

Enhancing Reflective Practice of Student Physical Therapists Through Video-Assisted Self and Peer-Assessment: A Pilot Study

Jeffrey G. Ebert, Jeannette R. Anderson, and Leslie F. Taylor
Mercer University

Reflective practice, in its comprehensive intent, allows a practitioner to make meaning of complex situations. While opportunities for developing reflective thinking are readily available in health professional education programs, opportunities for developing reflective practice abilities are limited. This pilot study was undertaken to address that gap and assess student physical therapists' perceptions of a series of non-graded, video-recorded practice experiences on developing their reflective practice abilities. The study used a quasi-experimental design with collection of quantitative and qualitative data. Physical therapy students reported an increased awareness of their verbal and nonverbal strengths and areas for improvement, their ability to give and receive feedback to a peer, and ways to improve their psychomotor skill performance. Students identified that they would have liked to have initiated this type of self- and peer-assessment earlier in the curriculum. The assignment served as a specific method of teaching reflective practice in the physical therapy curriculum and has broader application for other healthcare and higher education programs.

Reflective practice, in its comprehensive intent, allows a practitioner to make meaning of complex situations and enables learning from experience (Dewey, 1933). The "reflective practitioner" is a term that has remained in high regard since Donald Schön's presentation of the concept (Schön, 1983). Building on John Dewey's initial work in which the constructs surrounding external thinking and actions versus internal thinking and actions were first introduced, Schön presented the foundational concepts of reflection that remain in the forefront of higher education literature. Specifically, he presented the concepts of "reflection-ON-action," in which the consideration of the event occurs afterward and "reflection-IN-action," in which the responsive thinking occurs in real time (Dewey, 1933; Schön, 1983, 1987).

Schön's pivotal work set the stage for multiple iterations of ways to measure and assess reflective practice, some of which resulted in a growth of literature addressing the related concepts of reflection, critical thinking/reflection, and reflexivity (Finlay, 2008; Mann, Gordon, & MacLeod, 2009). One of the main challenges that becomes evident when reviewing the literature is the inconsistent use of terminology, as various authors present different models for consideration. While there may be disagreement from authors regarding the meaning of various terms, the one thing that is agreed upon is the problem of terms being poorly defined or used interchangeably. One author's use of the term "reflection" is another's definition of "critical thinking," one's "clinical reasoning" is another's "reflective thinking," and so on. Finlay (2008) agrees that "the lack of consensus and clarity about the concept of reflective practice [results in] the proliferation of different versions and models to operationalise reflective practice" (p. 7). Christopher Johns (2009), in the third edition of his text *Becoming a*

Reflective Practitioner, summarizes the evolution of the 15 iterations of his own model's progression of teaching reflective practice to nurses, from a somewhat prescriptive method to the current teachings which include the term "mindfulness" at its core.

The process of teaching reflection, as demonstrated in the literature, appears to be multi-factorial (Braine, 2009; Burton, 2000; Dewey, 1933; Finlay, 2008; Kofoed, 2011; Mann et al., 2009; McCarthy, Cassidy, & Tuohy, 2013; Sobral, 2000). In her discussion paper for the Practice-based Professional Learning Centre, part of the United Kingdom's Open University, Finlay provides readers with a summary of the conceptual and practical problems of teaching reflective practice (Finlay, 2008). As with many complex concepts, the teaching and assessment methods must be reasonable and match reality as closely as possible so as not to have students feel more disconnected in the process. Finlay (2008) identified that inauthentic efforts to stimulate reflection could further disengage students and result in their saying just enough to get by or saying what they thought the instructor wanted to hear. In presenting reflective practice models that could be applicable to health care education, several key variables appear with some consistency, including facilitating context, providing a safe atmosphere, providing mentorship and supervision, offering peer support, and allowing time to reflect (Finlay, 2008; Leung & Kember, 2003; Mamede & Schmidt, 2004; Yoo & Chae, 2011).

According to Pretorius and Ford (2016), the ability to reflect on one's own experiences for the purpose of improving professional practice is a crucial characteristic of a successful healthcare practitioner, allowing them to engage in a process of lifelong learning. Studies in which reflective practice has been tested are evident in medical and nursing

literature, and both professions have considered the use of video recordings as a method of self-assessment and faculty assessment (Sorenson & Dieter, 2005; Strand, Fox-Young, Long, & Bogossian, 2013; Webb et al., 2012; Yoo & Chae, 2011). One study of undergraduate nursing students demonstrated that using videos for reflection correlated with improvements in communication skills, long-term memory in the clinic, and student satisfaction (Sorenson & Dieter, 2005; Yoo & Chae, 2012). Studies aimed at improving clinical assessment abilities of nurse practitioners have used video-recordings and support the benefits of this methodology in improving clinical assessment abilities and/or communication skills per student and/or faculty report (Sorenson & Dieter, 2005; Strand et al., 2013; Webb et al., 2012). Medical students who received faculty feedback in the form of voice overlays on video-recorded history-taking and physical examination skills on three occasions improved more than the control group who utilized video recordings but had no faculty assessment (Stone, Angevine, & Sivertson, 1989). Much of the evidence for using video recording appears in higher education literature, in which it is used to train student teachers to be more effective in the classroom (Calandra, Gurvitch, & Lund, 2008; Harford & MacRuairc, 2008; Harford, MacRuairc, & McCartan, 2010; Kong, Shroff, & Hung, 2009).

Exploring the relationship between reflection and levels of learning, Leung and Kember (2003) identified that “deep” levels of learning correlated with reflection and that “surface” learning was linked to non-reflective forms of thinking. Surface learning was associated with habitual action, while deep learning was correlated with understanding, reflection, and critical reflection (Leung & Kember, 2003). Mann et al. (2009) commented on the difficulty of measuring the causal effect of something that is “invisible”; however, studies supporting reflective practice from students’ perspectives are promising, even with their limits. Theoretical discussions are in vast supply, yet few actual studies applying this to health care education have been published (Mann et al., 2009). Commentaries about the possible benefits of reflection in practice are to be lauded, but there is little evidence to support these statements (Schutz, 2007). While cursory evidence supports the development of reflective thinking and clinical reasoning, none of the empirical studies captures the complexity of psychomotor mastery. The point is clear: the “easiest” part of healthcare education is delivering knowledge and assessing its acquisition; teaching and assessing the ability to communicate effectively and demonstrate caring and compassion while performing often-complex physical assessments is much more difficult.

While opportunities for developing reflective thinking are readily available in many health professional education programs, opportunities for developing reflective practice abilities are limited. The goal of this project was to explicitly bridge that gap between reflective thinking and reflective practice through the use of two video-recorded practice experiences that emphasize communication and psychomotor skills. The two specific aims of the study were: 1) to implement a controlled method of reflective practice on two occasions in a Doctor of Physical Therapy (DPT) program using peer dyad practice, video-capture, and self- and peer-assessment; and 2) to assess the impact of this reflective practice intervention on enhancing the students’ verbal, non-verbal, and psychomotor skills development.

Methods

Participants and Setting

Participants included 36 students (27 female, 9 male, mean age 24) in an accredited DPT program. Study approval was received from the University’s Institutional Review Board (IRB). Students provided signed consent. The Department of Physical Therapy served as the setting for this study. In order to simulate the clinical setting, three private treatment areas associated with the Department were selected as locations for the experiences.

Research Design

This study used a quasi-experimental design with collection of quantitative and qualitative data. The investigators were faculty in the program, with the primary investigator serving as the coordinator of the musculoskeletal course in which these experiences were integrated. Using a number generator, the course coordinator randomly assigned the students to a peer dyad prior to each of the two reflective practice experiences. All 18 dyads engaged in the video-recorded reflective practice experience during weeks 5-6 and weeks 9-10 of the 15-week semester. Each member of a dyad was randomly assigned different, discrete musculoskeletal examination and treatment skills to perform on their peer. Prior preparation for cognitive, affective, and psychomotor proficiency of the upper quadrant examination occurred during class time and during independent practice in the weeks preceding each video-recording experience. Skills selected for the first reflective practice experience included assessing cervical mobility using accessory motion, performing cervical special tests, testing cervical muscle length, and performing central/unilateral cervical joint mobilization. Skills for

the second reflective practice experience included performance of shoulder range-of-motion testing, shoulder special tests, shoulder muscle length testing, glenohumeral joint mobilization, and resisted testing of the shoulder.

Students completed the video recordings on Wednesday mornings of the assigned weeks. Immediately prior to the experience, each member of the dyad selected a sealed envelope containing the examination and treatment skills to perform on their partner. Each dyad had up to 1.5 hours to complete the assignment. Students had the opportunity to practice, provide feedback to one another, practice multiple takes, and finally provide one complete video for self- and peer-assessment. The skills to be assessed were required to be recorded in a single take; splicing of the recording was not allowed.

Data Collection

Video-clips were uploaded to a private, course-specific YouTube page. Each dyad had one week to review and comment on their own and their peer's performance. At the completion of the course, students anonymously completed an on-line, investigator-developed *Reflective Practice Questionnaire* (see Appendix). The *Questionnaire* included 13 statements about the perceived value of the assignment and its impact on each of the following: communication, motivation to practice, giving and receiving feedback, anticipated performance on upcoming competencies, stress associated with competencies, and actual psychomotor performance. Responses were collected on a five-point Likert scale (*Strongly Disagree*, *Disagree*, *Neutral or No Opinion*, *Agree*, and *Strongly Agree*). An open-ended question, "Provide at least one example of something you learned about yourself from this experience that will benefit you on your next competency or practical examination or in your clinical internship," completed the questionnaire.

At the conclusion of the course, and after students had completed the *Reflective Practice Questionnaire*, the course coordinator held a class discussion about the experience to gather additional feedback related to the assignment's instructions, process, timing, and relevance to mastery of course content.

Data Analysis

Descriptive statistics from the questionnaire included the mean, median, standard deviation, and range. The qualitative data were analyzed using principles of grounded theory (Glaser & Strauss, 1967) and were assessed to determine themes from the data with subsequent coding of each response (Hesse-Biber & Leavy, 2006). Two reviewers independently read the

comments and developed a draft coding framework. A subsequent meeting led to identification of major themes. All three reviewers then read the data again, coded the data, and compared and discussed it until consensus was reached. Comments from the end-of-course discussion were documented and considered alongside the program's ongoing curriculum assessment plan.

Results

The first aim, to implement two controlled reflective practice experiences using peer dyad practice, video-recording, and self- and peer-assessment, was accomplished. The process of random selection of students to dyads was readily completed using a number generator. Scheduling of sessions in private treatment areas within the department was managed during non-class hours so that students could complete the assignments in a setting that more closely approximated a patient encounter in a clinical setting. The skills selected for each assessment were deemed appropriate for the study and supported the instruction that occurred during the corresponding musculoskeletal course. The students used suggested instructor-provided prompts to guide their reflection of their own and a peer's performance.

The second aim, to assess the impact of the intervention on developing the reflective practitioners' verbal, non-verbal, and psychomotor skills, included evaluating the quantitative and qualitative responses to the *Reflective Practice Questionnaire*. These data are presented in Table 1. Students positively responded to all 13 statements, indicating that they found value in the experiences. Students most strongly agreed with the following statements regarding improvement: verbal communication = 4.17; the need to practice as a result of seeing the video = 4.06; the ability to give and receive honest, helpful feedback to/from a peer compared to working in a dyad without a video = 4.03 for both; and the improvement in psychomotor skills = 4.03.

Mean scores were further supported by qualitative responses from the final prompt of the on-line questionnaire: "Provide at least one example of something you learned about yourself from this experience that will benefit you on your next competency or practical examination or in your clinical internship." Verbatim responses are provided to illustrate each of the following five themes that emerged: (a) awareness of body mechanics, (b) perceptions of confidence, (c) communication competence, (d) value of the experience, and (e) importance of practice.

Awareness of Body Mechanics:

"Even though I felt like I was using proper body mechanics, I found that this was not always the case when watching myself."

"I noticed my errors in body mechanics."

Table 1
Responses to Reflective Practice Questionnaire (n=36)

Prompt	Min	Max	Mean	SD
I have identified strengths in my nonverbal communication that I had not recognized previously.	2.00	5.00	3.7500	.69179
I have identified areas for improvement in my nonverbal communication that I had not recognized previously.	2.00	5.00	3.7778	.76012
I have identified strengths in my verbal communication that I had not recognized previously.	3.00	5.00	3.9722	.60880
I have identified areas for improvement in my verbal communication that I had not recognized previously.	3.00	5.00	4.1667	.60945
I am more motivated to practice as a result of seeing myself perform on a video.	2.00	5.00	3.5556	.84327
I am more aware of areas that I need to practice as a result of seeing myself perform on a video.	3.00	5.00	4.0556	.67377
I improved my ability to give honest, helpful feedback to a peer compared to working in a dyad without a video.	3.00	5.00	4.0278	.55990
I improved my ability to receive feedback from a peer compared to working in a dyad without a video.	3.00	5.00	4.0278	.60880
The format of this assignment provided an opportunity to develop my ability to work with others.	2.00	5.00	3.8056	.66845
The format of this assignment provided an opportunity for me to improve my psychomotor skills.	3.00	5.00	4.0278	.60880
I would have liked to have used video reflection earlier in the program.	2.00	5.00	3.7222	.88192
Using videos to reflect on my performance would have helped my performance on competencies.	2.00	5.00	3.6944	.74907
Using videos prior to competencies would have decreased my stress level during competencies.	2.00	5.00	3.5833	.90633

Perceptions of Confidence:

“I learned that I do not display confidence in my non-verbals.”

“I have learned that I need to increase my eye contact and confidence when speaking to patients.”

Communication Competence:

“I learned that it is important to know how to explain what we are doing with our patients in patient-friendly language. I noticed that when I was trying to explain the skills I was performing, it was a challenge to put it into terms they could understand. From here on out I will be more conscious of this to improve my communication with patients while in all clinical internship settings.”

“I learned that I need to work more on providing instruction and explanations in patient-friendly language.”

“How fast I actually talk.”

“I talk a lot. I may need to dial that back a bit, especially if the patient is not appreciating my openness.”

Value of the Experience:

“My ability to see and assess my own skills was helpful to give myself criticism and see where I needed to improve.”

“Being able to practice on a classmate, get their feedback, and compare it to my perception of my performance, and the evidence from the video, helped me gain a better appreciation for what I do know and helped me feel more confident and better able to perform in the bigger competencies.”

“I learned that my verbal and nonverbal skills have improved quite a bit. I always kept thinking that I get very nervous and thus my verbal skills during competency are sub-par but when I watched myself perform these skills, I realized that I felt that the words easily flowed out. I was not hesitant. I looked confident in fact.”

Importance of Practice:

“I learned that the more I practice, the better I do.”

“I learned that the more I practice the more comfortable I feel with doing the skills.”

“I learned what specific skills I needed to focus on practicing.”

Student reports from the faculty-led discussions indicated that students agreed that the curriculum provided many instances for their development of reflective thinking, yet few opportunities for their development of structured reflective practice. Students also agreed that the video-recording experiences and subsequent feedback of their own and a peer's performance supported their development of reflective practice. Students identified that they would have benefitted from incorporating these types of non-graded reflective practice opportunities earlier in the curriculum.

Discussion

This series of two non-graded experiences explicitly bridged the gap between reflective thinking and practice. According to Schutz (2007), reflective practice has "the potential to help practitioners... unlock the tacit knowledge and understanding that they have of their practice and use this to generate knowledge for future practice (p. 26)." Future verbal and nonverbal performance, as well as the ability to give and receive feedback, were perceived by the students to be enhanced as a result of this assignment. The assignment was also valuable in assisting students in identifying barriers to their performance not previously recognized. Although this pilot study was carried out within the context of a doctor of physical therapy curriculum, because it involved reflection on the physical performance of hands-on skills, it has applicability to education programs of any discipline that include assessment of skill performance.

This activity was not designed to decrease class hours spent on learning the identified psychomotor skills; however, anecdotally, there was a time savings for faculty as student performance on subsequent competency and practical examinations at the end of the semester was improved compared to prior years without this activity. Less faculty time was required in remediation of student performance and re-takes of the competency or practical examinations. These pilot data were insufficient to draw definitive conclusions as to the long-term positive impact of the intervention; however, the results were so promising that the coordinator chose to make this a permanent assignment within the course. Student feedback supported our assessment about missed opportunities to engage in reflective practice experiences earlier in the curriculum. This pilot was implemented in the second of a two-course musculoskeletal series. Based on these findings in the subsequent year, this activity was added to the first course of the series to enhance students' reflective practice development.

Consideration was also given to the "disconnect" between faculty and student expectations related to reflective practice. For example, the students' primary

goal in skills practice preparation for a competency examination may be simply to do well enough to pass, while the faculty members' primary goal of their preparation is for them to learn. After a competency examination, students are routinely asked by faculty, "How do you think you did?" with the hope that the student will successfully demonstrate reflection-ON-action. However, the constructs associated with reflective practice success (a safe environment, mentoring, time for reflection, and peer support) were identified during the end-of-course discussion by faculty and students as often lacking during these performance-based examinations.

Faculty also recognized that faculty-student interactions that followed a competency examination were often rushed and based on a rubric upon which the grade depended and not on the higher-level discussions of performance and decision-making. Faculty's assumptions to date had been that students engaged in reflective practice during class laboratory sessions and continued independent reflective practice prior to a psychomotor competency examination. However, it became clear that students often struggle with the concept of practice and that they demonstrate varying abilities to self-reflect and self-correct their performances. Additionally, students are often unable to reflect at all during the high-stakes, high-stress experience of a graded competency examination.

While students have opportunities to provide feedback of various types throughout the curriculum, they receive limited formal training on how to provide such feedback. A limitation of this study was that without prior training in providing feedback, the type, quality, and effectiveness of feedback varied and had the potential to impact the results of the study.

Future iterations of this research would benefit from formal analysis of student performance on competency and practical examinations, comparing those who completed the reflective practice experience to those who did not. Further, allowing the students to score each other on their reflective practice experience performances and comparing those scores to faculty assessments of the same performances could allow for better evaluation of the quality and consistency of student feedback.

Conclusion

This study provided pilot data on student physical therapists' abilities to engage in and improve their reflective practice through a series of video-assisted, non-graded clinical skill performance experiences. For this study, the authors framed the research questions around Schön's definition of "reflection-ON-action," in which self-assessment of one's performance occurred after the fact as the first logical step in developing a

practitioner who can transition to “reflection-IN-action” (Schön, 1983). Students’ development of communication and/or psychomotor skills benefited from the use of video-recordings. Non-graded reflective practice appeared to assist students in the successful translation of classroom skills and reflective thinking to clinical performance using reflective practice. Providing opportunities for students to develop reflective practice skills while in the didactic program will assist them in transitioning from novices in the classroom environment, to effective clinicians and, ultimately, expert practitioners. This intervention has broader application for developing reflective professionals in other healthcare and higher education programs.

References

- Braine, M. E. (2009). Exploring new teachers’ perception and understanding of reflection: An exploratory study. *Nurse Education in Practice*, 9(4), 262-270. doi: 10.1016/j.nepr.2008.08.008
- Burton, A. J. (2000). Reflection: Nursing’s practice and education panacea? *Journal of Advanced Nursing*, 31(5), 1009-1017. doi: 10.1046/j.1365-2648.2000.01395.x
- Calandra, B., Gurvitch, R., & Lund, J. (2008). An exploratory study of digital video editing as a tool for teacher preparation. *Journal of Technology and Teacher Education*, 16(2), 137-153.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston, MA: D.C. Heath and Co.
- Finlay, L. (2008). Reflecting on reflective practice [Discussion paper]. Retrieved from <http://www.open.ac.uk/opencetl/resources/pbpl-resources/finlay-l-2008-reflecting-reflective-practice-pbpl-paper-52/>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. London, UK: Transaction Publishers.
- Harford, J., & MacRuairc, G. (2008). Engaging student teachers in meaningful reflective practice. *Teaching and Teacher Education*, 24(7), 1884-1892. doi:10.1016/j.tate.2008.02.010
- Harford, J., MacRuairc, G., & McCartan, D. (2010). ‘Lights, camera, reflection’: Using peer video to promote reflective dialogue among student teachers. *Teacher Development*, 14(1), 57-68. doi:10.1080/13664531003696592
- Hesse-Bieber, S. N., & Leavy, P. (2006). *The practice of qualitative research*. London, UK: Sage.
- Johns, C. (2009). *Becoming a reflective practitioner* (3rd ed.). Oxford, UK: Wiley-Blackwell.
- Kofoed, N. A. (2011). Reflective practice for personal and professional transformation. *Journal of Christian Nursing*, 28(3), 132-138. doi: 10.1097/CNJ.0b013e31821cbb92
- Kong, S. C., Shroff, R. H., & Hung, H. K. (2009). A web enabled video system for self reflection by student teachers using a guiding framework. *Australasian Journal of Educational Technology*, 25(4), 544-558. doi:10.14742/ajet.1128
- Leung, D., & Kember, D. (2003). The relationship between approaches to learning and reflection upon practice. *Educational Psychology*, 23(1), 61-71. doi:10.1080/01443410303221
- McCarthy, J., Cassidy, I., & Tuohy, D. (2013). Lecturers’ experiences of facilitating guided group reflection with pre-registration BSc nursing students. *Nurse Education Today*, 33(1), 36-40. doi:10.1016/j.nedt.2011.10.020
- Mamede, S., & Schmidt, H. (2004). The structure of reflective practice in medicine. *Medical Education*, 38(12), 1302-1308.
- Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: A systematic review. *Advances in Health Sciences Education: Theory and Practice*, 14(4), 595-621. doi:10.1007/s10459-007-9090-2
- Pretorius, L., & Ford, A. (2016). Reflection for learning: Teaching reflective practice at the beginning of university study. *International Journal of Teaching and Learning in Higher Education*, 28(2), 241-253.
- Shepard, K., & Jenson, G. (1994). *Handbook of teaching for physical therapists* (2nd ed.). Boston, MA: Butterworth-Heinemann.
- Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.
- Schön, D. (1987). *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass.
- Schutz, S. (2007). Reflection and reflective practice. *Community Practitioner*, 80(9), 26-29.
- Sobral, D. (2000). An appraisal of medical students’ reflection-in-learning. *Medical Education*, 34(3), 182-187.
- Sorenson, D. S., & Dieter, C. (2005). From beginning to end: Video-based introductory, instructional, and evaluation applications. *Nurse Educator*, 30(1), 40-43.
- Stone, H., Angevine, M., & Sivertson, S. (1989). A model for evaluating the history taking and physical examination skills of medical students. *Medical Teacher*, 11(1), 75-80.
- Strand, H., Fox-Young, S., Long, P., & Bogossian, F. (2013). A pilot project in distance education: Nurse practitioner students’ experience of personal video capture technology as an assessment method of clinical skills. *Nurse Education Today*, 33(3), 253-257. doi:10.1016/j.nedt.2011.11.014

- Webb, E. A., Davis, L., Muir, G., Lissauer, T., Nanduri, V., & Newell, S.J. (2012). Improving postgraduate clinical assessment tools: The introduction of video recording to assess decision making. *Medical Teacher*, 34(5), 404-410. doi:10.3109/0142159X.2012.668242
- Yoo, M. S., & Chae, S. M. (2011). Effects of peer review on communication skills and learning motivation among nursing students. *Journal of Nursing Education*, 50(4), 230-233. doi:10.3928/01484834-20110131-03

JEFFREY G. EBERT, PT, DPT, OCS, is a clinical assistant professor in the Department of Physical Therapy at Mercer University, in Atlanta, GA. He has more than 13 years of experience in higher education. His research areas of interest include the scholarship of teaching and learning. He has published on this topic and has presented his research at state and national conferences. He currently teaches courses in orthopedics and movement science.

JEANNETTE R. ANDERSON, PT, DHS, is the Chair of the Department of Physical Therapy at Mercer

University in Atlanta, GA. She has over 15 years of experience in public and private higher education institutions. She has published on topics related to the scholarship of teaching and learning and presented at national and international conferences. She currently teaches content on professionalism in physical therapy and leadership development.

LESLIE F. TAYLOR, PT, PhD, MS, is a professor in the Department of Physical Therapy and Associate Dean of the College of Health Professions at Mercer University in Atlanta, GA. She has over 26 years of experience in higher education. She has published and presented on topics involving physical function in older adults as well as the scholarship of teaching and learning. Her current teaching responsibilities include psychosocial aspects of illness and disabilities, professional leadership, and research methods and application.

Acknowledgements

Financial support was provided by the Mercer University College of Health Professions Scholarship of Teaching and Learning Grant.

Appendix

At the completion of the course, students anonymously completed an on-line, investigator-developed *Reflective Practice Questionnaire*.

Please rate how much you agree with the following statements.

(Scale of 1-5: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree)

Assessing my performance in the video:

1. I have identified strengths in my nonverbal communication that I had not recognized previously.
2. I have identified areas for improvement in my nonverbal communication that I had not recognized previously.
3. I have identified strengths in my verbal communication that I had not recognized previously.
4. I have identified areas for improvement in my verbal communication that I had not recognized previously.
5. I am more motivated to practice as a result of seeing myself perform on a video.
6. I am more aware of areas that I need to practice as a result of seeing myself perform on a video.

Working with a peer on this video-recording assignment:

1. I improved my ability to give honest, helpful feedback to a peer compared to working in a pair without a video.
2. I improved my ability to receive feedback from a peer compared to working in a pair without a video.
3. The format of this assignment provided an opportunity to develop my ability to work with others.
4. The format of this assignment provided an opportunity for me to improve my psychomotor (hands-on) skills.

Thinking back on your PT education:

1. I would have liked to have used video reflection earlier in the program.
2. Using videos to reflect on my performance would have helped my performance on prior competencies.
3. Using videos prior to competencies would have decreased my stress level during competencies.

Open-ended:

1. Provide at least one example of something you learned about yourself from this experience (positive or negative) that will benefit you on your next competency, practical exam, and/or clinical internship.