

Title: A systematic review of the contribution of theory to the development and delivery of effective interprofessional curricula in health professional education

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Summary of Action to date.

The review team have held 5 workshops to date, have formulated and piloted their frameworks for Part 1 of the review: the search strategy, Part 2: Initial article selection; Part 3 Assessment of methodological quality and Part 4: Assessment of theoretical quality.

Part 1 Literature search

The team utilised the BeHEMOTH framework (**B**ehaviour; **H**ealth condition; **E**xclusions; **M**odels or **T**heories).[1] combined with existing search protocols used in previous systematic reviews of Interprofessional education literature [2][3]. Literature retrieved is managed through Mendeley as a reference manager. A challenge in this process has been achieving balance between inclusivity and specificity within the search. It was agreed to favour a lack of specificity at this stage of the protocol to ensure full inclusivity. Lack of specificity has related to the varied use of terms such as model, interdisciplinarity, interprofessional and multiprofessional. A total of 2942 articles have been retrieved at this phase.

A preliminary classification of papers selected has been introduced at this phase of the protocol to manage the volume of literature retrieved as well as clarify shared definitions of theory. Articles selected were classified accordingly to theory(s) utilised, the empirical/non empirical content and curricula focus. The latter was adapted from the Coles and Grant curricula model [4] describing articles on dimensions of curriculum precursor, curriculum on paper; curriculum in action; curriculum as experienced by learners; and curriculum outputs/effectiveness.

Part 2: Article Selection

A selection framework guided this procedure based firstly on criteria identifying Interprofessional education as defined in the protocol and secondly for the presence of theory. Judgements were drawn on a review of article abstracts alone. An initial framework was piloted on a sample of 20 articles by the whole team and adjusted accordingly. Three members of the team then reviewed the 2942 articles selected and conducted a 10% check of articles selected or deselected for inter reliability. At the time of this report, interrater reliability on Interprofessional education criteria was acceptably high (over 95%). However, interrater reliability on what constituted theory was unacceptably low. The team are currently revising and retesting the selection framework to improve shared understanding of the definition of theory.

Part 3 Assessment of Methodological Quality

An initial framework adapted from the BEME coding proforma [5] in combination with methodologically appropriate CASP tool [6] was piloted by the review team as a whole and adjusted accordingly. For simplicity, as well as to cater more adequately for qualitative studies a single assessment tool was subsequently developed with components each able to assess qualitative, quantitative and mixed methods studies. The qualitative component was adapted from concepts from a range of qualitative assessment sources [7][8][9][10] and quantitative components on critical appraisal tools for RCTs, cohort studies, case-control studies, surveys, integrative systematic reviews and education interventions tools [6][11]. These coding frameworks were put together into a single methodological quality tool that was used by 3 reviewers to assess 4 articles reporting

empirical studies. The tool was found to identify high and low quality research and there was very high inter-rater agreement. The tool will now be used with a larger sample of articles to test its discriminatory power across a wider range of research designs.

Part 4 Assessment of Theoretical Quality

An assessment tool based on Fawcett and Downes [12], Walker and Avant [13] and Wallis [14] was developed and piloted by three of the review team on a sample of 4 articles. The initial pilot demonstrated unacceptable variations in inter-rater reliability of the tool. A revised theoretical quality tool has subsequently been constructed and is currently being retested by the team. All articles are judged against the pragmatic adequacy, significance, internal consistency and clarity of theory employed. In addition, empirical articles are judged on the quality with which theoretical claims are congruent with or adapted to/by empirical observations.

The group is now at the stage to commence the systematic review of the articles utilising the framework as discussed above.

Lessons learnt to date:

- The importance of the librarian to the search strategy and the alternative perspective they bring to this process.
- The importance of face-to-face workshop events for the team to learn together whilst “doing”
- The importance of piloting and the challenge of reaching shared understanding of key definitions amongst team members.
- A major challenge and originality of review lies in its definition of theory and assessment of what constitutes theoretical rigour.

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