2004

Reality-based Assessment and Testing Methods Using Video Vignettes

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Problem

Nursing is a practice profession that requires a transfer of learning to clinical practice (Billings, 2000). Clinical practice settings for nursing education have changed drastically from directly supervised, inpatient care settings to indirectly supervised, community based settings. Indeed, the American Association of Colleges of Nursing (1993) specifically emphasizes the need for master's programs to incorporate more educational opportunities for health promotion interventions to families and aggregates within community based settings. Furthermore, there is increasing demand for practitioners to assess and care for rural patients using technologic mediums like telehealth, telemedicine, telehome, teleradiology, telepsychiatry and virtual medical centers (Bachman & Panzarine, 1998; Billings, 2000).

Changing practice settings and technologic advancements create special problems for nursing education. Nursing educators are challenged to identify cost-effective, standardized experiences that validate student progression from supervised to unsupervised, community experiences. Of particular note, the College of Nursing recently opened an "all Internet" option for distance students to obtain their master's degree. We were faced with the challenges of providing clinical experiences to students faculty have never met. Clinical simulations provide a growing avenue to prepare students for the realities of independent practice (Billings, 2000). The purpose of this project was to introduce reality-based assessment and testing methods that validate students' clinical competence, using video vignettes to simulate family dynamics and health promotion needs in community settings. A secondary purpose was to provide students with an introductory technologic interface for family and health promotion assessments. These primary and secondary purposes are congruent with South Dakota State University's Lead Forward Objectives by addressing technologic skill proficiency, communication ability (counseling skills are the focus), clinical skill development and critical thinking. Project achievement directly enhances students' international competitiveness, and clinically reflects social awareness and adaptability to change.

Background

Course objectives directed students to assess family processes, connectedness, and interactions in order to derive contextually-based family counseling interventions that promote healthy behaviors. Traditional methods for teaching family dynamics focused on written case studies and role playing. Although communication is a core competency in the nursing profession, it is difficult to depict human experiences that are symbolically communicated through language and nonverbal responses in writing. Written case studies lack many implicit and explicit meanings, including the nuances, subtleties, and intuitive cues (Dickinson-Hazard, 1999; Mallow & Gilje, 1999; Salmon, 1999).

Paradoxically, other drawbacks to written case studies relate to written details that "lead" students to the "obvious answer." Subsequently, students fail to see the relevance of learning health promotion counseling skills, resulting in a disengaged learner. This disengagement impacts learner competence, confidence and satisfaction with personal performance when faced with actual clinical experiences (Keller, 1987). What we would often see is students who were "book smart," but were unable to identify family dynamics and apply the appropriate intervention when clinically faced with the complexities of family interactions.

Strategy

Principles of adult learning, creativity, and technology were considered in the development of this project. Specific attention was given to develop instructional processes that would engage the learner. Students attended didactic classes that provided course content related to counseling, family assessment, and health promotion. Clinical examples were provided along with classroom role-play situations. Concomitantly students were assigned community based families and submitted audio recordings of their interactions for faculty review and feedback.

At mid-term, students were given a take-home examination that included written case studies for structured analysis. As a final synthesis and review, students were given a video-driven, take-home final examination on CD-rom that paralleled the same set of analysis questions given at mid-term. The video was comprised of clinical vignettes that simulated family dynamics and health promotion needs commonly found in family homes. Inherent in this exam was time for the review and elaboration of information. This exam provided students opportunities to assess their own critical thinking, problem solving, and actions. Because it provided a standardized clinical simulation, student performances could be compared for evaluative purposes.

Results

Students were apprised of the course learning progression and the format of the final examination during the course introduction. Students indicated that they worked harder at learning family assessments and counseling skills because they knew they would be held accountable to demonstrate their clinical skill mastery on the final examination. Student performances on the clinically simulated final examination were more closely approximated to their audio recorded clinical performance than their performance on the written case study mid-term examination. These findings seem to indicate that students were more actively engaged in learning and that simulations provide a low-cost, standardized approach to validate clinical performance.

Impact on Students

The project was designed to stimulate active learning and engagement within the testing process. Students expressed gratitude for the opportunity to review previously covered material and synthesize their thoughts. I heard direct comments like, "I didn't know that I didn't understand it until I tried to apply it." Consistent with adult learning, students indicated that they learned more and would retain it longer because they believed the learning was interesting, exciting, and directly applicable (Dickinson-Hazard, 1999; Billings, 2000; Chandler & Hanrahan, 2000; Gagne, 1984).

Current student evaluations directly reflected this. Three quotes from the evaluation are: "This course helped identify communication skills that I need to work on;" "This was a different style of learning for me, more experiential than cognitive. I'm a visual learner so it was harder for me to incorporate the auditory parts of the tapes, but necessary and valuable to have this for learning to listen to patients, and listen for their experiences;" and "I think you do an excellent job on emphasizing learning rather than the letter grade, and it is refreshing."

Students who expressed dissatisfaction with the testing process were largely students who expressed a direct disinterest in counseling skills, indicated that they had not practiced the counseling skills, and had submitted fewer assignments. Student commitment to the number of clinical hours was also a consistent theme influencing their satisfaction. Student comments included, "There were so many assignments and obligations that had to be made; it ended up being what had to get done . . .," and "the assignment of finding 2 articles each week was not very helpful for me. I felt pushed and rushed so I grabbed the first articles I could find. I never had time to investigate what others found."

Recommendations

Mallow and Gilje (1999) advise caution in the development of technologically-driven vignettes, asserting that the role of technology within

caring and narrative pedagogies has not been clearly defined. This advice is a good reminder that clinical simulations cannot completely replace direct clinical experiences. However, experientially, this simulated clinical exam provides an opportunity to assess students' general performance. Recommendations for future trial are: 1) to use a simulated clinical examination at mid-term so that students can grow from the experience and their performance growth trajectories can be compared between mid-term and final examinations, and 2) clearly explain to students the amount of work requirements generated with the use of technology with the course requirements. This sometimes may require careful of advisement for students who do not allocate sufficient time for course work completion.

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BIOGRAPHY

Dianna Sorenson is a professor in the College of Nursing. She was a three-year recipient of the Governor's Award for Technology (1992, 1991,1990). Her work as a licensed clinical nurse specialist was recognized through her research efforts, receiving the Hildegard Peplau Award through the American Nurses' Foundation in 1990.