



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. 3 No. 4 ISSN 1540-580X

Enhancing Critical Reflection of Students During a Clinical Internship Using the Self-S.O.A.P. Note

Deanna Dye, PT, MA

Academic Coordinator of Clinical Education

Assistant Clinical Professor

Idaho State University

Physical Therapy Program

Citation:

Dye, D. Enhancing critical reflection of students during a clinical internship using the self-S.O.A.P. note. *The Internet Journal of Allied Health Sciences and Practice*. October 2005. Volume 3 Number 4.

Abstract

Background and Purpose: Critical reflection is a skill all physical therapists need to develop to be successful in professional practice. Scholars have defined the varied processes, purposes and outcomes of reflection. Journaling is one technique for encouraging the process of critical reflection. While journaling can take many forms, a structured journal format with clear instructions and ongoing feedback has been found to be most successful in maintaining student engagement. **Method Description and Evaluation:** A journal structured in a S.O.A.P. note format was implemented as a weekly assignment during a clinical education experience. Students were required to submit the weekly self-S.O.A.P. note to the academic coordinator of clinical education (ACCE). The ACCE provided students with occasional feedback on their notes to encourage further reflection. Perceptions of the benefits and pitfalls of the activity were gathered through means of a focus group interview. **Outcomes:** The four students in the focus group identified several benefits which can be grouped into four categories relating to the clarity of format, effect of feedback, support of summative evaluations and self-recognition of progress. **Discussion and Conclusions:** Self-S.O.A.P. notes provide a familiar structure to assist students in the process of critical reflection. Further research is needed to determine the level of reflection that is occurring, the effect of feedback on the students' critical reflection, and if a relationship exists between high levels of critical reflection and high summative evaluation ratings.

Introduction

Background and Purpose

Critical Reflection

An essential component of expert professional practice is a practitioner's ability to critically reflect on his or her performance.¹⁻⁵ According to Clouder, "The literature on professional expertise refers frequently to reflective practice to the extent that there can be no mistaking the scale of its acceptance."^{1(p211)} Jensen et al. found critical reflection to be one of four defining dimensions of expert physical therapy practice.^{2,4} Experts use reflection to learn from practice.⁴ In allied health, critical reflection is endorsed as bridging the gap between theory and practice.^{5,7-11} The need to address the critical reflection ability of professional students during the professional education program is well represented in the literature.¹⁻¹⁰ Therefore, the design and implementation of methods to promote and encourage the development of critical

reflection in allied health students is of high importance to the allied health educator.

Several authors have defined critical reflection over the years.¹¹⁻¹⁴ According to Dewey, reflection is active, persistent and careful consideration of any belief....¹² For reflection to be critical, one must look into the underlying assumptions that ground one's actions and decision making according to Brookfield.¹³ Mezirow reinforces that reflection must involve the critique of assumptions about both the content and process of problem solving.¹⁴ In clinical practice, Schön distinguishes reflection "in practice" and reflection "on practice" as two distinct phenomenon.¹¹ Finally, Boud suggests that reflection only occurs in the presence of a challenging environment.¹⁵ Regardless of the exact definition used for critical reflection, the overall concept remains the same and requires an identified skill, which may or may not be teachable.

The paucity of empirical studies assessing and measuring critical reflection makes it difficult to determine whether or not critical reflection can be taught. Studies investigating students' critical reflection as demonstrated in journal writings reveal mixed results. Findings by Bain et al. demonstrated that the primary indicators for the occurrence of critical reflection are the student's performance on his or her first journal entry and also the length of the entry.¹⁶ Bain et al. and Sobral speculate that the actual time spent on the task of critical reflection had the most influence on the students' performance.^{16,17} Williams et al. found no improvement of critical reflection scores as rated on a 5-point scale over an 8-week period.¹⁸ The authors partially attribute this lack of change to minimal or non-directive feedback and a short time frame.¹⁸ While valid and reliable methods of measuring the achievement and depth of critical reflection are currently being investigated, no comparisons between various methods to promote reflection have been investigated.^{3,5,6,16,18,19}

Journaling as a Method of Promoting Reflection

Regardless of the conflicting data concerning the ability to teach critical reflection, many authors espouse methods for encouraging and promoting reflection, with journaling being the foremost.^{7,9,10,16-23} Several limitations and perceived difficulties with journaling have been identified. Kerka provides an exceptional summary of the literary works to date on this topic.²³ Limitations of journaling include the students' loss of enthusiasm of the task over time, frustration and uncertainty regarding what to write, and the solitary nature of writing.^{16,23} In addition, students often simply document concrete observations of their experiences without any reflection.²³ Some strategies identified to encourage quality journal writing include providing guidelines regarding content and format, perhaps by suggesting a theme, giving a clear explanation of the purpose, and identifying how the journal will be used.^{20,22,23} In addition, instructors should provide the student with feedback and encouragement throughout the process to facilitate additional reflection.^{10,16,18,21-23}

Physical therapist students are greatly challenged when they have to apply their academic knowledge in the clinical environment. Since journaling is the foremost method to promote reflection, a form of journaling was incorporated throughout a physical therapist student's first clinical internship. The educational goals of the journaling assignment were to set a foundation, establish a habit of reflection, and encourage development of critical reflection. The purpose of this paper is to describe the development, implementation, and evaluation of a journaling technique used to promote reflection during a clinical internship.

Method Description and Evaluation ***Modified Journal***

In order to encourage students to reflect on their performance during their clinical internships, a modified

form of journaling was implemented to promote self-assessment and critical reflection. The students were asked to journal on their weekly experiences and performance in the clinic using a S.O.A.P. note format. The self-S.O.A.P. note was submitted to the academic coordinator of clinical education (ACCE), who serves as the course coordinator, each week. The ACCE provided timely feedback on the note via electronic means.

The self-S.O.A.P. note assignment is required in all clinical internships throughout the program. The instructions change slightly. During the first two 6-week affiliations the students are asked to summarize their week's events and self-assess their performance. During the last two 8-week affiliations, the students are asked to reflect on a specific critical incident that occurred during the week. This paper investigates the initial perceptions of students engaged in the activity for the first time during their first clinical internship.

A S.O.A.P. note is a standardized method of formatting documentation in the medical community.²⁴ It provides a framework and structure to the note a clinician writes regarding a patient. The information is divided into four sections. Section "S" contains the subjective information provided by the patient, family members, and others. In the "O" section, the clinician documents the objective information of the examination or treatment. The synthesized analysis of the information in the "S" and "O" sections is recorded in the "A" section. Lastly, the clinician's plan of care is documented in the "P" section.²⁴

The S.O.A.P. note format is commonly used in the allied health fields.²⁴ In addition, Idaho State University's physical therapist education program instructs students specifically in this form of documenting during their first semester of the program. By the time the students attend their first clinical education internship, they are very familiar with this format.

The self-S.O.A.P. note parallels a patient S.O.A.P. note (Appendix 1). I was first introduced to this tool by Ms. Patty Trela, a physical therapist and center coordinator of clinical education in Salt Lake City. Ms. Trela uses the self-S.O.A.P. note on a daily basis to monitor a student's ability to self-assess and also to gain insight into the personal interactions between the clinical instructor and the student. I modified her technique by decreasing the frequency of use and focusing the purpose on critical reflection instead of the reporting of daily events.

Instructions

The instructions provided in the syllabus for the students' first full-time six-week clinical education internship, stated:

Each student will complete a note documenting his or her own performance. The note will be written in a

S.O.A.P. note format and be completed at least weekly. S = your subjective feelings on the day/week; O = a summary of interventions and skills you performed; A = self-assessment of your performance; P = your plan for improvement, changes, new challenges, etc.

In addition, by permission, a previous student's self-S.O.A.P. notes were provided to demonstrate quality work. The students were verbally instructed to submit their self-S.O.A.P. notes at least weekly as a requirement for successful completion of the course. Students submitted their self-S.O.A.P. notes to the ACCE either through the University's WebCT e-mail system, through direct e-mail, or fax.

Assessment Method

The overall course evaluations indicated satisfaction with the course; however, they did not specifically address the self-S.O.A.P. note assignment. In order to evaluate the students' perceptions of this technique, a focus group was held at the end of the course to gather information on the perceived benefits and limitations of this self-assessment and reflection tool. Although a focus group should have a conversational flow, the questions should be focused to target the desired information.²⁵ Therefore, a semi-structured interview (Table 1) was performed to solicit the students' perceptions specific to the assignment to help determine if the self-S.O.A.P. note assignment would be beneficial for subsequent classes.

Table 1: Focus group semi formal interview - Self-S.O.A.P. Notes

<ul style="list-style-type: none"> • Did you feel you were able to write your true perceptions? • What is your opinion on the structure of the note? • Did using the S.O.A.P. format help guide thinking? • Did it feel confining? • What is your opinion of the requirement of submitting them on a weekly basis? • In what ways was the process of writing helpful? • In what ways was the process of writing difficult or not beneficial? • How did the self S.O.A.P. note guide your progression of learning? • Did they help you identify your strengths and weaknesses? • Did they help you develop your thought process? • How did you use the self S.O.A.P. note in your mid-term and final internship evaluation? • Is there anything you would do differently? • Any additional comments?
--

Four students were randomly chosen from the class to participate in the focus group. The students were informed that their participation was voluntary and each student was provided the opportunity to refuse to participate. Students were further informed that participation or refusal to participate would have no effect on their status in the course or program and that all information would be used anonymously. All four students agreed to participate. The students were informed that the purpose of the interview was to gather

their perceptions of the self-S.O.A.P. note assignment and requested that they be candid in their responses. The semi-structured interview was recorded on audiotape and then transcribed and analyzed to gain insight to the perceived benefits and limitations of this instruction method.

Outcomes

Students' perceptions of the assignment were extremely positive. Of the fifteen students enrolled in the eight-week clinical course, all but one met the requirement of weekly note submission. The four students in the focus group identified several factors which may have contributed to the success of the assignment. These factors can be grouped into three categories relating to the 1) clarity and ease of use of the S.O.A.P. format, 2) effect of feedback, and 3) self-recognition of progress. Few, if any, limitations were identified from the students' perspective.

First, the format itself served to direct the reflection process. The students expressed that using a S.O.A.P. note format was a "perfect" structure for stimulating the process of reflection. The familiarity of the format simplified the process because it felt so natural. Students did not perceive the format to be confining but actually helped ensure that they reflected on both how they felt and how they performed. For example:

[The self S.O.A.P. note] is exactly tailored to what you are normally going through thinking when you are out on affiliation. So, we already know how to write a S.O.A.P. note and it lent itself well to how you're feeling, what you are doing, how overall you are doing, and your plan to do better.

[Without a structured format], it would be a lot more based on personality. If you are analytical you'd focus more on objective things. Oh I did this. If you're more right brained you might focus more on feelings and leave out the actual things that you did.

What you did, how well you think you did it, and what are you going to do. It seems perfect – I didn't feel confined.

Along with the assignment's format, the instructions and sample notes aided in the students' understanding of the expectations and purpose for the assignment. They found the instructions and previous student sample notes helpful and informative.

I read the instructions. I thought they helped me. Because, yeah, we know S.O.A.P. notes but I was like, "Well, what does she want?"

The example S.O.A.P. notes helped me because I did read them to get an idea of what was wanted.

Second, feedback from the students' clinical instructors, ACCE, and patients greatly assisted the process of reflection. The opportunity for immediate feedback on the notes from the ACCE may have helped deter the reported problem of loss of interest over time. They identified that feedback on their performance assisted their self-assessment. In addition, feedback on their self-S.O.A.P. note encouraged greater reflection.

I used the feedback from my clinical instructor in the assessment portion.

We are so familiar with S.O.A.P. notes that you just kind of do it. But feedback from you [the ACCE], "Just give me a little more in the assessment. Tell me how you really feel you are doing." That feedback from you kind of guided, then I would try to do more.

Third, the self-S.O.A.P. notes provided a mechanism for recognizing self-improvement and stimulating critical reflection. While completing the mid-term and final evaluations, students found the self-S.O.A.P. notes helpful in identifying their perceived level of performance. In addition, they found that the self-S.O.A.P. note stimulated greater reflection during the week while actually performing patient care.

Yeah, it's inspiring. Because like in my plan I'd want to do more evals on my own next week. And so then I'd be excited when the "O" section of my next note started, "Did twelve new evals this week."

I would look back and see now what did I do last week and what did I do this week and how do they compare and stuff for my assessment.

Even during the week with the patients [I would note], "Oh this is a good experience that I definitely will write in my S.O.A.P. note. So I need to remember everything that I am doing."

In general, students were pleased with the assignment. One student said, "I don't like homework assignments. But overall this one was okay. I'm not saying I liked it. But it was good." The overall benefit of the self-S.O.A.P. note is that it stimulates self-reflection, helps identify

areas of improvement, and guides future learning. Students recognized that without an actual assignment, the process of critical reflection would most likely not occur.

The process occurred – which is something. I would not have just sat around and said, "You know, how am I doing? Where do I want to go? How do I feel?" Guarantee I would not be doing that on my own. ... That's not happening if I'm not doing S.O.A.P. notes.

Discussion

Benefits of Method

Critical reflection is a necessary skill for students to develop to become expert clinicians. Jensen et al. note that reflection is a distinguishing factor between novice and expert clinicians.^{2,4} Therefore, developing the skill and habit of critical reflection should be a significant component in allied health programs. Whether or not practice can improve the quality and depth of reflection is yet to be empirically decided.^{5,16,18,22} However, time spent writing does provide a method to encourage the process.^{10,19} Williams et al. found that through journaling, students demonstrated improved ability to reflect.¹⁹ In addition, the students noted the links between the clinical education internship and academic learning. The act of writing stimulates reflection during practice and perhaps can instill this valuable habit.

Using suggested strategies for promoting critical reflection through journal writing, such as assuring that students have a clear understanding of the expectations and purpose, developing trust, providing a framework and feedback, is key to enhancing a student's ability to write honestly and reflectively.^{10,18,23} The self-S.O.A.P. note provides a format that is familiar to the students and parallels the physical therapy evaluation thought process, which may aid the students' comfort level with the activity. In addition, requiring the submission of the self-S.O.A.P. note to the ACCE on a weekly basis affords the opportunity to provide feedback. Perkins highlights the interaction between student and instructor as instrumental in facilitating additional reflection.¹⁰ The ACCE can give feedback on the writing itself, on the students' actual performance, and on the level of reflection. The feedback can then be structured to encourage deeper reflection.

Although not formally studied, the self-S.O.A.P. notes were very valuable in identifying any problems or issues early in the affiliation. By providing the ACCE with advanced knowledge of the student's experiences and perceptions, the ACCE was better able to engage in conversations with the CI regarding the student's performance. In addition, the ACCE could provide direct and immediate advice to the student regarding any concerns or issues identified in the S.O.A.P. note.

Limitations and Feasibility

The benefits of performing Self-S.O.A.P. notes must be weighed against the time commitment required of the ACCE to read and provide quality feedback for each student. On average, responding thoughtfully to each student to encourage a higher level of reflection required fifteen to thirty minutes per student. Idaho State University has the luxury of small class sizes, so for this class of fifteen students, providing quality feedback consumed between four and eight hours each week. Whether this time is well spent depends on the effect of the feedback on the students' reflection ability and whether that effect causes a permanent change in the students' reflective habits. Several authors speculate that direct, specific feedback does affect a student's critical reflection ability.^{10,16,19,23} However, these speculations have not been empirically studied.

Although it is unwise to conclude or generalize an attitudinal position or a degree of strength of opinion based on the focus group's responses, the data from the focus group indicates that students find self-S.O.A.P. notes beneficial.²⁶ The benefits were reported as providing direction for learning, inspiration for improvement, motivation for ongoing critical reflection, and support for evaluation. Students also noted that the ease of submission and clear directions contributed to the success of the assignment.

Generalizability

The use of self-S.O.A.P. notes can be expanded beyond students to use by practitioners or novice clinicians. Clinic managers could encourage greater reflection through recommending the practice of weekly journaling. The self-S.O.A.P. note format would provide direction for those new to journaling. In addition, staff clinicians could share entries with one another to encourage greater reflection and stimulate conversation on patient care, professional practice, and clinic operations. The

conversations could provide a foundation and perhaps begin discussion on quality assurance needs.

The process of writing self-S.O.A.P. notes can be effective in encouraging critical reflection among students during their clinical education internships. Further research regarding the quality of reflection and its correlation to successful clinical performance is needed. Determining a valid and reliable method for quantifying the quality and depth of students' critical reflection based on their writing may be a challenge. Several methods to code and quantify the level and progression of critical reflection have been investigated with good reliability.^{3,5,6,19} However, there is no consistency across studies. Future research is certainly indicated to learn more about the actual impact of feedback and the environment on improvement of the quality and depth of reflection to help determine whether or not critical reflection can be taught and or improved.

Conclusion

The self-S.O.A.P. note assignment appears to be a successful alternative to a standard journal to promote and encourage reflection. The self-S.O.A.P. note inherently utilizes some of the suggestions for enhancing student critical reflection. Providing a structure and clear purpose for reflection is a primary advantage of the self-S.O.A.P. note compared to an unstructured personal journal. The weekly submission requirement supplies a mechanism for continuous feedback and interaction throughout the clinical internship. Though the submission may inhibit a student from reporting freely, the primary purpose of the assignment is not impaired. Time commitment for providing quality feedback must be weighed against the beneficial effect the feedback may have on the student's reflective ability. Overall, the structure of a self-S.O.A.P. note supports the process of critical reflection.

References

1. Clouder L. Reflective practice in physiotherapy education: a critical conversation. *Studies in Higher Educ.* 2000;25:211-223.
2. Jensen GM, Gwyer J, Shepard KF, Hack LM. Expert practice in physical therapy. *Phys Ther.* 2000;80:28-43.
3. Fund Z, Court D, Kramarski B. Construction and application of an evaluation tool to assess reflection in teacher-training courses. *Assess & Eval in Higher Educ.* 2002;27:485-499.
4. Jensen GM, Gwyer J, Shepard KF, Hack LM. *Expertise in Physical Therapy Practice.* Boston: Butterworth-Heinemann; 1999.
5. Wong FKY, Kember D, Chung LYF, Yan L. Assessing the level of student reflection from reflective journals. *J Adv Nurs.* 1995;22:48-57.
6. Kember D. Determining the level of reflective thinking from students' written journals using a coding scheme based on the work of Mezirow. *International Journal of Lifelong Education.* 1999;18:18-31.
7. Wellard SJ, Bethune E. Reflective journal writing in nurse education: whose interests does it serve? *J Adv Nurs.* 1996;24:1077-1082.
8. Gandy J, Jensen G. Group work and reflective practicum in physical therapy education: models for professional behavior development. *J Phys Ther Educ.* 1992;6(1):6-10.
9. Burrows DE. The nurse teacher's role in the promotion of reflective practice. *Nurse Educ Today.* 1995;15:346-350.
10. Perkins J. Reflective journals: suggestions for educators. *J Phys Ther Educ.* 1996;10(1):8-13.
11. Schön DA. *Educating the Reflective Practitioner.* San Francisco: Jossey-Bass; 1990.

12. Dewey J. *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Boston: C. D. Heath; 1933.
13. Brookfield SD. *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass; 1995.
14. Mezirow J. Transformative theory: critique and confusion. *Adult Ed Q*. 1991;42:250-252.
15. Boud D, Keogh R, Walker D. Promoting reflection in learning: a model In: Boud D, Keogh R, Walker D, eds. *Reflection: Turning Experience Into Learning*. London: Kogan Page; 1985:18-40.
16. Bain JD, Ballantyne R, Packer J, Mills C. Using journal writing to enhance student teachers' reflectivity during field experience placements. *Teachers and Teaching: Theory and Practice*. 1999;5:51-73.
17. Sobral DT. An appraisal of medical students' reflection-in-learning. *Medical Education*. 2000;34:182-187.
18. Williams RM, Sundelin G, Foster-Seargeant E, Norman GR. Assessing the reliability of grading reflective journal writing. *J Phys Ther Educ*. 2000;14(2):23-26.
19. Williams RM, Sundelin G, Foster-Seargeant E, Norman GR. Journal writing to promote reflection by physical therapy students during clinical placements. *Physiotherapy Theory and Practice*. 2002;18:5-15.
20. Woodward H. Reflective journals and portfolios: learning through assessment. *Assess & Eval in Higher Educ*. 1998;23:415-424.
21. Jensen G, Denton B. Teaching physical therapy student to reflect: a suggestion for clinical education. *J Phys Ther Educ*. 1991;5(1):33-38.
22. Riley-Doucet C, Wilson S. A three-step method of self-reflection using reflective journal writing. *J Adv Nurs*. 1997;25:964-968.
23. Kerka S. *Journal Writing and Adult Learning*. ERIC ED399413: Ohio; 1996.
24. Kettenbach G. *Writing S.O.A.P. notes*. Philadelphia: F.A. Davis Co.; 1995.
25. Tiberius R. Making sense and making use of feedback from focus groups. *New Directions for Teaching and Learning*. 2001;87:63-75.
26. Sim J. Collecting and analyzing qualitative data: issues raised by the focus group. *J Adv Nurs*. 1998;2:345-353.

APPENDIX 1: Self-S.O.A.P. Sample

S: The first day of my internship at [Clinic A] started with a stalled car, and I was fortunate enough to only be ten minutes late despite the car troubles. I was immediately impressed with the cleanliness and sharpness of the facility. My CI met me with immediate attention and kindness. She appears to specialize in urinary incontinence and SI joint dysfunction. It felt good to be in [City USA] again.

O: We have treated patients with pathologies that include SI joint dysfunction, LBP, s/p meniscectomy, chondroplasty and total knee athroplasty, rotator cuff repair and hip replacement. New assessment tools I have gained include palpatory cues for SI dysfunction and a wellness measure given as a percentage of total wellness on their evaluation form. Dr. XXXX and Dr. XXX are both in close contact with the therapists here at the [Clinic A] so we have looked at x-rays and are scheduled to observe surgeries of the knee. Therapy has followed a trend of moist heat f/b therapeutic exercises or mobilization f/b ice and e-stim. I have already been involved with >50 % of our evaluations and have documented all therapy I have been directly involved with.

A: I feel like the principles of evaluation and treatment are clear to me, but I am trying to learn how the folks do their protocol here. That is probably the biggest challenge I have met in doing a thorough job. With the week's end, I already feel better prepared to overcome that challenge. I would like to incorporate some of the critical knowledge I have learned thus far in classes at ISU, but don't want to overstep any boundaries. Other than that, I could improve on documenting more thorough and being more definitive with questions to patients.

P: I plan on writing down the pieces of info I feel are important to include in an evaluation, and memorizing the important components of an eval, regardless of what the eval form dictates. This way I can be sure to do the best I can without following trends mindlessly. I also plan on making treatment plans for the patients in my own mind before given directions from my CI.