

Pedagogy of reflective writing in professional education

Lisa McGuire¹, Kathy Lay², and Jon Peters³

Abstract: Educators in professional programs are challenged to utilize pedagogical approaches that best prepare students with knowledge, values, and skills for professional practice. Providing academic content alone may not provide the problem-solving skills necessary for practice in a complex world in which practitioners must analyze, evaluate, and revise knowledge. Thus, reflective process becomes a core skill for functioning effectively in a diverse and complex practice environment. Analysis of data from focus groups with social work students is presented. Implications for using reflective writing are discussed as a pedagogical tool for preparing students for professional practice.

Keywords: professional education, reflective writing

I. Introduction.

Professions such as social work, nursing, medicine, education, and others face myriad challenges as society continues into the twenty-first century. The complexity of social problems encountered by professionals demands the evaluation of information from multiple sources as well as the ability to translate knowledge into action. Higher education is charged with the task to prepare professionals with the ability to develop skills in practical reasoning in order to make sound professional judgments (Sullivan and Rosin, 2008). This paper examines the pedagogy of reflective writing from one professional discipline, social work. Social work *practitioners*, for example, are challenged with promoting the well-being of society through social change (NASW, 1999). Social work *educators* are challenged to promote life-long learning that embraces knowledge and skills for professional practice (CSWE, 2001). This has implications for educators from other professional disciplines.

Educators in professional programs must use pedagogical approaches that prepare students with knowledge, values, and skills to meet the emerging challenges for practices in their respective fields.

The best professional pedagogies develop informed practical judgment that students will need in their careers by introducing them to the traditions of knowing and acting that distinguish their future professions. These pedagogies create bridges between theoretical knowledge and the demands of uncertain situations (Sullivan and Rosin, 2008, p. 45). Mere exposure to content does not instill learning that provides the sophisticated problem-solving needed in a complex world where practitioners must continually analyze, evaluate, and revise knowledge in the context of ongoing practice experiences (Weimer, 2002). Reflection, therefore, becomes a critical skill for functioning effectively in diverse and complex practice realities.

Scholars (Dewey, 1910; Freire, 1973; Knowles, 1980; Kolb, 1983; and Schön, 1983) have examined learning processes such as experiential learning, adult learning and reflective processes in higher education. These works provide educators with a framework for facilitating

¹ Indiana University School of Social Work, 902 W. New York Street, Indianapolis, IN 46202, lmcguir@iupui.edu.

² kalay@iupui.edu.

³ jonpeter@iupui.edu.

learning processes in the classroom. However, helping students integrate knowledge with the realities of practice continues to challenge educators across professional disciplines (Burnett, Phillips, and Ker, 2008; Kinchin, 2008; Ireland, 2008; Knight, 2001). The process of analyzing and integrating knowledge through reflection processes is a lifelong learning skill for all professional disciplines, including social work (Lay, McGuire, and Grise-Owens, 2006).

One pedagogical strategy educators of professionals may utilize for encouraging self-reflection and critical thinking is the *reflection paper*. “Reflective writing ... focuses on the writer’s learning experience itself and attempts to identify the significance and meaning of a given learning experience, primarily for the writer” (Fink, 2003, p. 117). In higher education, the term paper has traditionally been the standard (and sometimes only) product to demonstrate the outcomes of student learning. Although such an assignment may well demonstrate knowledge in a particular content area, it may not require students to be able to develop insights into their own biases or demonstrate the ability to integrate that knowledge with the specific application in actual practice. Reflective writing has the potential to facilitate both self-reflection and integration of theory and practice. It also shows promise in assisting students in identifying the connection between personal experiences and professional values (Walmsley and Birkbeck, 2006).

However, not all reflection is created equal. Educators have been interested in the development of reflection as a part of higher-order thinking in intellectual development (Perry, 1970). Yet, reflection is not often defined in a way that provides educators and learners with a structure for thinking or clear guidelines for evaluation (Brookfield, 1995; Fisher, 2003). When asked to write reflectively, educators and learners may associate it with free thinking, without structure or purpose. Although unstructured reflection may be useful, it does not explicitly prepare the learner with the analytical skills necessary for practice in a complex world. Reflection that *prepares* includes, “...a process of critical examination that involves challenging assumptions, testing the logic of conclusions, considering multiple perspectives—not merely identifying facts and feelings...”(Clayton, Ash, Bullard, Bullock, Moses, et al, 2005, p. 14).

This paper provides a theoretical framework for using reflection papers across the professional social work curriculum that provides structure and encourages critical thinking. Results from student focus groups on reflective writing are presented, providing preliminary evidence for the usefulness of this pedagogical strategy.

II. Theoretical Framework.

Concepts of reflective learning are not new to the pedagogical discourse on higher education. Dewey (1910) defined reflective thought as “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (p. 6). The theoretical framework to support the pedagogical strategy of reflection papers includes: 1) concepts of adult education; 2) experiential learning; and 3) critical thinking in writing.

A. Adult Education

Concepts of adult education are relevant to professional disciplines in that often students tend to be non-traditional. For example, 60% of full-time and 70% of part-time graduate social work students are over the age of twenty-five (CSWE, 2007). In addition, approximately 33% of

all undergraduate social work students are over twenty-five (CSWE, 2007). These adult learners bring a wealth of experience to their professional education that may be maximized through reflective writing.

Traditional models of education have utilized a “banking model” (Friere, 1973, p. 72) where the student is viewed as an empty vessel to be filled with academic content by the expert teacher. However, Friere (1973) challenged the traditional roles of student and teacher, emphasizing collaboration between co-learners. Concepts of dialogue and reflection are significant in a Friirian (1973) model of adult education. Knowles (1980) underscores the importance of andragogy and the active involvement of the student in the learning process. Learning then must be mutual, reciprocal, and simultaneous (Roche, Dewees, Trailweaver, Alexander, Cuddy, and Handy, 1999) and this is particularly relevant for the adult learner.

Boud (2001) highlighted the importance of reflection in the learning process for adults by positing that:

...learning is always grounded in prior experience and that any attempt to promote new learning must take into account that experience. All learning builds on existing perceptions and frameworks of understanding; therefore, links must be made between what is new and what already exists if learners are to make sense of what is happening to them (p. 11-12).

Reflective processes that identify and explore those links should be emphasized in teaching adult learners. “An essential teaching task is to develop connections between the “abstract world” of concepts with the “real world” of personal experiences” (Gitterman, 2004, p. 96). Adult learners require an opportunity to examine their experience in the context of a dialogic process (Knowles, 1980). For example, social work students who have previous experience working in public child welfare may have been utilizing theoretically based interventions for many years without knowing or understanding the theory from which they were derived.

B. Experiential Learning

Inclusive of the literature on adult education, experiential learning provides an additional conceptualization of reflection in the learning process. Professional educational programs share the requirement of practicums and internships to prepare students to connect theoretical knowledge with practice. The roots of social work education are firmly grounded in the apprenticeship model (Frumkin and Lloyd, 1995) and practical experience is emphasized through the requirement of substantial practica hours at both the undergraduate and graduate levels. Thus, theories and concepts of experiential learning are historically central to the pedagogy of social work education.

Schön (1983) provided a link between experience and reflection for the education of professionals. He posited the implicit nature of reflection within the reflection-in-action process across many professions. “Reflection-in-action” (p. 49) has been integrated by social work educators as an accurate representation of how social work professionals operate in the “swampy lowland” (p. 42) of practice. Schön identified the gap between those realities of practice and the seemingly sure knowledge of the academy. Like other professions, social work has struggled to connect academic content to complex realities of practice. Reflection facilitates the continuous integration of knowledge, experience, and action.

C. Writing and Critical Thinking

In addition to the frameworks of adult learning and experiential education, another relevant area of literature is critical thinking and writing skills as a means to enhance learning in higher education. Critical thinking is a requirement for professional practice across disciplines. It may be defined as “the art of analyzing and evaluating thinking with a view to improving it” (Paul and Elder, 2006, p. 4). This requires reflection on thinking processes. As critical thinking has increasingly become a focus of undergraduate education through the general curriculum, professional programs may find students coming to their disciplines with critical thinking skills. However, educators are challenged to make expectations for critical thinking explicit in writing assignments and “...adopt teaching strategies that give students repeated, active practice at exploring disciplinary questions and problems” (Bean, 1996, p. 35).

Basic writing skills are also necessary for professional practice across disciplines and therefore, a requirement for professional education. Writing documents thinking processes for the purpose of examination. Fink (2003) has identified two types of writing for powerful college teaching: substantive writing, such as a term paper or essay, and reflective writing. Both in social work and adult education areas, the use of journals or diaries to promote reflection have been suggested (Boud, 2001; Cullen, 1981; Sullivan and Bibus, 1990). Most of the tools identified previously are more student-directed and unstructured. These types of assignments allow students to have a broad focus however, lack of structure and focus in reflective writing is not likely to promote critical thinking (Brookfield, 1995).

The literature on adult education, experiential learning, and critical thinking/writing skills provide a theoretical framework for the utilization of reflective writing as a pedagogical strategy. The nature of professional disciplines requires practical connections between academic content and diverse practice settings. Adult learners, who are well-represented in both undergraduate and graduate professional education, benefit from opportunities to connect their life experiences to new academic content from classroom and field assignments. Reflective writing provides opportunities to integrate student thoughts and experiences with academic content. Thus writing and critical thinking may become linked in the teaching-learning process. Reflection papers may challenge students to utilize and improve their critical thinking skills for professional practice. This study sought to further illuminate the learning process in reflective writing from the student perspective.

III. Methodology.

The authors have utilized reflective writing as one among many pedagogical strategies. In reviewing feedback from university course evaluations for the past five years, the use of the reflection papers was often mentioned as a positive learning experience for students and facilitated integration of course content and reflective learning. However, it was not possible from the responses to open-ended questions from the course evaluations to determine why or how the reflection papers were effective in facilitating student learning. Therefore, a primary purpose of this study was to gain further clarification about how reflection papers may facilitate learning in the classroom setting.

This study focuses on student learning processes as related to reflection papers. For the purpose of this study, a reflection paper is defined as a reflective writing assignment that is focused upon a specific activity (a reading or group of readings, video, service learning,

practicum, role play, guest speaker, group activity, etc.) that highlights the student's learning from that activity.

Qualitative research methods, which included self-reflection and focus groups, were utilized in this study to gather and analyze information about reflection papers as a pedagogical strategy (Patton, 1990; Fook, 1996). In the spirit of reflective research (Fook, 1996), the authors began the process of studying the use of reflection papers by self-reflecting on the pedagogical purposes for utilizing them in social work courses. We identified multiple purposes, including: enhancing writing skills, dialoguing between professor and student on issues of difference and power, documenting student learning in experiential activities, and encouraging completion of reading assignments.

After reviewing course evaluations and completing the self-reflection process, questions were developed for focus groups to be conducted with students who had written reflection papers in social work courses. Research questions focused on how reflection papers facilitated student learning of knowledge, values and skills for social work practice. Questions included: "In what ways have reflection papers facilitated your learning experience?"; "In what ways did reflection papers help you to build your skills as a social worker?"; "In what ways did reflection papers help you to learn about social work values and ethics?"; "What were the drawbacks to using reflection papers?"; and "Is there anything else you would like to say about using reflection papers in social work classes?"

The research was approved by the university Institutional Review Board. Students from three courses were invited to participate in the focus groups after completing coursework where reflection papers were used as a teaching tool. These courses cut across curricular areas such as theory, practice and policy and included one 300-level undergraduate course and two graduate courses. The total number of students in these courses was thirty and all were invited to participate in the focus groups via an announcement in classes.

Three focus groups were facilitated by one of the authors who was NOT the instructor of the respondents. Discussions were audio recorded and transcribed. Authors independently conducted a content analysis (Weber, 1990; Padgett, 1998) on the full transcripts. This process included a line by line coding and subsequent grouping into categories as "meaning units" (Padgett, 1998, p. 76). The collaborative analyses included both inductive and deductive processes (Padgett, 1998) with end result being the final seven themes.

IV. Focus Group Result: The Student's Voice.

Three focus groups were conducted with a total of thirteen participants (n=13). Participants included males and females, undergraduate and graduate students from full, as well as part-time social work programs. All participants had recently completed a social work course in which one of the instructors assigned multiple reflection papers. Results from the qualitative evaluation of the utilization of reflection papers in social work education identified the following seven themes: 1) active participation/ classroom management; 2) dialogue with instructor; 3.) critical thinking; 4.) interconnections of theory to practice; 5.) professional identity/values clarification/self-awareness; 6.) improving written communication skills; 7.) and concerns with grading. Direct quotes from student respondents will be presented to support the identification of these themes.

A. Active participation in the course.

As the authors had identified in personal reflections on reasons for using reflection papers in many courses, students indicated that the papers facilitated their participation and engagement in course materials, both assigned readings and overall reflection.

“The reflection paper gave me my own way of participating in the class and not necessarily having to, ... if I didn’t have anything to say, it might look like I wasn’t participating, but then my reflection paper gave me another chance to say my piece...”

“...it helped me to keep in check and balance to make sure that I’ve been reading”

Adult learning theory supports the importance of active involvement in the learning process (Knowles, 1980). Social work students, as adult learners, bring a number of experiences, both personal and professional, that become the back-drop for their learning new content around social work values, knowledge and skills. For some students, this new learning may mean “undoing” old ways of working with clients or challenging values of traditional agency systems (Knowles, Holton, and Swanson, 2005). Reflection papers offer the opportunity for participation to every student, not just those who are comfortable speaking out in class. Reflection papers also provide a mechanism to encourage timely completion of course reading assignments which in turn facilitates learning.

B. Professional Identity/Values Clarification/Self-awareness.

The reflection papers had a clear role in facilitating self-awareness and an exploration of values/ethical issues for student respondents. Both of these are important aspects in the development of an identity as a professional social worker (Baretti, 2004).

“I think it has made me more aware of the things I do personally ... I guess a better understanding of myself in social work”

[The reflection paper]”... helped for me to define what my ethics were, when I was writing it.”

“I think in a few reflection papers, I monitored myself very carefully ... it helped me bring about an awareness because it was an area where I had a bias ...but knowing that someone else was going to read my thoughts – I didn’t change my thoughts, it’s just that I changed the way I presented them which helped me to change the way I think about the situation. Yeah.”

“It’s the nature of the reflection paper that allows you to, if you want to, to look pretty closely at yourself.”

“...it’s harder to do that but yet you learn more when you have to look at yourself as opposed to saying go research this topic and then write just a black and white paper.”

Professional education programs are concerned with the development a professional identity and the role reflection plays in its development (Clandinin and Cave, 2008; Urzua and

Vasquez, 2008; and Warnock, 2008). In social work, CSWE (2001) mandates that curricula include content on history of the profession, social values and ethics, diversity, and intensive practica during which students are required to participate in a professional mentorship process. This content is designed to promote the development of a professional identity. Despite expectations for social work education to provide professional socialization, there is little research that defines the concept of professional identity or seeks to understand it as a holistic process (Barretti, 2004). Some attention has been placed on the development and evaluation of value shifts that are expected to occur during social work education, however it is not clear as to how a professional identity develops (Abbott, 1988; Judah, 1976; Landau, 1999; Pike, 1996; Varley, 1966). Reflection papers seemed to have offered this opportunity for students to explore their professional identity, as evidenced by their comments above.

C. Personal Narrative/Dialogue with the Instructor.

Students appreciated the opportunity to dialogue with the instructor on challenging issues. They clearly listened to and appreciated the feedback offered by the instructor and the feedback provided reinforcement for the reflection process.

“I was surprised when I got the first one back on how many concepts she underlined and the details she made ... she actually went back and read it. And that also kept me alert to the quality of the paper I was turning in...”

...but I think that when you go back into graduate school, it should be learning and discussion through open dialog, and not just lecture, test, because that’s not, I mean that’s just retaining information to pass a grade, whereas reflections is, even if it’s not verbal dialog, it’s written and so you’re kind of exploring ideas, which I think is what graduate school should be about.”

“I guess the only thing I would say to (instructor) was that I mean that I’m glad that we do the feedback – that she gives us feedback from the reflection paper. I don’t think you could do a reflection paper and not have feedback because I think that would just like defeat the whole purpose. You wouldn’t even put the thought into it. And there were a lot of times where you know, her comments and stuff, even though they weren’t directed to the answer, you know they were put in the form of a question. “Ahh, yeah! I didn’t think about that!” And I would start to really think about something more deeply.”

To the extent that professional socialization is facilitated by meaningful dialogue with instructors around course products, reflective writing provides a vehicle for enriching socialization. Reflective writings in this case were focused on relevant readings and topical areas of the students’ current courses. In addition to expanding intellectual involvement with the material, engagement with course content was deepened through feedback on the writings. Students initially reflected on and developed analyses of topical areas and were then guided in deepening both their self-awareness and level and breadth of analysis through specific feedback from the instructor.

D. Critical Thinking.

Related to the earlier discussion on dialogue and narrative, student respondents seemed to value taking a second, and hopefully, more in-depth look at both what they were reading and their experiences in classroom activities, as well as their life experiences. Often, this process involved thinking critically about classroom concepts and deciding whether the classroom material made sense to them in light of their current or previous life experiences.

“I had to really reach down and find out what – what I would do and what I think”

“Well, I guess for me it helped with the information such as the readings because I tend to read really quick and then like let the story barely sink in. And then if I have to sit down and actually put it in writing, I also would go back and look at it so I’d know how it applied to me”

[The reflection paper] *“... kind of forces you to not only think critically, but forces you to almost have a stance, an opinion, and elaborate it.”*

Specific to the education of professional social workers, critical thinking has been added to the Educational Policy and Accreditation Standards of the Council on Social Work Education (2001). Gambrill (2005) has written a comprehensive text on critical thinking for clinical social work practice and Gibbs and Gambrill (1999) provided a workbook for social work education. It is difficult to know how social work education programs are implementing and monitoring the use of critical thinking skills among social work students. However, the reflection papers did appear to generally encourage deeper thought on course content.

E. Interconnections of theory to practice.

Consistent with the authors’ expectations regarding the utilization of reflection papers, students reflected the importance of integrating theoretical content with actual practice, whether it was combining the assigned theory with previous, current or even hypothetical clients. Students articulated the process of applying theoretical materials to personal or practice situations.

“...it helped me to figure out the situation and how to handle it using the step-by-step model and some of the steps we’ve had have given me more of a sense of control over things”

“application of the model because when we have a discussion paper on chapters, I tend to pick out solid points in the text on the how-to’s and then give a reflection on how I might have tried it”

Adult learners bring prior personal and professional experiences to their educational process so that both adult education and experiential learning theories would predict that providing the opportunity to make connections would enhance the learning of students. The reflection papers support and enhance this process by providing a focused opportunity with the “supervision” of the classroom instructor, which may be a precursor or concurrent learning experience for the practicum.

F. Improving written communication skills.

Although this theme was less pronounced than some areas, students indicated that the reflection papers facilitated academic writing skills, including APA style and learning to use of professional language.

"I turned out a 5-page paper one time ... I couldn't stop myself from writing because she wouldn't get the whole picture... But then I thought ... never write more than two pages."

"...it helped you get your feet wet writing again."

"It made us communicate, well, better, I think. It's supposed to be deep thought, contemplation, and once you know your values, you can articulate, gain concepts and articulate the knowledge."

"I thought it was the purpose of the reflection papers to...practice your writing skills and use it as kind of a playing field for APA... testing the waters about how to write in that style...."

Educators are challenged to involve a range of students who bring a wealth of lived experience to the professions, but may not have had primary/secondary educational experiences that challenged them to think and write critically. Also, students who return to the academy after many years of employment may face challenges in academic writing. Previous findings in social work education indicate that a substantial percentage of social work students struggle with writing (Alter and Adkins, 2001; 2006). Reflection papers may provide an opportunity for students to enhance their basic writing skills. It is important to note that some of the respondents in this study were discussing their experiences in their first graduate course, where the use of reflection papers explicitly had the intent of allowing students multiple opportunities over the semester to practice and improve their academic writing skills through multiple reflective writing assignments.

G. Concerns with Grading.

The first six categories identified positive aspects of the use of reflection papers. However, one negative category emerged: a concern with how the papers were evaluated and how grades were calculated for these writing assignments.

"...it would have been easier if all of the reflection papers would have been graded on a scale of one to ten, that way we could better assess how we were doing"

"I don't see where the critical grading, critique, etc. was consistent across the semester."

"She needs a rubric, that's what I am saying."

Initially, reflection papers were not numerically graded, based upon literature that identified a model of low-stakes writing where grading may interfere with the learning process (McKeachie, 2006). They were evaluated on a pass/fail basis and extensive feedback was given to encourage the reflection process; however, this approach seemed to be a concern for some

students who preferred more specific performance guidelines and scoring. The literature on teaching in higher education has struggled to provide criteria for judging writing and has debated the effectiveness of the use of scoring guides/rubrics (Bean, 1996; Mertler, 2001). Rubrics or scoring guides facilitate specific performance criteria as well as grading scales for students and instructors to evaluate learning (Mertler, 2001; Richlin, 2006) from writing assignments.

V. Discussion.

Students articulated the value of reflection for their learning, identifying the benefits of encouraging active learning, promoting self-awareness and professional identify, encouraging narrative and dialogue with instructor, facilitating critical thinking, clarifying interconnections of theory to practice, and developing professional writing skills. In addition, they identified concerns with how reflection papers were evaluated and graded. After reviewing the results, the authors also noted that reflection assignments did not consistently yield the full range of benefits identified by the participants. In continuing to employ the pedagogical strategy of reflective writing, the authors experimented with ways to increase the effectiveness of critical thinking to enhance learning. From these efforts, three strategies have emerged which appear to facilitate the reflective process to enhance learning: (a) structuring the assignment in order to facilitate the integration of experience and academic content, (b) the development of rubrics, and (c) fostering dialogue between student and instructor.

Structuring of the reflection process appears to be requisite for maximizing the positive qualities identified by students and also providing rigor that facilitates evaluation. This structuring includes providing specific prompts or questions to focus student examination of issues most relevant to course content. For example, in the graduate courses in which the respondents participated, instructions for the papers were initially very general: i.e. “write a two to three page reflection paper on the required reading or the videos show in class”. Some students were well able to identify their personal experience of the reading/video (“As I read the article, I was thinking about a the current practice reform occurring in our agency” or “As I watched the video, I realized my life would be very different if I had a physical or mental disability”), make a connection between their experience with the theories and models being studied, and connect that to what they would actually DO in professional practice. However, many students did not. The instructions for the reflections have subsequently become more structured, asking for specific information to highlight the experience (“What did you do?”) as well as the learning that occurred as a result of the activity (“What did you learn and how will you use it?).

Secondly, this structuring leads to the development of clear guidelines for grading and the creation of rubrics. Rubrics are used to clarify expectations and make the evaluation process objective as well as collaborative. For example, in the undergraduate class on group work theory and practice, students were asked to address five major course concepts in each of the reflection papers that summarized the interaction of weekly in-class experiential groups. This structuring of the paper provides a means for evaluation of the learning. Rubrics provide the opportunity for connecting grading points to each of the concepts.

Finally, expanding and focusing instructor feedback given to students fosters an ongoing dialogue which enhances critical thinking. The feedback often involves the identification of common errors in critical thinking, such as inaccurate information, lack of clarity or judgments based on personal values. For example an instructor may note that clarification or detail is

necessary to substantiate a claim. The importance of feedback was mentioned by students and the authors note that students may comment on faculty feedback in class discussion as well as in subsequent papers, thus creating a form of ongoing dialogue.

VI. Limitations.

Although the content analysis of student responses indicates the value of reflection papers to explicate thinking processes for professional action, these findings are limited by the small sample of students from one discipline, at one university. Findings are focused on learning processes which in accordance with Schön (1983) assumes a connection between learning processes, learning outcomes, and practice which was not the focus of this study. In addition, it is not known whether the experiences of social work students are similar to students in other professions, such as nursing, medicine or education.

However, these results may be used to develop additional measures to investigate reflection papers or the utilization of rubrics to evaluate specific outcomes to student learning including cross-disciplinary research. In addition, this research did not explore the role of faculty in providing quality feedback to students. Further research will be needed to generalize the findings of this research to social work education or other professional education programs.

VII. Conclusion.

Schön's (1983) work developed partially as a correction to the seemingly dominant approach of "technical rationality" (p. 21) for professional practice, contrasting the reflective practitioner with the expert professional, the managerial professional or the practical professional. What was true in the 1980s is certainly still true today. Professionals in all disciplines must be equipped with the ability to rigorously reflect on their practice in a changing world as well as manage the complex technical requirements of professional practice. This includes being conscientious consumers of empirical data for the purpose of employing best-practices while continually reflecting on one's own practices utilizing critical thinking skills.

With the expansion of online courses in professional education, which often involve student and faculty dialogue, both synchronous and asynchronous, reflection assignments offer a potential pedagogical strategy to facilitate student learning. Reflection papers seem to hold promise as a teaching tool, which stimulates student self-reflection and enhances critical thinking skills in the learning process. Research must continue to focus both on learning processes, outcomes, and the connection to practice. Given the demands of all the professions in a constantly changing global environment, reflection is both a pedagogical strategy as well as a valuable skill to support effective professional practice for the future.

Acknowledgments

The authors would like to thank the IUPUI Center for Service and Learning, Boyer Scholars Program for support in the development and completion of this project.

References

- Abbott, A. A. (1988). *Professional choices: Values at work*. Silver Springs, MD: National Association of Social Workers.
- Alter, C., and Adkins, C. (2001). Improving the writing skills of social work students. *Journal of Social Work Education*, 37(3), pp. 493-505.
- Alter, C., and Adkins, C. (2006). Assessing student writing proficiency in graduate schools of social work. *Journal of Social Work Education*, 42(2), pp. 337-353.
- Barretti, M. (2004). What do we know about the professional socialization of our students? *Journal of Social Work Education*, 40(2), 255-283.
- Bean, J.C. (1996). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. San Francisco: Jossey-Bass.
- Boud, D. (2001). Using journal writing to enhance reflective practice. *New Directions for Adult and Continuing Education*, 90(Summer 2001), 9-18.
- Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.
- Burnett, E., Phillips, G., and Ker, J. (2008). From theory to practice in learning about healthcare associated infections: Reliable assessment of final year medical student's ability to reflect. *Medical Teacher*, 30(6), 157-160.
- Clandinin, D., and Cave, M. (2008). Creating pedagogical spaces for developing doctor professional identity. *Medical Education*, 42(8), 765-770.
- Clayton, P.H., Ash, S.L., Bullard, L.G. Bullock, B.P. Moses, M.G., Moore, A.C., O'Steen, W.L., Stallings, S.P., and Usry, R.H. (2005). Adapting a core service-learning model for wide-ranging implementations: An institutional case study. *Creative College Teaching*, Vol 2, Spring. pp. 10-26.
- Council on Social Work Education (2001). *Educational policy and accreditation standards*. Alexandria, VA: Author.
- Council on Social Work Education (2007). *Statistics on social work education in the United States: 2004*. Alexandria, VA: Author.
- Cullen, Y. (1981). The use of a diary in social work education. *Social Work with Groups*, 8(4), 107-116.
- Dewey, J. (1910). *How we think*. Boston: D.C. Heath.

Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco: Jossey-Bass.

Fisher, K. (2003). Demystifying critical reflection: Defining criteria for assessment. *Higher Education Research and Development*, 22(3), pp. 313-325.

Fook, J. (1996). *The reflective researcher: Social workers' theories of practice research*. St. Leonards, Australia: Allen and Unwin.

Frumkin, M. and Lloyd, G. (1995). Social work education. In R. Edwards and J. Hopp (Eds.). *Encyclopedia of Social Work* (19th Ed.). Washington, DC: NASW Press.

Friere, P. (1973). *Pedagogy of the oppressed*. New York: Seabury

Gambrill, E. (2005). *Critical thinking in clinical practice: Improving the quality of judgments and decisions*, (2nd ed.). Hoboken, NJ: John Wiley and Sons, Inc.

Gibbs, L., and Gambrill, E. (1999). *Critical thinking for social workers: Exercises for the helping professions* (2nd ed.) Thousand Oaks, CA: Pine Forge Press.

Gitterman, A. (2004). Interactive andragogy: Principles, methods, and skills. *Journal of Teaching in Social Work*, 24(3/4), 95-112.

Ireland, M. (2008). Assisting students to use evidence as part of reflection on practice. *Nursing Education*, 29(2), 90-93.

Judah, E. H. (1976). Acculturation to the social work profession in baccalaureate social work education. *Journal of Education for Social Work*, 12, 65-71.

Kinchin, I. (2008). Using concept mapping to locate the tacit dimension of clinical expertise: Towards a theoretical framework to support critical reflection on teaching. *Learning in Health and Social Care*, 7(2), 93-104.

Knight, C. (2001). The skills of teaching social work practice in the Generalist/Foundation curriculum: BSW and MSW student views. *Journal of Social Work Education*, 37(3)

Knowles, M. (1980). *The modern practice of adult education : from pedagogy to andragogy*. Chicago: Association Press, Follett Publishing.

Knowles, M., Holton, E., and Swanson, R. (2005). *The adult learner, sixth edition: The definitive classis in adult education and human resource development*. Oxford: Butterworth-Heinemann.

Kolb, D. (1983). *Experiential learning: Experience as the source of learning and development..* New York: Prentice Hall.

Landau, R. (1999). Professional socialization, ethical judgment, and decision-making orientation in social work. *Journal of Social Service Research*, 25(4), 57-76.

Lay, K., McGuire, L., Grise-Owens, E. (2006). *Reflection: A Life-long Learning Process for Practice and Practitioner Balance*. Presented at the semi-annual conference of the International Federation of Social Workers', Munich, Germany.

McKeachie, W. (2006). *McKeachie's Teaching Tips: Strategies, research, and theory for college and university teachers* (12th ed.). Boston and New York: Houghton Mifflin Company.

Mertler, Craig A. (2001). Designing scoring rubrics for your classroom. *Practical Assessment, Research and Evaluation*, 7(25). Retrieved June 12, 2007 from: <http://PAREonline.net/getvn.asp?v=7andn=25>

NASW (1999). *NASW Code of Ethics*: Washington, D.C.: NASW Press.

Padgett, D.K., *Qualitative methods in social work research: Challenges and rewards*. Thousand Oaks, CA: Sage.

Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Paul, R., and Elder, L. (2006). *The miniature guide to critical thinking: Concepts and tools*. Dillon Beach, CA: The Foundation for Critical Thinking.

Perry, W.G. (1970). *Forms of intellectual and ethical development in the college years; a schema*. New York: Holt, Rinehart and Winston.

Pike, C.K. (1996). Development and initial validation of the social work values inventory. *Research on Social Work Practice*, 6, 337-352.

Richlin, L. (2006). *Blueprint for learning: Constructing college courses to facilitate, assess, and document learning*. Sterling, VA: Stylus Publishing.

Roche, S.E., Dewees, M., Trailweaver, R., Alexander, S., Cuddy, C., and Handy, M.(1999). *Contesting boundaries in social work education: A liberatory approach to cooperative learning and teaching*. Alexandria, VA: CSWE.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Sullivan, M. and Bibus, A. (1990). Discovery of self: One use of logs in graduate school social work education. *Journal of Teaching in Social Work*, 4(2), 145-157.

Sullivan, W., and Rosin, M. (2008). A life of the mind for practice: Bridging liberal and professional education. *Change, Mar/Apr*, 44-47.

McGuire, L., Lay, K., and Peters, J.

Urzua, A., and Vasques, C. (2008). Reflection and professional identity in teachers' future-oriented discourse. *Teaching and Teacher Education*, 24(7), 1935-1946.

Varley, B. K. (1966). Socialization in social work. *Social Work*, 11, 84-91.

Walmsley, C., and Birkbeck, J. (2006). Personal narrative writing: A method of values reflection for BSW students. *Journal of Teaching in Social Work*, 26(1/2), 111-126.

Warnock, G. (2008). Reflecting on principles of professionalism. *Canadian Journal of Surgery*, 51(2), 84-85.

Weber, R. P. (1990). *Basic content analysis* (2nd ed.) Thousand Oaks, CA: Sage.

Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.