

# Integration of Intentional Research Assignments into Select Nursing Courses

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**Abstract**

Current education literature reveals that achieving student buy-in to the relevance of evidence-based practice (EBP) and research to everyday nursing practice is a challenge. One contributing factor could be the emphasis placed on EBP and research throughout undergraduate nursing curricula. Students display the natural tendency to lose certain skills if they are not consistently reinforced and utilized. With intentional integration of specific aspects of EBP/research principles across an undergraduate nursing curriculum, students may recognize the important role that research skills may play in their clinical practice. The specific skills that will be intentionally imbedded into the existing curriculum are: 1) Development of a research question using the PICO model; 2) the identification of the levels of evidence; 3) integration of EBP assignments.

**Literature Review**

The use of EBP is imperative in nursing practice, and in healthcare in general, if a high quality of care and service is to be achieved (Ryan, Lea, & Parker, 2013). The current healthcare environment requires that nurse graduates are prepared to participate in EBP/research initiatives in their practice settings (IOM, 2010). Students’ attitudes, perceptions, and willingness to utilize skills and information are developed early in their career trajectory (Ryan, 2016). With this in mind, integration of research concepts and skills across the undergraduate nursing curriculum will instill the importance of EBP and research to students’ eventual nursing practice. Additionally, opportunities to practice research skills will allow students to gain confidence in their abilities to locate, interpret, and apply scholarly findings to practice situations (Halcomb & Peters, 2009; Forsman, Wallin, Gustavsson, & Rudman, 2012; Leach, Hofmeyer, & Bobridge, 2016).

**Framework**

The framework adopted for this on-going study of nursing students’ knowledge and attitude related to research, is based on a concept developed by Lev Vygotsky (1896-1934) entitled the Zone of Proximal Development (ZPD) (Lui, 2012). The model identifies the levels of student learning which include: what can be done independently, what can be accomplished with help, and what cannot be done at all. The framework goes on to profile at which of the aforementioned levels where the best education interventions should be introduced. This framework has been traditionally used with the education of children and has been expanded over time to encompass the concept of “scaffolding” which was introduced by Wood, Bruner, and Ross (Lui, 2012). The researchers for this project will apply this framework to undergraduate nursing students in the university setting.

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**Purpose**

An assessment of the nursing undergraduate curriculum revealed a gap in research-focused content. A lack of teaching strategies and learning activities related to the use of research concepts and skills were identified. It was determined that a more purposeful approach to threading research skills and evidence-based practice (EBP) across the curriculum would strengthen knowledge and skills, and thus, influence attitudes toward research activities. This pilot represents only a portion of a larger research study that will assess baccalaureate nursing students’ attitudes regarding research.

The purpose of this project will be to determine how well students are being prepared with foundational knowledge within the nursing curriculum to meet the challenges of the practice setting as evidenced through attitude towards research. The findings will have limited generalizability due to the size of the sample but will be disseminated through publication and/or poster presentation as a pilot study.



**Methods**

After IRB approval was received, a quasi-experimental survey design was selected as the methodology deemed feasible based on the target population and the allocated timeframe. The study is a pilot that will require further investigation based on the initial outcomes.

A convenience sample of undergraduate baccalaureate nursing students is the identified population. A pre-test has been administered to sophomore level nursing students prior to their experiences in the nursing research class. and the subsequent intentional research assignments integrated into junior and senior level classes. A post-test will be given at the end of the senior academic experience.

The survey tool is a research attitude survey developed by Dr. Ingrid Swenson. It is being used with permission of the author. Once data are collected, it will be managed using statistical software (SPSS) and will be analyzed using descriptive and inferential statistics. The findings will be limited to the student population under investigation.

**Tool**

Student Attitudes Toward Research					
• Confidence in ability to tell the difference between poor and adequate research studies	Negative				
	1	2	3	4	5
• Difficulty/ease in understanding research terminology					
• Confidence in applying research findings in future nursing career					
• Importance of questioning attitude in nursing					
• Importance of intuition versus research in making clinical decisions					
• Importance of personal experience versus research in making clinical decisions					
• Interest in working on a research project					
• Enjoy discussing research studies					
• Enjoy reading research studies					
• Value in future career of being able to understand research studies					
• Potential for research improving patient care					
• Should nurses do research as part of their role					
1. PhD/DNP prepared*					
2. MSN prepared					
3. BSN prepared					
• Should BSN nurses understand research studies					
• Overall Attitude Score					

(Swenson & Kleinbaum, 1984)

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**Future Implications**

Through the mechanism of this pilot, the foundation is now established for future research related to undergraduate curricular design as it pertains to intentional integration of research concepts. To be consistent with external influences such as the Institute of Medicine (IOM) recommendations and Magnet™ standards, the findings will serve as a springboard for further curricular expansion and measurement of variables that influence student and faculty knowledge, attitudes, and proficiency in the use of research methods.

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