Using a Train-the-Trainer Model to Prepare Educators for Simulation Instruction

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abstract

Staff development departments are challenged with addressing the entry of new graduates into the workforce, updating the competencies of practicing nurses, and providing nurses with educational support to reduce turnover. Knowing how to develop simulations, integrate them into teaching, and effectively assess simulated performance is becoming a core role for educators in health care. For many educators, a knowledge and skill gap exists between the demand for simulation and competence in developing and using simulation. This article shares a cost-effective, three-step train-the-trainer model to prepare nurse educators to use simulation effectively. The three steps include champion identification, champion development, and champion integration. Strategies for addressing the challenges and lessons learned in implementing this model are outlined. The model is an effective and efficient approach for developing a core of champions in any topic area. These champions can then mentor and train others throughout the organization.


Nurse educators from both academia and staff development are committed to the development of safe and highly skilled health care practitioners. In response to calls in the nursing literature for reform in nursing education and practice (Benner, Sutphen, Leonard, & Day, 2010; Institute of Medicine, 2011), schools of nursing are incorporating more and more simulation into their programs at all educational levels to better prepare graduates to develop their competencies for entry into practice. Reform is necessary in confronting key issues in nursing, such as high turnover rates and the difficulty of transitioning from education to practice (Institute of Medicine, 2011). Staff development departments are challenged with addressing the entry of new graduates into the workforce, updating the competencies of practicing nurses, and providing nurses with educational support to reduce turnover.

Simulation has been reported in the literature as beneficial to student learning. It improves students’ confidence, knowledge, and satisfaction (Burns, O’Donnell, & Artman, 2010; Fountain & Alfred, 2009; Smith & Roehrs, 2009). Knowing how to develop simulations, integrate them into teaching, and assess simulated performance effectively is becoming a core role for educators in health care. However, for many educators, a knowledge and skill gap exists between the demand for simulation and their competence in developing and using simulation.

This article describes a unique three-step train-the-trainer model to prepare nurse educators to use simulation effectively. The three steps are champion identification, champion development, and champion integration. This model was used to prepare nursing faculty to integrate simulation across an undergraduate curriculum. It
can be effectively applied in preparing staff development educators to incorporate simulation into their instruction. This article also addresses potential barriers to success and implications for nurse educators. The ease of this approach and its successful implementation support its usefulness for educators in hospitals, health care institutions, and a variety of environments beyond academia.

NEED FOR EDUCATOR DEVELOPMENT

The current health care environment requires effective methods to prepare nurses with the competencies needed to care for patients with complex needs and to produce quality outcomes. The stakes are high for educators in all settings to develop highly competent practitioners. Simulation provides a mechanism for learners to practice the application of specific knowledge, skills, and attitudes while thinking through possible decisions in standardized patient care scenarios within a safe learning environment. Educators have the ability to create scenarios and associated responses to learner actions through the use of a high-fidelity mannequin. This education provides practice in patient care situations to better prepare nurses to care for complex patients. Simulation also provides an opportunity for nurses to practice identifying and managing both obvious and subtle cues of impending deterioration of a patient’s condition. As nurse educators design instruction that incorporates simulation, it is important that they have the knowledge and skills not only to develop simulations but also to implement them effectively in their courses and programs.

In health care settings, four generations of nurses may be working together. They were identified by Cahill and Sedrak (2012) as Traditionalists, born before 1945; Baby Boomers, born between 1946 and 1964; Generation X, born between 1965 and 1978; and Millennials, born between 1979 and 2002. Although key differences among these generations include age, values, attitudes, and life experiences, an additional difference is their comfort with and knowledge of technology. The nurses in Generation X and the Millennial generation are more comfortable with the use of technology than are the Traditionalists and Baby Boomers (Cahill & Sedrak, 2012; Stanley, 2010). Current students, many of whom are Millennials, expect to use technology in education (Casares, Dickson, Hannigan, Hinton, & Phelps, 2012; Smith & Caruso, 2010). Technology and computers are both familiar and foundational to learning for these nurses. This familiarity with technology, coupled with the desire to use technology in education, may present a challenge for educators, who often are of the Traditionalist or Baby Boomer generation. Thus, the educators may be less comfortable with technology than the learners.

EDUCATOR DEVELOPMENT IN THE USE OF SIMULATION: THE TRAIN-THE-TRAINER MODEL

A train-the-trainer model is an effective strategy for increasing an educator’s knowledge and skill in both content and delivery. The Center for the Health Professions at the University of California San Francisco uses this model for nursing leadership development through their Emerging Nurse Leaders Train-the-Trainer program (Center for the Health Professions, 2012). The American Association of Colleges of Nursing currently uses a train-the-trainer format for several of their initiatives, such as their end-of-life courses (American Association of Colleges of Nursing, 2013). Jeffries (2008) included train-the-trainer programs as the “T” in her S.T.E.P. approach to simulation educator preparation.

Although each of these three examples of train-the-trainer programs has proven effective, they require the educator to attend in-person training. The train-the-trainer approach can be enhanced by incorporating online instruction for the educator and combining the strategy with a retreat. Including a retreat as part of the model allows educators to spend dedicated time away from their usual work activities to focus on honing a specific set of newly acquired knowledge and skills, such as the ability to develop and use simulation.

Three-Step Model

A three-step train-the-trainer model was developed to prepare educators for simulation instruction. The first step of the process was to identify nurse educators who would champion, or be the change advocate for, simulation education. These educators would be responsible for developing and leading the implementation of simulation into various educational programs and would become the simulation trainers. The second step of the process was champion development. In this step, the nurse educator champions would receive education and training in the skills and knowledge needed to develop and implement simulation methods. This second step is truly the train-the-trainer step. The third step of the process focused on integrating the champions (i.e., trainers) into the role of champion simulation educator. Creating a plan for integration of the model is essential to its successful implementation. The approach for this integration centered on holding an educator retreat with planned follow-up.

Champion Identification. The preferred method for identifying champions is to seek individuals who are interested in a topic and willing to participate in activities
that enhance their knowledge and skills. In many institutions, simulation champions may be identified by their position, for example, staff development educator. For institutions that seek involvement beyond staff development educators, an announcement or call for interest may be made to identify those with a simulation background who desire to become simulation champions. The application should be brief and easy to complete. Potential participants should be asked to explain why they would like to be a simulation champion and to list any previous education, teaching, or coaching experience in simulation. In reviewing the applications, it is important to keep in mind that the second step of the model is focused on knowledge and skill development. The application can serve as a baseline assessment. A simple rubric can be developed to clarify and quantify desired applicant responses. A determination also should be made as to the number of simulation champions needed to implement the educational program. The institution may wish to identify specific qualifications for the simulation champion, such as a specific type of nursing degree and specialty. The complexity and volume of anticipated simulations should be assessed to determine not only the appropriate number of simulation champions but also the necessary qualifications.

Champion Development. Once the number of champions and the necessary qualifications are determined and the simulation champions are identified, the next step of the model focuses on education and training in the skills and knowledge related to simulation. An excellent resource for assisting nurse educators to learn to develop and integrate simulation is the National League for Nursing’s Simulation Innovation Resource Center (SIRC), which is an online e-learning site that provides more than 15 online courses on simulation. SIRC provides an opportunity for nurses to network with experts and peers and provides a complete list of resources, including vendors, free simulations, tools and instruments, research studies, and sources for funding (http://sirc.nln.org).

It is important to determine the baseline of simulation-related knowledge necessary for the identified champions. The champions’ applications and the SIRC module descriptions and objectives should be reviewed to determine which of the online courses should be required. Courses that might be helpful include: (1) designing and developing simulations; (2) debriefing and guided reflection; (3) teaching and learning strategies; (4) evaluating simulations; (5) maximizing realism; and (6) developing faculty. Two continuing education hours are awarded for each module. A decision should be made as to whether the champions will be required to complete the courses on their own time. In addition, a time line for completion should be established, such as one course per month. The cost of the courses should be funded by the organization. Champions can identify their learning needs and decide which of the SIRC online courses would best meet them.

Champion Integration. The third and final step of the model is integration of the champions into the role of champion simulation educator. This integration requires champions to come together, plan simulation activities, and practice implementing and evaluating the simulations. To facilitate the immersion of these educators into their role as simulation champions, a 1- to 2-day retreat format is recommended. A retreat provides the opportunity for the champions to immerse themselves in the integration of their new, expanded knowledge of simulation, away from the daily demands of work. At the conclusion of the retreat, desired outcomes may include: (1) identification of proposed educational activities that will include simulation; (2) development of simulation scenarios; (3) practice in implementation of designated simulation activities; (4) practice in the use of simulation equipment; and (5) identification of resources needed for planned programs.

After the retreat, the educators should be well prepared to assume the role of simulation champion. Simulation champions should plan to meet regularly to determine overall needs for simulation within the facility. There are a number of activities that the simulation champions may wish to pursue to support simulation in their educational programs. They should continue to identify resources that are needed to implement simulation and may wish to create a simulation resource repository for their agency (Jeffries, 2008). A simulation resource repository is the compilation and cataloguing of all simulations used in the various educational offerings that can be made available online as well as in a hard copy notebook.

The simulation champions can also develop simulation tool kits, or self-contained, ready-to-go simulations that some term a “sim in a box.” A “sim in a box” consists of a box labeled with the title of the simulation that includes written instructions on how to conduct the simulation, instructions on how to constitute the moulage, moulage ingredients (as appropriate), and simulation supplies. The concept behind “sim in a box” is that when educators plan to implement a simulation, they can simply go to a resource area and find the appropriate “sim in a box” with instructions and most of the moulage ingredients and simulation supplies.

Champions can serve as mentors in the organization. Through mentoring, champions are poised to assist oth-
er educators to effectively incorporate simulation into their teaching approaches. As mentors, champions provide support and guidance to those seeking to develop knowledge and skills in simulation. A final responsibility of the simulation champions is the dissemination of their knowledge through internal and external presentations and publications.

**Evaluation**

An evaluation plan should be developed to measure the processes and outcomes of the train-the-trainer program. The purpose and desired outcomes of the program should be identified at the beginning of the project. Both formative and summative evaluation measures should be planned for each implementation step of the model.

The authors used this train-the-trainer model to develop simulation champions in an undergraduate nursing program. Because they recognized the importance of measuring outcomes in any project, the authors identified both the purpose and the desired outcomes of the project. The identified purpose was to develop faculty teaching in the undergraduate program in the knowledge and use of clinical simulation. The desired outcomes were: (1) identification of six faculty to serve as clinical simulation champions; (2) completion of online SIRC modules by all six faculty; (3) integration into the simulation champion role by all six faculty through active participation in the retreat; and (4) active integration of the simulation champions into the undergraduate nursing program after the off-site retreat. At the conclusion of the project, six faculty, identified through competitive selection, received in-depth preparation in clinical simulation through completion of seven online SIRC courses. All six faculty completed these online courses. The six simulation champions, armed with their newly acquired knowledge, participated in a 2-day retreat. The retreat focused on teaching and learning the mechanics of developing instruction using simulation rather than the hands-on use of a human simulator. After the retreat, the six simulation champions continued to meet regularly to facilitate integration of simulation into the undergraduate curriculum.

**CHALLENGES AND LESSONS LEARNED**

In overseeing this type of project, several issues must be addressed. Central to the success of any project is the identification of a project leader and the commitment of administration. The director of the nursing program or the director of the staff development department is in a key position to lead such a project and commit financial support. The director may also identify a project leader and provide administrative support as needed. Once these resources are in place, the next step is to secure funding to support the train-the-trainer retreat model. Once a funding source is identified, the overall plan should be tailored to fit within the total allotted budget. Depending on the funding, the project leaders may need to identify essential and nonessential components. In the authors’ use of this model, 7 SIRC courses for each of the six simulation champions, totaling 42 courses (approximately $2,500), and the off-site retreat (approximately $2,000, including food, mileage, and lodging) were deemed essential.

Another area of concern is the finesse needed to address the desires of those who were interested in being simulation champions but were not chosen. It is important to develop and communicate clear guidelines for selection and participation. The simulation champions attempted to share all activities and resources with the undergraduate faculty. Another concern is the time needed to complete the SIRC courses, which can be challenging. In the authors’ experience, periodic reminders and encouragement were effective in ensuring that all simulation champions completed all courses. Further challenges are associated with scheduling a 2-day off-site retreat that accommodates the schedules of multiple educators. The authors chose a retreat location that was 2 hours from the work site by car. Travel was planned for the morning of day 1 and the evening of day 2.

A significant challenge is associated with scheduling time for the retreat follow-up activities. For example, the authors found that to address the needed simulation activities, the simulation champions scheduled working meetings every 2 weeks. The group found that it was difficult to accomplish the necessary tasks between the meetings; therefore, they planned to complete them at the meetings. The first 15 minutes of the meeting focused on goals for the meeting, the next 90 minutes were devoted to working on the simulation activities, and the last 15 minutes focused on reporting on activities accomplished and setting the agenda for the next meeting. For example, several meetings were devoted to the creation of online and hard copy versions of the simulation resource repository.

The final challenge was maintaining momentum. Ongoing recognition of the simulation champions is crucial to their continued involvement. Further, with rapidly changing technology, ongoing support for simulation education and networking are essential.

**IMPLICATIONS FOR NURSE EDUCATORS**

The three-step train-the-trainer model was successfully used to prepare educators for simulation instruction. Nursing staff development instructors, nursing
Simulation


1. Knowing how to develop simulations and effectively assess simulated performance is becoming a core role for educators in health care.

2. This three-step model is an effective and efficient approach for developing a core of champions in any topic area.

3. Including a retreat as part of this model allows educators time to immerse themselves in the integration of their new, expanded knowledge of simulation, away from the daily demands of work.