Using the ACE STAR Model for Teaching-Learning Evidence Based Practice
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**Background:** The Institute of Medicine has suggested that evidence-based practice (EBP) be part of the educational preparation of health care providers.

**Evidence:** Available data indicate that nurses in the United States (U.S.) are generally not educationally prepared for EBP.

**Strategy:** A baccalaureate research course was restructured and re-focused based on the ACE STAR Model. The purpose of this study was to determine the effect of this restructured course on teaching and learning EBP.

Teaching-learning activities included weekly online EBP activities related to the first three ‘star points’ on the ACE STAR Model.

Targeted learning outcomes were based on the grades/scores from online EBP activities and a test developed from the undergraduate EBP competencies from the Academic Center for EBP. The EBP competencies test was given pre and post the EBP course, during the senior practicum, and six months post graduation.

**Practice Change:** This study provided data for a curriculum and name change of our program’s previous research methods course. The traditional model of teaching research methods and research utilization was changed to an actual, three-credit hours, EBP course.

**Evaluation:** Over six semesters, 302 of 320 students (78.1% female; mean age 24.8 ± 5.9 years, 34 % Caucasian, 31% Asian, 9% Hispanic, 5% African American), progressed and consented to participate in this IRB-approved study. Parametric and non-parametric statistics were used depending on the measurement level and distribution of the data.

**Results:** Significant differences (all \( p \leq 0.01 \)) were demonstrated in pre/post course EBP activity and EBP competency test grades/scores. Competency scores were decreased during follow-up, but remained stable over time (87.2 ± 0.05, 86.4 ± 0.04, 86.3 ± 0.04, post course, senior practicum, and six months post graduation, respectively).

**Recommendations:** Re-examination of the focus of traditional baccalaureate research courses may be needed to increase U.S. nurses’ knowledge and application of EBP. These data suggest the ACE Star Model is an effective conceptual framework to enhance teaching-learning and retention of EBP.

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