

Near Peer Learning To Facilitate Nursing Students' First Medical Surgical Clinical Experience / Apprentissage par les pairs proches de manière à faciliter les premières expériences cliniques en médecine et chirurgie pour les étudiantes en sciences infirmières

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Introduction

Ensuring an appropriate clinical experience for students is becoming more challenging in the context of a global nursing shortage, more acutely ill clientele, and limited numbers of educators, academics, and clinical instructors (Schatz, Marraffino, Allen, & Tanaka, 2013; Wytelake, Tran, Bowman, Needleman, & Dobalian, 2013). This process results in clinical environments that are more complex with less guidance and mentoring available to students (Aston & Molassiotis, 2003; Milton-Willey, Kenny, Parmenter, & Hall, 2014).

Some studies have reported positive outcomes of near peer learning approaches in the clinical setting (Sprengel & Job, 2004; Yates, Cunningham, Moyle, & Wollin, 1997; Zentz, Kurtz, & Alverson, 2014). However, there remains an urgency to identify strategies tailored to students' needs to minimize unnecessary anxiety and maximize students' learning opportunities during their first nursing practicum. The purpose of this study was to explore the experiences and perceptions of nursing students in their first medical-surgical practicum following their participation in a Near Peer Learning Activity (NPLA) in a clinical setting.

Background

Application of Health and Physical Assessment Skills within the Clinical Setting

A health and physical assessment (HPA), the first step of the nursing process, enhances safe and efficient patient care (Fennessey & Wittmann-Price, 2011), and it is central to nursing education and clinical practice (Giddens & Eddy, 2009). These basic clinical skills are often learned and practiced in laboratory or simulated environments that aim to provide safe learning opportunities (Irvine & Martin, 2014). However, Norman (2012) and Irvine and Martin (2014) concluded that skills taught in simulated milieus did not always transfer to the clinical setting. Although the clinical experience is a core pedagogical approach used by many nursing programs because “nurses learn and develop their skills and knowledge by performing concrete activities within the real context of nursing” (Ordre des Infirmières et Infirmiers du Québec [OIIQ], 2009), this first clinical experience is one of the most anxiety-provoking situations for students (Alzayyat & Al-Gamal, 2014; Kleehammer, Hart, & Keck, 1990). This anxiety is most pronounced when conducting HPAs in their first clinical contact while having limited guidance and supervision (Goldsmith, Stewart, & Ferguson, 2006; Owens & Walden, 2001). Goldsmith et al. (2006) proposed that introducing peer learning in the clinical setting may provide additional support that may mitigate the barriers to skill transference, such as anxiety and a poor learning environment, by providing extra opportunities to practice while at the same time promoting a positive supervised learning environment (Goldsmith et al., 2006; Irvine & Martin, 2014; Norman, 2012).

Near Peer Learning Approaches

Near peer learning is a formal, time-limited learning activity, framed around specific learning objectives that involves pairing a senior student with a junior student during a teaching session (Naeger, Conrad, Nguyen, Kohi, & Webb, 2013; Rashid, Sobowale, & Gore, 2011). Near peer learning promotes a positive learning environment and may help mitigate some of the anxiety and apprehension engendered by the unfamiliar clinical milieu (Goldsmith et al., 2006; Owens & Walden, 2001). It has been shown to provide students with the opportunity to apply theory to practice, develop important clinical skills, and to practice clinical assessments with additional supervision and guidance (Owens & Walden, 2001). However, nursing studies

involving peer learning approaches have been conducted primarily in the academic and laboratory settings (Becker & Neuwirth 2002; Brannagan et al., 2013; Edwards, Hawker, Carrier, & Rees, 2011; Owens & Walden 2001). An extensive review of the literature found two studies that examined peer learning in the clinical setting (Sprengel & Job, 2004; Zentz et al., 2014).

A study by Sprengel and Job (2004) used a locally derived survey tool to assess the perceived benefits of peer mentoring. The students rated the experience highly on elements of confidence in caring for patients, their role as a nurse, and teamwork. Two themes emerged from their comments: the “realization that clients are real people in contrast to working with mannequins in the lab” and “having a mentor reduced their level of anxiety during the initial clinical experience” (Sprengel & Job, 2004, p. 249).

In addition, Zentz et al. (2014) completed a large, mixed method descriptive study examining the perceptions of 342 BSN students of fulfilling the roles of the professional nurse through participation in two peer-assisted learning sessions: one in a laboratory setting and another in the clinical setting. The ratios were one senior student for twenty-five junior students (1:25) in the laboratory setting, and one senior student for ten junior students (1:10) in the clinical setting. The authors used a locally developed 5-point Likert scale and open-ended questions to determine students’ perceived impact of the peer-assisted interaction on their confidence in the clinical setting and demonstration of professional nurse roles such as teacher, caregiver, and manager. The major findings of this study included reduced anxiety and increased confidence, junior students feeling less intimidated and better understood by the senior students, and that having senior students made for a more supportive learning environment (Zentz et al., 2014). However, it was reported that the program lacked preparation of students and faculty. The authors suggested that future implementation should include formal preparation and handouts of the suggested learning activities, clear description of the expectations and direction for the peer learning activities (Zentz et al., 2014).

Furthermore, a recent study by Dadoun, Bhanji, and Dubrovsky (2014) demonstrated that medical students who were taught a procedural or technical skill by peers developed the same degree of competency as students taught by experts. Moreover, the pedagogical approach of near peer learning may be useful for learners because they benefit from having a peer teacher who is sensitive to their vulnerabilities and academic level (Aston & Molassiotis, 2003; Zentz et al., 2014).

The application of near peer learning to the clinical setting has yet to be fully explored. The authors believe this learning strategy applied to the clinical setting can be valuable, is easily implemented, and could enhance the quality of clinical experiences for both junior and senior nursing students. Thus, near peer learning may provide additional and alternative resources to address the challenges facing clinical education and may be particularly effective for learning clinical skills such as physical assessment (Owens & Walden, 2001).

Research Question

The following questions guided the study: following the participation in the NPLA, (1) how did nursing students perceive their experience in their first medical-surgical practicum? (2) More specifically, how did nursing students experience performing a HPA in their first medical-surgical practicum?

Methods

The Implementation of a Health and Physical Assessment Near Peer Learning Activity

Educators at a Canadian university hosted a pilot project entitled: *A Near Peer Health and Physical Assessment Clinical Learning Activity - A pilot project*. The undergraduate nursing program at the time (2015), would only introduce nursing students to their first medical-surgical clinical rotation in their third semester with limited prior exposure to the acutely ill clientele and the acute medical-surgical clinical setting. This university's nursing program typically applied a clinical supervision model whereby a clinical instructor supervises and is responsible for groups of 6 to 8 nursing students in a given clinical setting. The clinical instructor works collaboratively with the nurses on the unit to support the students. The primary purpose of the project was to create an opportunity for an early supervised clinical exposure for junior nursing students (i.e., students who had yet to experience their first medical-surgical clinical practicum) in the context of the Health and Physical Assessment course during their second semester of the nursing program.

In preparation for the clinical learning activity, the senior students were provided with two one-hour training sessions prior to the integration of the junior students into the clinical setting. The training session was guided by the Adaptive Mentorship (AM) Model (Ralph & Walker, 2013), implemented as described by Garcon (2014). The model replaces the “one-size-fit-all” standard approach by allowing mentors to vary their support or their task response according to developmental needs (competence and confidence) of the learner (Ralph, & Walker, 2013). According to Ralph and Walker (2013), the “support response” is defined as “the degree of “human” or psycho/social/emotional expression they provide the learner”, whereas the “task response” refers to “the degree of specific direction given to the learner regarding the technical, mechanical, or procedural aspect of the latter’s performance of the task being learned”. The mentor-learner pair collaboratively determines the existing development level of the learner and the desired support and task response to perform a specific skill-set being learned (Ralph & Walker, 2013, p. 22).

During the training session, in addition to the AM model, the senior students were guided in reflective practice techniques and participated in role-play and case analysis. At the end of the session, the senior students were provided with the junior students’ HPA system-focused skills’ checklist, the learning objectives of the clinical activity and a discussion guide. The senior students’ role was to introduce the junior students to the setting and to their assigned patients. As established collaboratively, they assisted the junior students as they performed their HPA.

The clinical learning activity consisted of a one-time 1 hour and 45 minute session where the junior students performed HPA skills on selected patients admitted to an acute medical unit at one of the university’s teaching hospitals, under the guidance of a senior student (i.e., students who were one year ahead of junior students in the program and who were already familiar with the clinical setting). The assigned HPA was one that the junior students were previously exposed to and had practiced on themselves and/or on Standardized Patients in the laboratory setting and in the simulation center.

Following the interaction of approximately 1 hour with the patient, the student pairs reflected informally on the experience for an additional 45 minutes. The senior students were prompted to guide the reflection towards the overall experience of the junior student, identifying

novelty factors such as a “real” patient and setting and their perceived performance of the assessment.

Research Design

A qualitative descriptive design with individual interviews was used to explore in depth junior nursing students’ experiences of their first medical-surgical clinical practicum considering their participation in a NPLA (Sandelowski, 2000).

Ethics

The study was approved by the university’s Ethics Review Board. Following an explanation of the study and opportunity to ask questions, each participant signed a consent form prior to the commencement of the interview. In the case of a telephone interview, verbal consent was obtained and recorded. The researchers explained that participation was voluntary, and that confidentiality would be maintained. In addition, the students were reassured that participation or withdrawal from the study would not affect their academic standing in the nursing program. Furthermore, none of the members of the research team were in an evaluative position during all phases of the study.

Sample

The inclusion criteria for study participation was the following: nursing students who, (a) took part in the NPLA in March 2015 during the second semester, (b) were enrolled in the second-year clinical courses during the third semester, and (c) agreed to be audio-recorded during the interview. Potential participants were recruited via email by the student class representative and invited to attend an informational session given by the study team. The researchers left the room and the class representative handed out response cards and envelopes, then collected these from all attendees at the end of the meeting and submitted these to the researchers.

Data Collection

Semi-structured interviews were used to explore junior nursing students’ experiences. Sample questions from the interview guide are provided in Table 1. Students were interviewed only after they had been in the clinical setting a minimum of six clinical days, to have enough experience to comment on during the interview. The interviews were conducted either face-to-face or by telephone. Interviews were digitally audio-recorded and transcribed verbatim by a professional transcriber. The data collection period was extended from the third to the seventh week of the first clinical practicum.

Trustworthiness

Credibility was established through peer debriefing whereby the research team met regularly to analyze and interpret the findings (Graneheim & Lundman, 2004). To address confirmability, the researchers adopted a self-critical attitude by writing reflective notes after each interview consisting of insights, possible biases, and preconceptions that may have affected the research. In addition, an audit trail was kept of the research process including field notes, audio recordings, and products of data reduction and analysis. Transferability was ensured through dense description of the participants and setting of the NPLA as provided above. Lastly, dependability was ensured by providing a detailed description of the research methods.

Table 1

Sample Interview Questions

1.	Tell me about your experience on a typical day on the unit in your current clinical practicum.
1.1	What do you think has contributed to your experience on the unit so far?
2.	What are your thoughts and concerns about being in your first medical-surgical clinical practicum?
2.1	What do you feel has contributed to your concern in this first medical-surgical clinical experience?
3.	Have you performed a health and physical assessment on the unit so far?
3.1	What if anything has helped you to perform a health and physical assessment?

Data Analysis

Data collection and data analysis were done concurrently and were part of an iterative process where each informed and modified the other (Sandelowski, 2000). Thematic content analysis was used to generate the codes, themes and patterns that captured the students' experiences (Burnard, 1991). Demographic data and field notes were integrated into the transcripts to contextualize the data; however, they were not used in the analysis of the data. Content analysis began with the review of these field notes and the transcripts. The researchers read through each transcript and took notes to become immersed in the data (Burnard, 1991).

During the second reading, open coding was conducted by underlining, highlighting, and labelling the text related to participants' thoughts and feelings about the clinical practicum and performing HPA (Burnard, 1991). Similar open codes were clustered into broader categories to reduce the data to represent students' thoughts and feelings about the phenomenon through the process of axial coding (Burnard, 1991; Polit & Beck, 2004). The data were then organized into a table containing axial codes, the corresponding open codes, excerpts demonstrating the open codes, and the location of these excerpts within the original transcripts. A final coding matrix was developed to tabulate the number of participants endorsing each category in order to identify the key themes and ensure data saturation. These products of analysis were introduced into a concept map to visualize how the categories were related and to identify the overarching themes.

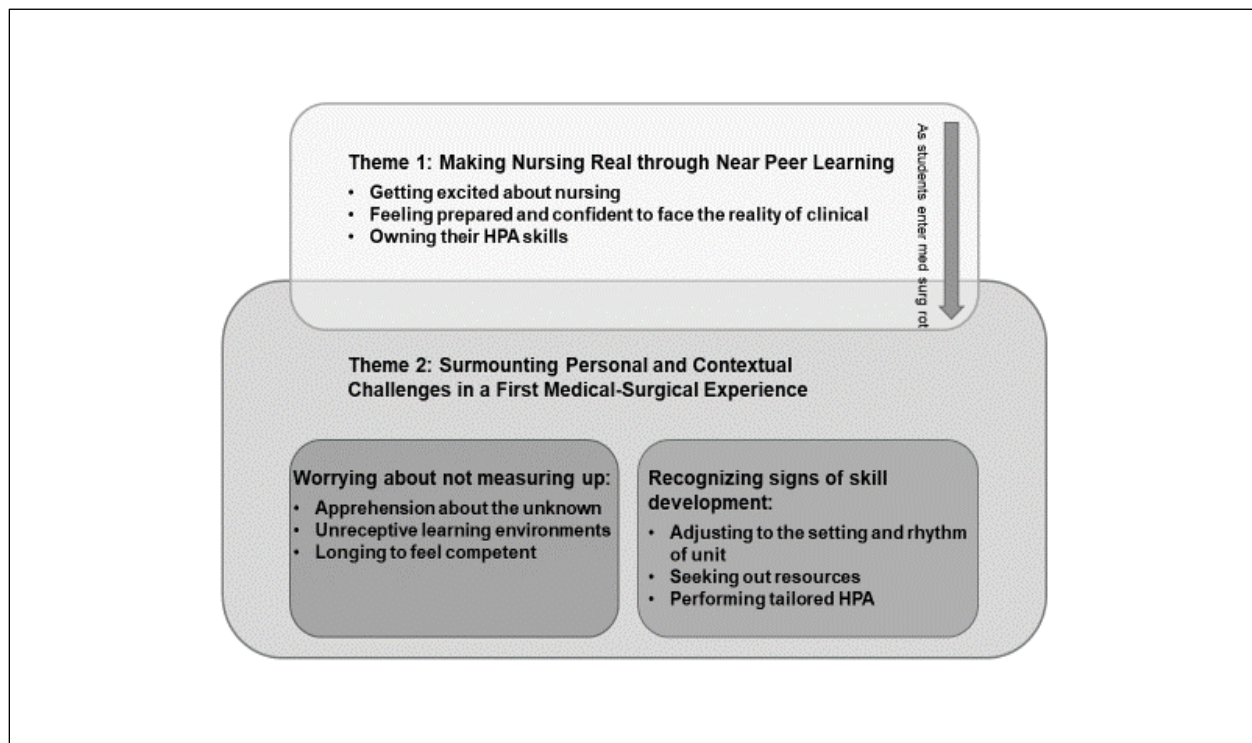
Findings**Sample Demographics**

Ten of the twenty-one eligible nursing students consented to participate in the study. The sample included three men and seven women in their second year of nursing studies (mean age 22 years, range 21 to 28) who had completed a minimum of six clinical days.

Student Experiences

Two main themes captured the essence of the students' experience: (1) *making nursing real through near peer learning* and (2) *surmounting personal and contextual challenges in a first medical-surgical experience*. A concept map in Figure 1 provides an overview of the main study findings.

Figure 1.

Near Peer Learning to Facilitate Nursing Students' First Medical Surgical Clinical Experience**Theme 1: Making Nursing Real through Near Peer Learning**

Getting excited about nursing. Eight participants expressed that the NPLA made them look forward to and excited about becoming a nurse. One student stated, “So that’s what I really enjoyed about it [NPLA]. It really made me excited to actually be able to go in hospital on clinical days and do that kind of stuff.” Another student added “feeling hopeful” about their future abilities, based on observing their near peer “role models” in action. After watching an older student perform in the clinical setting, one student stated “I was like oh wow, she’s doing that for real. So yeah, that made me excited to start my second year. I’m really more excited for my second year than I was in the first year.” Five students described how the experience reaffirmed their career choice in nursing. One student also expressed excitement about the first experiences which made her feel like a real nurse, stating “it made me feel like a nurse [...] because we were putting on our scrubs, our stethoscopes [...] I really felt like a nurse.”

Feeling prepared and confident to face the reality of clinical. All ten students agreed that the NPLA helped them to feel more prepared and more confident to face the reality of their medical-surgical practicum. Students described being ahead of the game, with one student mentioning, “even though I was still climbing that mountain, I made my first step. Having that first step [back in March] made me feel like I was already slightly ahead of the game”. Another student also reported a similar experience, explaining:

I pick up things more quickly. So, I don’t need to work on my confidence. I don’t need to spend time telling myself okay, you can do it, you can go talk to patients. Like, I’m above that level already, which is where I see other students are not there yet, are too shy to talk

to the patient, who don't know how to approach the patient still, don't know where to get information.

Owning their HPA skills. Most students mentioned that the NPLA helped them to own their HPA skills and feel more competent. It provided them with an opportunity to take stock of their abilities. In addition, six students stated that the NPLA helped to bridge the gap between theory and practice. For example, one student mentioned “so I just found the main goal or the main benefit from that [NPLA] was saying in my mind: okay, this is how you do it theoretically, and this is the reality.”

Theme 2: Surmounting Personal and Contextual Challenges in a First Medical-Surgical Experience

Subtheme 1: Worrying about “not measuring up”. Despite their preparation from the NPLA, students still reported facing challenges as they entered their first medical-surgical practicum. Students identified three main situations that contributed to their worries.

Apprehension of the unknown. For these novice students, apprehension about what was to come seemed to originate from the perception of a huge contrast or “jump” between the expectations in first year compared to those in second year. Some students attributed their worries to the lack of information provided about “what to expect or what the day's going to be like” during their first clinical placement.

Unreceptive learning environments. The learning environments in their first medical-surgical practicum were described by most of the students as unreceptive or not conducive to learning. This was likely to occur when the expectations of nurses and instructors did not coincide, the instructors and nurses did not convey understanding of the learning experience, and when negative feedback was provided, and positive encouragement was absent. One student summarizes this experience for all his peers:

Even now, it's still very difficult because I feel like sometimes in the nurses' eyes and in my instructor's eyes, all they can see would be us still flopping around the first few days and not being able to do anything [...] Because we are students, we're expected to make mistakes. We're not really expected to do things right. So, when we actually do things right, there is no feedback because that's the way you're supposed to do it, and both from the instructor and the nurses, [...] the general feel I get is perfection should be the standard. And then when we make mistakes, however, we get scolded pretty badly. So, it's really difficult because [...] it makes us feel like we're not really improving while we actually are... At the same time, the good things that we are doing, we don't really learn how to improve on them because [...] we never really get recognized for that as well.

Longing to feel competent. Eight students described their desire to perform in the eyes of their instructors and the nurses on the unit. They expressed this specific concern regarding their clinical competence and “know how”. This concern was well shared by one student who said:

I feel like coming into the practicum, I was lacking a lot in the actual practical knowledge that I had to know, and many of the nurses expect us to know that. So, sometimes the response has been that we are students, we are here to learn, and the expression of the nurses has been why are you even here? [...] So I do feel that the lack of practical knowledge that could be taught in first-year led to me feeling slightly incompetent during my practicum here and there.”

This student attributed his perception of longing to be competent to the lack of exposure to practical skills during the first year of the nursing program; this was also described by three other students.

Subtheme 2: Recognizing signs of skill development. Despite the challenges encountered, all students described signs of improvement, including adjustment to the environment, use of resources, and performance of HPA.

Adjusting to the setting and rhythm of the unit. As students entered and progressed in their first medical-surgical practicum, students described developing a personal routine and rhythm to deal with the “chaos” of the unit. The students expressed that despite having to get used to this chaos, which the NPLA did not expose, the NPLA experience was worthwhile.

Seeking out resources. Another encouraging sign of development identified as students entered their clinical practicum, was their ability to access resources. When students discovered with time, that nurses were supportive, this increased their desire to seek out learning experiences. For example, one student mentioned “I always ask [the nurses] what tips and tricks they can give me for when I get to do that skill [...] it’s very nice that they’re helpful and they give you all that information.”

Performing tailored HPA. Most students spoke at length about their ability to perform a tailored HPA on patients. For example, one student stated, “it is very different from one patient to another”, thus they tailored their HPA to the patient’s health issues and needs. After having gone through the NPLA, most students also learned to prioritize and “narrow down” their assessment based on the patient context. Students also mentioned becoming “better” and “more comfortable” with their assessments, and “really doing it fully without forgetting what [I] really need to assess.”

Discussion

Considering the challenges associated with the clinical practicum, educators and researchers continuously search for comparable alternatives. The current study has demonstrated that with a carefully designed NPLA, novice students can benefit from an early and brief initial medical-surgical clinical exposure to which they can apply the knowledge and skills they acquired in the classroom or laboratory.

Previous work points to the importance of early clinical experiences in improving students’ motivation, learning, understanding of basic sciences and appreciation of the clinical relevance of theoretical knowledge (Dornan et al., 2006; Khanal, Bhusal, Sigdel, & Bajracharya, 2016; Yardley et al., 2010). Similarly, the findings from the current study suggest some benefits to introducing students to the clinical setting early in their professional education. Following a brief, structured NPLA, students described feeling confident in their interactions with patients, as well as more prepared to tailor their approach to HPA. They attributed these achievements to having the opportunity to practice their skills with supervision in the NPLA initiative, suggesting that there may be benefits to introducing students to the clinical setting early in their training with support of their near peers.

The NPLA was developed and implemented within the HPA course. Although usually taught in the laboratory setting, the course content and objectives presented an opportunity to take the learning into the clinical setting and allow students to begin to apply these essential skills. The design of the NPLA created a receptive learning environment where junior nursing

students were paired with senior nursing students who ensured that the novices could safely practice their health assessment skills with patients on the unit. As a result, and concurrent with the findings of Zentz et al., (2014), these novice students reported higher self-confidence and sense of preparedness to deal with the reality of the clinical practicum and their readiness to apply their HPA skills as they entered their first medical-surgical practicum the following semester. Similarly, Carlson (2003) and Hickey (2010) report that pedagogical approaches that provide effective, structured, and individualized accompaniment for junior students entering the clinical setting foster their sense of empowerment and confidence in their abilities.

The benefits of the NPLA experience did not alleviate all the difficulties students encountered in their medical-surgical placement. The stressful conditions in the clinical setting and students' unrealistic expectations of their own performance created the perfect storm of "not measuring up" and "longing to feel competent" in their medical-surgical experience. Both Dwyer and Revell (2014) and Pitt, Powis, Levett-Jones, and Hunter (2012) note that students' negative self-perceptions of their clinical performance have yet to be studied. Thus, students' self-perception of "not measuring up" in the present study may warrant further research to understand the factors that influence these impressions and to develop interventions to optimize learning in clinical environments. Furthermore, investigation of early near peer clinical learning activities, as a strategy to overcome the challenge of "longing to feel competent" due to "lack of exposure" in the first semesters of the nursing curriculum, may be recommended. Educators could implement early near peer clinical learning experiences, with pre- and post-analysis to measure this outcome.

The present study had three limitations. First, ten students of the 21 eligible students accepted to be interviewed. While this limits generalizability, there were a range of responses and experiences collected. Second, for the convenience of the students, three interviews were conducted by telephone. The telephone interviews were shorter in length which may have affected the amount of detail the students were able to share. Third, although the researchers inquired about the students' initial experience upon entering their medical-surgical practicum, two interviews took place during the sixth and seventh week of the students' clinical rotation. This ultimately extended their clinical exposure time and may have influenced their recall of the initial experience.

Conclusion

The clinical practicum is irreplaceable in nursing education. The overall students' clinical learning experience will be influenced by the support and structure provided by instructors and faculty during the clinical practicum (OIIQ, 2009; Pitt et al., 2012). However, it is crucial that the clinical experience is positive, and educators need to ensure this despite unpredictable circumstances.

This study explored junior nursing students' experience and perceptions of their first medical-surgical clinical practicum following their participation in an NPLA. The findings suggest that a brief, early clinical learning activity that is structured and guided by a supportive near peer shows potential in mitigating some of the worries experienced by novice students transitioning into their first clinical rotation and enhances their ability to apply their HPA skills. Early clinical exposure may serve to bring new meaning and understanding to the theory that students are grappling with in the classroom. Students see first-hand how the theoretical knowledge is important for practice, which may further motivate them.

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