



## The Internet Journal of Allied Health Sciences and Practice

<http://ijahsp.nova.edu>

A Peer Reviewed Publication of the College of Allied Health & Nursing at Nova Southeastern University

*Dedicated to allied health professional practice and education*

<http://ijahsp.nova.edu> Vol.5 No. 2 ISSN 1540-580X

---

### Using the Power of Student Reflection to Enhance Professional Development

---

Sonia S. Zimmerman, MA, OTR/L, FAOTA

Debra J. Byram Hanson, MA, OTR/L

Jan E. Stube, PhD, OTR/L

Janet S. Jedlicka, PhD, OTR/L

LaVonne Fox, PhD, OTR/L

Occupational Therapy Department, School of Medicine and Health Sciences  
University of North Dakota

---

#### Citation:

Zimmerman, S., Hanson, D., Stube, J., Jedlicka, J., Fox, L. Using the Power of Student Reflection to Enhance Professional Development. *The Internet Journal of Allied Health Sciences and Practice*. April 2007, Volume 5 Number 2.

---

#### Abstract

Student personal and professional development is an area of increasing importance in professional education programs. The practitioner of the future needs to be able to reflect and self-assess his/her learning in order to take intentional steps toward developing or continuing competency. The purpose of this article is to describe the evolution of one program's process of incorporating self-reflection and feedback as an integral part of the curriculum. Examples of the guiding questions are included. The value of a self-reflective student evaluation process in the development of reflective practice and its implementation within a professional healthcare curriculum and future practice environments are discussed.

The assessment of personal and professional student development requires careful study of behavior, attitudes, and performance. Yet, it is admittedly often a subjective task. As discussed by Kasar, many faculty in professional programs of study realize the challenges to accurately evaluating skill development, especially when the skills include the ability to communicate effectively with diverse populations, or to self-monitor one's behavior in practice settings.<sup>1</sup> Skills such as these cannot be taught in lecture nor assessed in written examinations. Instead, the student needs to learn self-reflective assessment skills and engage in dialogue with faculty regarding possible ways to improve the learning process.

The Occupational Therapy (OT) Program at the University of North Dakota (UND) has developed a student evaluation process designed to actively involve the student in his/her education by writing self-reflective essays focusing on his/her learning. The evaluation process highlights the program's desire to produce self-reflective practitioners who are able to reflect upon their learning as they transition from the role of student to that of therapist and develop the necessary competencies for practice. A basic belief of the UND OT faculty is that self-reflective learners have the potential to become self-

reflective practitioners who are aware of their skills, strengths, and areas of weakness, and are able to use that self-knowledge to develop professional expertise and engage in lifelong, independent learning.

The purpose of this article is to share the foundational understandings and beliefs regarding the value of self-reflection in learning and education. The authors also want to share the student evaluation process used at UND for over a decade to facilitate development of personal and professional skills necessary to successful practice in occupational therapy.

#### Changing Paradigms of Teaching

In an *old paradigm* of teaching in higher education, knowledge is transferred to students by persons who have a PhD in their field of study; students passively accept and learn new facts within a traditional classroom setting.<sup>2</sup> Unfortunately, this paradigm may not adequately prepare students for the professional workplace where employers value skills and qualities such as emotional intelligence, self-regulation, and therapeutic use of self.<sup>3,4</sup> These skills and qualities are often identified as *soft skills* since they are focused more on the human side of interaction rather than technical skills obtained through formal coursework preparation.<sup>5</sup>

Reflection and the reflective process have been identified in the literature as important to the development of these valued professional skills and qualities.<sup>6</sup> Reflective processes have been used in the practice of medicine as a tool for narrative competence leading to empathy, professionalism, and trustworthiness.<sup>7</sup> Within the occupational therapy literature, reflection is suggested as an effective means for development and enhancement of professional practice.<sup>8-10</sup> Reflection is also valued in the *new paradigm* of teaching and learning in higher education where new understandings are formulated by faculty and students together in a milieu that has been carefully considered by the faculty, and where meaning is constructed actively by the student learner.<sup>2,11-13</sup>

### Importance of the Reflective Process

Reflection, as defined by Schon refers to self-awareness of one's own repertoire of knowledge and skills in combination with present circumstances to form new understandings.<sup>8</sup> Kolb suggests that experiential learning occurs in a cycle, where reflection regarding a concrete experience leads to theorization about the meaning of the experience, which results in final testing of understandings in the world of practice through direct action.<sup>9</sup> Kinsella considers reflective practice to be a complex process where therapists learn from practice experience, examine conceptions of knowledge, think about contexts of practice, explore assumptions in practice, become aware of theories in practice, and finally, develop an action plan.<sup>10</sup>

Self-reflection is valued as a skill possessed by practitioners in order to be competent as autonomous and responsive service providers. It is viewed as important for professional problem-solving, clinical reasoning, and promoting better client outcomes.<sup>11</sup> Crist, Wilcox, and McCarron suggest that through reflection, occupational therapists can influence their own professional competence by evaluating current knowledge, skills, and abilities in relation to employment responsibilities.<sup>8</sup>

Across allied health education and higher educational practices, in general, student self-assessment ability is viewed as an important academic outcome related to fostering critical thinking and developing a valuable life-long skill.<sup>11,13,14</sup> Best practice within higher education includes classroom assessment techniques to promote student articulation of their goals and understanding of learning activities.<sup>15</sup> Within occupational therapy, self-reflection is seen as essential to the integration of educational content with life experiences to increase learning and to form a sense of competency.<sup>16</sup> Reflection is a means to support supervisor-student communication within the process of student professional development and transition to the role of practitioner.<sup>17,18</sup>

### Methods for Facilitating Self-Reflection

Within the literature, there are various methods described for the development of reflective professional practice including the use of journals, feedback, and peer group discussion. Although journaling can be conducted as an individual private activity, it is most often seen in conjunction with feedback from either faculty or student peers.

Evidence of the use of reflective journaling is provided from a wide variety of fields outside of healthcare including education, engineering, and counseling. Tsang reported the use of journal writing in pre-service teacher education program as fostering critical reflectivity over time and promoting understanding of the teaching process.<sup>24</sup> Hampton and Morrow discussed positive changes regarding student self-awareness, interest, perceptions of learning, and instructor-student relationships as a result of journaling initiatives in undergraduate engineering classes.<sup>25</sup> Counseling faculty are encouraged to consider reflective journals to dialogue with students and model the language and methods of the discipline.<sup>26</sup>

Through the use of journals as an educational strategy, occupational therapy students experience transformative learning by increasing their own self-awareness combined with interactive feedback from faculty.<sup>19</sup> Reflective journaling is viewed as more effective for learning purposes when used along with the element of feedback from mentors, rather than occurring in isolation. Tryssenaar and Perkins qualitatively explored the outcomes of reflective journals kept by occupational and physical therapy students while on their clinical fieldwork.<sup>22</sup> Stages of affective developmental learning from novice to adaptation are described in this work, informing educators as to the need for facilitation and support during this student to practitioner role transition.

Riley-Doucet and Wilson described a 3-step process to promote the role transition of second-year nursing students who were expected to develop autonomy and self-directedness.<sup>21</sup> The 3-step process involves: critical appraisal through self-reflective journaling, peer group discussion whereby the educator functioned as a facilitator and mentor, and the students' independent self-evaluation of their learning and successful behavioral outcomes. Outcomes of the study reported by the students included: feeling safe in reflecting on their learning through a confidential journal process, an increased ability to reflect on strengths and weaknesses and improved satisfaction in identifying personal accomplishments. Students initially identified a lack of professional readiness in following the 3-step process. Through increased collaboration among peers and educator, students were able to better utilize the format.

Feedback is a useful tool to promote effective role transitioning from student to practitioner. In a study by Scheerer, educators provided occupational therapy

students with written or verbal professional behavior feedback, at their discretion, during the first 2 years of the professional education timeframe.<sup>6</sup> In the 3<sup>rd</sup> year of the curriculum, students completed a Professional Behavior Form and provided a self-evaluation with a goal written for improvement of a professional behavior. Using a case study format and focus groups to gather summative student perceptions, the results indicated that students value educator feedback, especially regarding their strengths. Receiving educator feedback in a face to face meeting is advantageous. Students appreciate educators listening to “their voice” which serves to reduce any resentments students feel, such as mismatched perceptions between students and educators.

Traditionally, teacher or peer feedback is not included within student self-assessment, yet feedback is assumed to be central to the learning process.<sup>20</sup> Written and interview questions were asked of 34 final-year honor students at a British university regarding self-assessment and the timing of the process with teacher or peer feedback. The majority of students (68%) found that self-assessment of assignments after teacher feedback was the most useful, particularly to realizing errors. Taras concluded that integrated teacher feedback is useful for students to overcome unrealistic expectations and to shift their focus toward learning achievements.<sup>23</sup> It is important to note that, at both the student and practitioner level, a combined approach of self-reflective methods and discussion with professional colleagues leads to greater understanding and the promotion of effective learning.<sup>11</sup>

Considering the changing paradigms of higher education and the importance of self-reflection to career competency, the UND department of OT established a student evaluation process which employs multiple methods of self-assessment. Utilized over the past decade, this formative process emphasizes self-reflective writing combined with faculty feedback and joint discussion. The transition from the role of student to novice therapist is facilitated in the process of regularly-occurring student evaluations.

### Student Evaluation Process

Over the past decade, The University of North Dakota Occupational Therapy Program has refined a student evaluation process to facilitate the transition from the role of student to novice therapist as the student progresses through the program. The process is considered a formative one and utilizes self-reflective writing combined with faculty feedback and joint discussion occurring each of the 5 semesters the student is in the didactic portion of the program. Periodic reviews of the program serve to strengthen the process; the most recent review was completed by a joint team of occupational therapy graduate students and faculty in 2004.

The program's curriculum design and the seven OT Program student competency statements (see Table 1) are considered in the development of the student evaluation process. Competency statements are designed to mirror the expected occupations of the therapist role, such as assessment, treatment planning and implementation, and documentation. The occupations of a student, which include participation in classroom activities/student organizations and completion of various student assessment procedures, support the student's ability to ultimately participate in occupations inherent to the therapist role. Each student is asked to reflect upon the development and impact of their personal and professional readiness skills, the occupations of an OT student, and the contextual/environmental aspects of the learning experience. In addition, the student is asked to reflect specifically on his/her performance relative to the seven program competency statements. To enable this process, guiding questions have been developed for the student's use with a separate set of questions used each semester of the professional program; in some cases, the same question structure is used and adapted to match the primary practice area addressed (see Table 2). The questions are available in the Student Program Manual, as well as detailed instructions regarding the student evaluation process.

Table 1: Occupational Therapy Student Competencies

1. Students will demonstrate an understanding of the terminology and concepts of occupation.
2. Students will be able to demonstrate an understanding of the use of screening and evaluation tools used to determine the need for occupational therapy intervention.
3. Students will be able to appropriately select and apply intervention approaches and corresponding interventions to treatment scenarios.
4. Students will be able to understand and apply principles of management and supervision within selected contexts for occupational therapy practice.
5. Students will understand, analyze and evaluate research evidence, professional literature, and measures of outcome in order to make informed, evidence-based practice decisions in occupational therapy.
6. Students will demonstrate knowledge and understanding of the *AOTA Code of Ethics*, *Core Values and Attitudes of Occupational Therapy*, and *AOTA Standards of Practice* documents as guides for professional interactions in academic and practice settings.
7. Students will demonstrate effective communication skills, both oral and written, across multiple contexts.

**Table 2: Sample Questions**

---

**Student Evaluation - Year 1**  
**Transition to the Role of the Occupational Therapy Student**

1. Compare how you have changed personally and professionally from your undergraduate courses, such as study skills and habits, etc.
2. What has been going well for you as you transition into the role of the occupational therapy student? In what areas do you struggle?
3. Identify strategies and/or supports which assist you in dealing with these challenges.
4. What have you learned about yourself relative to your written and verbal communication skills?
5. Describe elements of the physical and social contexts of the program that have facilitated your learning and elements that have detracted from your learning.

**Student Evaluation - Year 2, Semester 1**  
**Personal/Professional Learning: Psychosocial Dysfunction****Knowledge:**

1. As you reflect on your learning about psychosocial practice, describe your ability to:
  - a. Plan and administer psychosocial assessments
  - b. Develop occupation based interventions for psychosocial practice
  - c. Use theory, frames of reference and models of practice suitable for psychosocial practice
  - d. Find and apply evidence based literature for psychosocial practice
2. What do you predict you will need to review prior to your Level II Fieldwork in psychosocial dysfunction? What strategies will you use to accomplish this task?

**Sensorimotor:**

As you reflect on your recent Level I Fieldwork experience, what manual skills/techniques (i.e. physical handling of assessment materials and utilization of crafts) have you learned or had the opportunity to use? Evaluate your experience. What skills do you need to develop next?

**Psychosocial:**

In preparation for your Level II Fieldwork, describe your ability to:

- a. use communication skills effectively in professional contexts
- b. establish rapport and apply principles of therapeutic use of self
- c. plan and lead group based interventions

**Contexts:**

Describe elements of the physical and social contexts of the program that have facilitated your learning and elements that have detracted from your learning.

**Student Evaluation - Year 3**  
**Adaptation to the Therapist Role and Future Learning**

1. As you reflect on your graduate coursework this semester, what knowledge and skills have gained that will be helpful to you as a professional?
  2. Describe your ability to represent your profession in an interdisciplinary team. What skills will you need to further develop?
  3. As you consider the three management classes, discuss how you might apply this information to entry-level practice.
  4. Evaluate the impact of the overall culture and expectations of the OT Program and curriculum on your learning. What was helpful, what could be changed to further support your learning processes?
  5. What have you learned about taking charge of your learning and your future?
-

The guiding questions assist the student in preparing for the self-reflective writing by initially facilitating reflection and evaluation of the student's adaptation to the role of a student in a professional program. Later, as the student progresses in the program, he/she is challenged to take greater responsibility for personal and professional learning, as well as identifying areas of strength and need in relation to his/her role preparation to enter various areas of practice. Emphasis is placed on the student's development of the ability to assess his/her personal knowledge base and determine learning needs necessary to attain and maintain competency for practice. Finally, as students near graduation, future practice roles and plans to pursue continued professional education as part of an overall plan for lifelong learning are encouraged. A student may identify, for example, a more specialized area of practice and independently plan to seek out additional training and/or certification.

Each academic semester in both the undergraduate and graduate OT Programs, the student writes a 3-4 page paper in response to the guiding questions provided. The student is responsible for providing evidence of personal reflection on academic performance and professional development, resulting in a richly descriptive, personalized assessment of self. Faculty members review the papers in advance of the individual meetings with each student and concurrently compile their observations of the student's performance that semester to be shared with the student in the faculty-student meetings. The process seeks to encourage an interactive environment on two levels – between the student learner and his/her learning and between the faculty and the student.

A faculty member meets with the student for approximately 20 minutes to review and discuss the student's paper and share faculty feedback with the student. The meetings serve as a valuable way to gain an understanding of the uniqueness of each student's development as a professional, and foster mentoring relationships between the student and faculty. To ensure that the time is used effectively and the student is afforded ample opportunity to share his/her thoughts and feelings regarding the learning experience in the program, a five-step procedure is used. The steps include: 1) short conversations of introduction and orientation, 2) discussion of the student's responses to the guiding questions presented in the paper and encouragement to the student to share perceptions of his/her learning, 3) sharing and review of faculty comments regarding the student's performance in the program that semester, including an expectation that the student will reflect upon the feedback and provide additional perspective (in some cases, this is an opportune time to have the student make use of the insights uncovered and develop an action plan for themselves), 4) an open time where the student can bring any topic that was not covered in the paper or the previous discussion up for further conversation, and 5) a

summary of the meeting is written by the faculty member with student input, followed by signatures from both parties. The summary is then placed in the student file, along with a copy of the student's paper and faculty feedback. A copy of the faculty feedback and summary are provided to the student for future reference.

The process has influenced the students, faculty, and curriculum in a variety of ways. Students initially express difficulty understanding the process, but soon progress from being dependent learners to having the ability to self-reflect, assess personal strengths, and identify areas to strengthen. "I didn't understand the purpose; first when I was writing the paper it felt like busy work, but once I sat down with the instructor and talked about it, it made more sense." "The time I spend studying for anatomy doesn't equal the grade." "I am frustrated I can't figure out how to narrow my searches and seek the deep information." "This feels like journaling; journaling helps me organize my thoughts and be able to think through where I am and what I am learning." As a result of this process, students are better prepared to interact positively in the supervisory process in the professional setting, more accurately self-assessing and using feedback to enhance lifelong learning. "My first supervisor said she was surprised at my insight and ability to take feedback; I had to laugh, it is so much a part of the curriculum and how we are trained to reflect on our progress and plan strategies for addressing the areas we are weak in".

One outcome of the process for faculty is the opportunity to interact with students outside of the classroom setting. "I enjoy the one-to-one meetings with the students; it gives me a chance to connect with students who may not be in one of my classes." In addition, UND faculty feels that they personally benefit in the interaction process. "The student meetings allow me to use my skills in interview, and it is an opportunity to explore the deeper meaning of how students experience their professional and personal growth and development." The time investments that students and faculty make in the student evaluation process set the stage for future dialogue in the area of professional development.

The information shared also influences curriculum development. "I get the students' perspectives on how the curriculum is sequenced and the issues they identify as critical to their learning." Faculty members meet to review the process each semester. General student perceptions and feedback are shared, which provides student input into curriculum development. Global student concerns are also addressed in a time-efficient manner.

Developed in response to student feedback, faculty and students alike find the structure of the student evaluation process helpful. The steps illustrate the multiple methods used to facilitate the self-reflective evaluation process. The student is engaged in writing the paper, receiving

and responding to faculty feedback, and open discussion of both the paper and the comments. Students are encouraged to participate in the summary process where important points of the discussion are documented for future use. The formative aspect of the process is evident in that students meet with faculty throughout their time in the program, rather than a single meeting to determine, for example, readiness for fieldwork. In this way, students are better able to learn to assess their own progress and develop plans to improve their learning in preparation for the future role of a fieldwork student and ultimately, a professional therapist.

### Conclusion

Self-reflection is foundational to the development of professional practice skills. Allied health students can

benefit from multiple opportunities to reflect on personal and professional readiness skills through the use of a guided process involving personal introspection, reflective writing, and faculty-student interaction. Information gained through this approach may also be used to inform assessment of academic program outcomes.

This self-reflective evaluation process may have applications in the clinical practice setting, as well, enabling seasoned practitioners to guide students and novice therapists toward reflective professional practice. Longitudinal studies in both the academic and clinical setting would further illuminate the value of self-reflection to professional practice.

### References

1. Kasar J. Development of the instrument, and its academic and clinical applications. In: Kasar J, Nelson Clark E, eds. *Developing Professional Behaviors*. Thorofare, NJ: Slack Incorporated; 2000: 145-153.
2. Johnson DW, Johnson RT, Smith KA. *Active Learning: Cooperation in the College Classroom*. Edina, MN: Interaction Book Company; 1991.
3. National Association of Colleges and Employers. Job Outlook 2006: Student Version. 2005. Available at: <http://www.naceweb.org>. Accessed September 1, 2006.
4. Freshman B, Rubino L. Emotional intelligence: a core competency for health care administrators. *Health Care Manager*. 2002;20:1-9.
5. Goleman D. *Working with emotional intelligence*. New York: Bantam Books; 1998.
6. Scheerer CR. Perceptions of effective professional behavior feedback: occupational therapy student voices. *The Am J Occ Ther*. 2003;57:205-214.
7. Charon R. Narrative medicine: a model for empathy, reflection, profession, and trust. *JAMA*. 2001;286:1897-1902.
8. Crist ,P., Wilcox BL., McCarron K. Transitional portfolios: orchestrating our professional competence. *The Am J Occ Ther*. 1998;52:729-736.
9. Kinsella EA. Reflections on...reflections on reflective practice. *The Can J Occ Ther*. 2001;68:195-198.
10. Moyers PA. Models of reflection. *OT Practice*. 2006;11(3):11,24.
11. Boyer EL. *Scholarship Reconsidered: Priorities of the Professoriate*. San Francisco: Jossey-Bass; 1997.
12. Palmer PJ. *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life*. San Francisco: Jossey-Bass; 1998.
13. Weimer M. *Learner-centered Teaching: Five Key Changes to Practice*. San Francisco: Jossey-Bass; 2002.
14. Schon DA. *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*. San Francisco: Jossey-Bass; 1987.
15. Kolb DA. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall; 1984.
16. Maki PL. *Assessing for Learning: Building a Sustainable Commitment Across the Institution*. Sterling, VA: Stylus Publishing; 2004.
17. Brookfield SD. *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom*. San Francisco: Jossey-Bass; 1990.
18. Angelo TA, Cross KP. *Classroom Assessment Techniques: A Handbook for College Teachers, 2<sup>nd</sup> ed*. San Francisco: Jossey-Bass; 1993.
19. Tryssenaar J. Interactive journals: an educational strategy to promote reflection. *The Am J Occ Ther*. 1995;49:695-702.
20. Schkade JK. Student to practitioner: the adaptive transition. *Innovations in Occ Ther Educ*. 1999;1:147-156.
21. Riley-Doucet C, Wilson S. A three-step method of self-reflection using reflective journal writing. *J of Adv Nursing*. 1997;25:964-968.
22. Tryssenaar J, Perkins J. From student to therapist: exploring the first year of practice. *The Am J Occ Ther*. 2001;55:19-27.
23. Taras M. To feedback or not to feedback in student self-assessment. *Assessment & Eval in Higher Educ*. 2003;28:549-565.

24. Tsang, W. Journaling from internship to practice teaching. *Reflective Practice*.2003;4:221-240.
25. Hampton, S. Morrow, C. Reflective journaling and assessment. *Journal of Professional Issues in Engineering Education and Practice*. 2003:186-189.
26. Hubbs, D., Brand, C. The paper mirror: understanding reflective journaling. *Journal of Experiential Education*. 2005;28:60-71.