

Title:

Incorporating an Information Technology Teaching Assistant (IT-TA) Into an Undergraduate Nursing Curriculum

Nicholas Aaron Cress

Teresa Villaran

Berea College, Berea, KY, USA

Session Title:

Rising Stars of Nursing Invited Posters - Group 2

Slot (superslotted):

RSG STR 2: Friday, September 26, 2014: 10:00 AM-10:30 AM

Slot (superslotted):

RSG STR 2: Friday, September 26, 2014: 11:45 AM-1:00 PM

Slot (superslotted):

RSG STR 2: Friday, September 26, 2014: 3:00 PM-3:30 PM

Keywords:

Electronic Health Records, Information technology and Undergraduate labor

References:

1. AACN (2008). The Essentials of Baccalaureate Education for Professional Nursing Practice. Retrieved January 31, 2012, from www.aacn.nche.edu/education-resources/BaccEssentials08.pdf
2. American Association of Colleges of Nursing (AACN) (2012). Nursing Faculty Shortage Fact Sheet. Retrieved on 7/31/14, from <http://www.aacn.nche.edu/media-relations/FacultyShortageFS.pdf>
3. American Nurses Association (2008). Nursing informatics: Scope and Standards of Practice.
4. American Nurses Credentialing Center (ANCC) (2013). Informatics Nursing. Retrieved May 9, 2013, from <http://www.nursecredentialing.org/NurseSpecialties/Informatics.aspx>
5. Cipriano, P. F., & Murphy, J. (2011). Nursing Informatics. The Future of Nursing and Health IT: The Quality Elixir. *Nursing Economics*, 29(5), 286-282.
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7. Moody, L., Slocumb, E., Berg, B. & Jackson, D. (2004). Electronic Health Records Documentation in Nursing: Nurses' perceptions, attitudes, and preferences. *CIN: Computers, Informatics, Nursing*, 22(6): 337-344.
8. QSEN: Quality and Safety Education for Nurses (n.d.). Informatics. Retrieved January 31, 2012, from <http://www.qsen.org/definition.php?id=6>
9. Russell, A., Comello, R. & Wright, D. (2007). Teaching strategies promoting active learning in healthcare education. *Journal of Education and Human Development*, 1(1). Retrieved on February 1, 2012, from <http://www.scientificjournals.org/journals2007/articles/1025.htm>
10. The TIGER initiative (2009). Collaborating to integrate evidence and informatics into nursing practice and education: An executive summary. Retrieved from http://www.tigersummit.com/uploads/TIGER_Collaborative_Exec_Summary_040509.pdf

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE	TIME ALLOTTED	FACULTY/SPEAKER	TEACHING/LEARNING METHOD	EVALUATION/FEEDBACK
Example	Example	Example	Example	Example	Example

<p>Critique selected definition of the term, "curriculum"</p>	<p>Definitions of "curriculum" Course of study Arrangements of instructional materials The subject matter that is taught Cultural "training" Planned engagement of learners</p>	<p>20 minutes</p>	<p>Name, Credentials</p>	<p>Lecture PowerPoint presentation Participant feedback</p>	<p>Group discussion: What does cultural training mean to you?</p>
<p>The learner will be able to discuss the importance of utilizing an IT-TA to incorporate technology into nursing curriculum.</p>	<p>Duties of an IT-TA Potential benefits for the IT-TA, Nursing Faculty, and College</p>	<p>Time allotted</p>	<p>Nicholas Cress, BCSN</p>	<p>Poster Presentation</p>	<p>Discussion</p>
<p>The learner will be</p>	<p>Recognize the time,</p>	<p>Time allotted</p>	<p>Nicholas Cress, BCSN</p>	<p>Poster Presentation</p>	<p>Discussion</p>

<p>able to discuss the opportunities available to the undergraduate student in the IT-TA position.</p>	<p>effort, and skill required for computers, databases and other technologies to become reliable and effective tools for patient care</p>				
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Abstract Text:

Purpose

The purpose of this project is to develop a permanent undergraduate student labor position that supports promoting the knowledge, skills, and attitudes of nursing students through the use of technology. This student bridges the gap between technology and nursing practice. Berea College is a work college. All students work at least 10 hours per week on campus. This project was funded by the Work Colleges Consortium which requires the integration of education, work experience and service to others.

Background

The Institute of Medicine’s (IOM) report on the future of nursing, recommends the use of technology to “prepare students for decision making in complex care environments” (IOM, 2010). According to the TIGER (Technology Informatics Guiding Education Reform) initiative (2009), the nursing profession has been slow to include information technology into nursing education. Lack of informatics knowledge in healthcare can lead to increased staffing needs, patient care errors, and organizational and work flow disruption (Kulhanek, 2011).

The incorporation of Electronic Health Record (EHR) technology has the potential to simulate real life situations. Nurse’s attitudes after implementation of an EHR indicate it helps rather than hinders care, improves documentation, is less of a threat to privacy than a paper record, and decreases workload (Moody, Slocumb, Berg & Jackson, 2004). Active-participatory learning by nursing students through technology, enhances safer clinical practice and critical decision-making (Russell, Comello & Wright, 2007). There is a gap between nursing education and nursing practice (Benner, Sutphen, Leonard & Day, 2010) that can be bridged by incorporating technology used in practice into the educational setting.

The American Association of Colleges of Nursing (AACN) indicates nine Essentials of Baccalaureate Education for Professional Nursing Practice (2008). Essential IV emphasizes the need for nurses to have “knowledge and skills in information management and patient care technology.” Incorporation of technology is critical to the delivery of quality patient care. The decision support tools embedded in these information systems help nursing students make complex life-threatening decisions based on evidence.

Quality and Safety Education for Nurses (QSEN), funded by the Robert Wood Johnson Foundation, indicates six quality/safety competencies that pre-licensure nurses should have (QSEN, n.d.). Competency number six, "Informatics," is defined as the "Use of information and technology to communicate, manage knowledge, mitigate error, and support decision making." This competency requires much more than just input of data. This competency requires the user to understand, trend, interpret and utilize the data that is entered to enhance the safe delivery of care across healthcare settings.

The benefit of utilizing an EHR in the nursing curriculum is by managing information and utilizing evidenced-based decision support tools. Students need the same opportunities when learning, unfortunately with the current nursing education system, this does not always occur. Exposing nursing students to an EHR in their undergraduate education makes them more marketable to employers, and enhances their ability to go into health IT positions.

Benner, Sutphen, Leonard & Day (2010) describe four shifts in nursing education that need to occur: contextualizing education, incorporating multiple ways of thinking, translating knowledge learned in the classroom to the clinical setting, and transforming from student to professional. Use of technology has the potential to address all four of these necessary changes in nursing education.

The current nursing faculty shortage (AACN, 2012) comes at a time when demands for nursing curriculum change requires the development of safe, quality nursing graduates. Unfortunately the slow movement to incorporate technology into the curriculum may be because of the nursing faculty shortage. Since the average age of nursing faculty is 44 () we are not considered technology "natives", or those people who grew up with computers. This may be hindering our ability to move rapidly to incorporate technology into the curriculum. The IT-TA can bring technology experience and knowledge to the program that is needed to fulfill the needs of students. What is interesting is that we found students were not as tech savvy as we expected them to be and the IT-TA has been very helpful in student instruction with basic computer and technology needs.

The IT-TA is available to help faculty incorporate technology into their courses. Technology can take the form of working with an academic electronic health record, development of spreadsheets, student created patient education videos, and student produced web pages. The IT-TA makes learning with technology easy and fun, which takes the apprehension out of using new technology, and learning at the same time.

Our nursing IT-TA assists in meeting educational goals set by accrediting bodies at a time when information management is critical for healthcare providers. More and more health care institutions are incorporating electronic health records into patient care due to the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009. Student involvement in technology is necessary for them to be competitive in the health care workforce. The skills obtained in health informatics promote a strong, knowledgeable workforce that can provide the leadership needed for safe, exceptional care (Cipriano & Murphy, 2011).

Nurse informaticist is a fairly new role for nurses. This role requires analytical and critical thinking skills through use of the nursing process (Assess, Plan, Implement, Evaluate) imbedded into technology. Nurse informaticists have a Bachelors degree. Requirements for this role include working as a nurse for two years, and hours working in an IT area. Working for nine months, at 15 hours/week, an IT-TA will have hours to apply toward a national certification in Informatics Nursing through the American Nurses Credentialing Center (ANCC, 2013). This is where the integration of work and education lead to opportunities even after graduation.

The IT-TA:

1. Works 15 hours per week.

2. Is a junior or senior nursing student who has demonstrated excellence in learning, as well as leadership skills.
3. Goes through an orientation phase: including orientation to the technology, and acquisition of 10 contact hours of continuing education before mentoring students.
4. Assists students and faculty in keeping abreast of current and new technology in and out of the classroom.

Benefits to students (Excerpted from QSEN (n.d.):

1. Explain why information and technology skills are essential for safe patient care.
2. Describe the role of technology and information management in the quality and safety of patient care.
3. Recognize the time, effort, and skill required for computers, databases and other technologies to become reliable and effective tools for patient care.
4. Seek education about how information is managed in care settings and utilize care technology and information management tools to support safe processes of care.
5. Navigate the electronic health record. Document and plan patient care in an electronic health record.
6. Value technologies that support clinical decision-making, error prevention, and care coordination. Protect confidentiality of protected health information in electronic health records.
7. Appreciate the necessity for all health professionals to seek lifelong, continuous learning of information technology skills.

Benefits to faculty:

1. Able to incorporate technology into course work.
2. Stay abreast of technology used by students.
3. Allows a student to trial the technology before launching in course work.
4. Student investment promotes student use.
5. Links education and practice for students.

Benefits to the College

1. Creates a high-level undergraduate labor position leading to opportunities for employment.
2. Student learning across programs of study (labor, technology, professional).
3. Development of a program (nursing) to meet real life requirements for employment.
4. Improved student-faculty relationships utilizing a student liaison.