understand, transfer, and apply reflection from its theoretical origins to the practice arena.

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Table with multiple columns and rows, containing text that is mostly illegible due to heavy redaction or scanning artifacts.

Category	Value	Value
1. Total number of students	100	100
2. Number of students who completed the course	95	95
3. Number of students who passed the course	90	90
4. Number of students who failed the course	5	5
5. Number of students who dropped the course	5	5
6. Number of students who were absent	10	10
7. Number of students who were on probation	2	2
8. Number of students who were on suspension	1	1
9. Number of students who were on withdrawal	1	1
10. Number of students who were on medical leave	1	1
11. Number of students who were on sabbatical	0	0
12. Number of students who were on other leave	0	0
13. Number of students who were on other status	0	0
14. Number of students who were on other status	0	0
15. Number of students who were on other status	0	0