Transforming Teaching Practices: A Model to Conquer Evidence Based Decision Making Skills

Manisha Thakkar¹, Jeanne Young Kirby², Jason Home³, David Wilson⁴ and Roopa Howard⁵

¹Biosciences, Endeavour College of Natural Health
²Biological Sciences, Flinders University
³Coober Pedy Area School
⁴Medical Sciences, University of Adelaide
⁵Information Technology Engineering and the Environment Divisional Office, University of South Australia

Corresponding author email address: Manisha.Thakkar@endeavour.edu.au


Abstract

Evidence based decision making (EBDM) skills are central to teaching and learning practices, and are considered to be key competencies in the educational system. Various teaching approaches and frameworks have been implemented at different educational institutes to embed EBDM skills in the course curriculum. Research Skill Development (RSD) is one such framework that supports transformation of teaching practices and fosters accessible understanding of EBDM skills and students’ autonomy through Models of Engaged Learning and Teaching (MELT). This workshop will look at different EBDM approaches and identify how shared parameters of MELT can drive students to conquer Evidence Based Decision Making skills.

Introduction

Educational bodies are incorporating various teaching and learning approaches, including inquiry-based learning, students as partners, and work-integrated learning to maximise students’ learning outcomes and engagement with the content. Ultimately, these approaches aim at the development of highly skilled graduates. The key focus of these various teaching and learning approaches is to help students attain the Evidence-Based Decision Making (EBDM) skills that are required by all streams at all educational levels in
schools and universities. Even though the nuances of applying EBDM skills vary among disciplines, all disciplines require students to gather, evaluate and apply evidence to their respective contexts. Teaching practices are now deemed to be research-led, research-oriented, research-based and research-informed in all disciplines that transform the learners through ‘construction, or reconstruction, of their existing patterns of understanding’ (Griffiths, 2007). To help students acquire this active learning experience, Healey (2005) recommends transforming the curriculum of core modules through the provision of different levels of inquiry, and identifying the impact of the introduced changes through systematic research. Moreover, it is important to identify research and teaching as “two different, but overlapping, processes of inquiry” that allow “academic freedom ... pedagogical variety and student growth towards autonomy” (Badley, 2002). Along the lines of Healey and Badley’s suggestions, the Research Skill Development (RSD) framework (Willison & O’Regan, 2006; 2016), epitomises the overlapping relationship between major facets of research (inquiry) and levels of student autonomy. It aims at guiding whole-of-curriculum transformation and teaching practices to build Evidence Based Decision Making skills. Numerous Models of Engaged Learning and Teaching (MELT) have emerged that share the parameters of RSD (MELT, 2017) and assist students to develop EBDM skills.

Workshop

The aim of this workshop is to draw attention to various MELT that have been used in whole-of-curriculum transformation at various universities to improve teaching and learning for the development of EBDM skills. Participants in this workshop will engage in collaboratively developing, implementing and evaluating their context-specific MELT and using evidence to bring about whole-of-curriculum transformation for consistent improvement of EBDM skills in students.

In this workshop, we will

- Look at the current teaching and learning practices at your organisation, how EBDM is reflected in the current teaching and learning practices and curriculum of your institute and how EBDM strategies help in improving decision making skills in your students.
- Share experiences from MELT developers around improving students’ EBDM skills and their approaches to implementing MELT at the institutional level.
- Establish context-specific descriptions of MELT facets to design a MELT for your institute.
- Identify barriers to institute-wide implementation and collaborate on solutions to these barriers.

Collaborative practice is important in driving and maintaining change at an institutional level. Thus, participants are encouraged to attend the workshop in pairs or teams to facilitate the development of practical actionable steps for effecting transformation within their institution.
Workshop plan:

1) Introduction and the MELT Warm up activity (20 minutes)
   a. Current teaching and learning practices targeting Evidence Based Decision Making
2) Overview of institute-wide MELT implementation in Evidence Based Decision Making (15 minutes)
3) Identification of participant institution and discipline context (10 minutes)
4) Designing, implementing and evaluating a MELT (40 minutes)
   a. Design discipline/institute specific MELT
   b. Identify approach and barriers to implementation
   c. Workshop strategies to overcome barriers and evaluate MELT
   d. Establish strategies for using the implementation and evaluation data of the MELT to transform institute wide teaching practice of EBDM
5) Wrap up (what next?) (5 minutes)

The outcomes of the workshops for the participants will be:

- An increased understanding of how the RSD framework is being applied and evaluated for the purpose of the curriculum re-design to improve EBDM Skills through adaptation and implementation of context/discipline specific MELT.
- A new or further developed version of a context specific MELT for evidence based decision making.
- Strategies for implementing and evaluating a context-specific MELT as part of course curriculum.
- A collaboratively derived set of “how to” strategies for using the implementation and evaluation data of the MELT to transform institute wide teaching practice of EBDM.
References


