Embedded or modular? Preliminary findings from a longitudinal study of two methods of delivering Evidence-Based Practice teaching in pre-registration nursing education.

Laura Scurlock-Evans, Jo Rouse, Prof. Dominic Upton & Dr. Penney Upton, University of Worcester.

Context

- For the past 20 years Evidence-Based Practice (EBP) has been increasingly emphasised as an effective approach and goal in health care (Upton & Upton, 2006). However, research has identified a number of barriers to its adoption and implementation (Sandström et al., 2011).
- Most research in this area has focused upon the practice of registered nurses (e.g. Brown et al., 2009), or newly qualified practitioners (e.g. Maben et al., 2006).
- Little research has focused on nurses' initial pre-registration training, particularly on the impact EBP teaching delivery method on adoption and implementation of EBP throughout the learning process.

Aim of the study

The study represents an on-going educational audit exploring the impact of teaching delivery method (embedded vs. modular) on undergraduate pre-registration nursing students' self-reported EBP implementation, attitudes, and knowledge and skills.

Design

- A longitudinal, cross-sectional survey collecting data from September 2011 until February 2015.

Method

- Two cohorts of undergraduate nursing students were opportunistically recruited for the study: cohort one (N= 57, response rate= 90.1%) were being taught EBP modularly, but cohort two (N= 88, response rate= 63.8%) had EBP embedded across their modules.
- Data was collected every 6 months, using the Evidence-Based Practice Questionnaire (EBPQ; Upton & Upton, 2006): a 24-item self-report measure with three subscales (practice of, attitude towards, and knowledge and skills in EBP).

Results

- Preliminary analysis of students' EBP 6-months into their course (following one clinical placement) is reported.
- The initial results identified no statistically significant differences between the cohorts on the practice of EBP (*U*= 2,138.00, Z= -0.13, p= .894; embedded group *Md*= 5.00, modular group *Md*= 5.00, see figure 1).
- However, statistically significant differences between the two cohorts were identified on EBP attitudes (*U*= 1,852.00, Z= -2.43, p=.015), and knowledge and skills (*U*= 2,802.00, Z= 3.68, p<.001). Students on the modular curriculum displayed slightly higher attitude scores (*Md*= 6.33) than those on the embedded curriculum (*Md*= 5.67), although both cohorts demonstrated positive attitudes toward EBP (see figure 2). Conversely, the embedded curriculum cohort students displayed slightly higher scores on EBP knowledge and skills (*Md*= 4.89) than the modular cohort students (*Md*= 4.29; see figure 3).

Figure 1. Box-plot of EBP practice subscale scores.

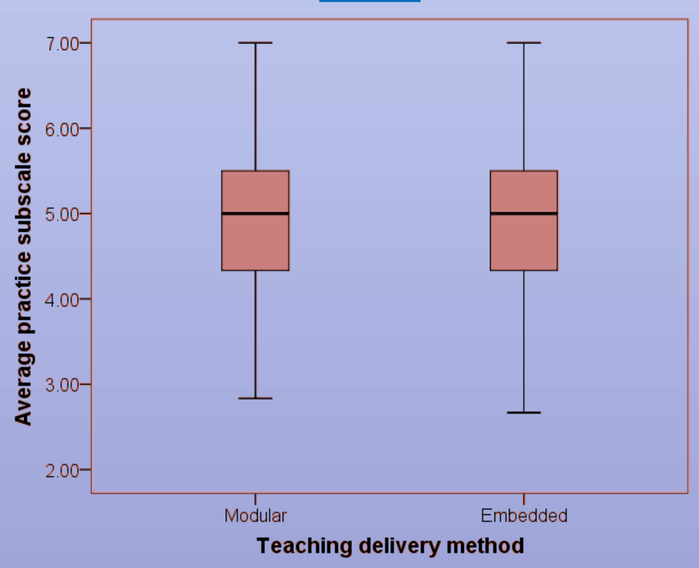


Figure 2. Box-plot of EBP attitude subscale scores.

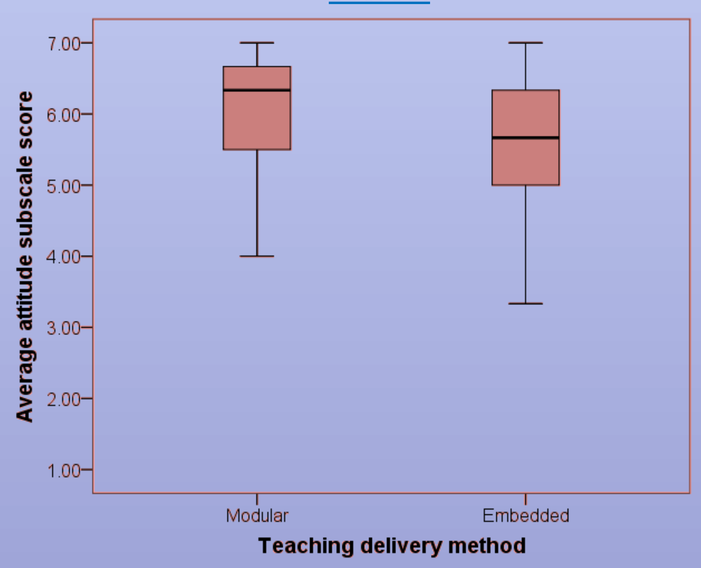
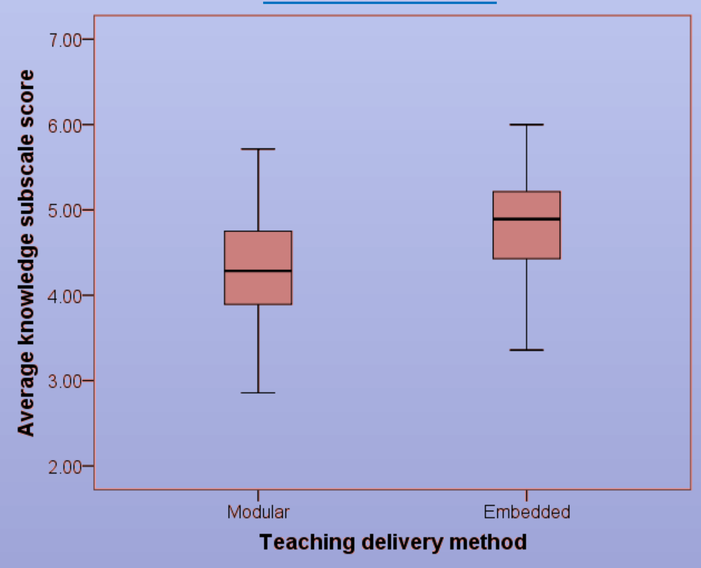


Figure 3. Box-plot of EBP knowledge & skills subscale scores.



Conclusion & implications

- Although the project is still in its infancy, preliminary findings raise important questions about the relationship between EBP attitudes, practice and skills.
- The embedded cohort's lower attitude scores may reflect social-desirability effects: modules dedicated to EBP may instil greater importance of displaying positive EBP attitudes.
- Embedding EBP may provide an effective means of developing students' practice, knowledge and skills, without requiring dedicated modules, thereby reducing resource demands.

References

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For more information please contact:
l.scurlock-evans@worc.ac.uk

University of Worcester