Mapping the main streams and foci of competence-based education research

5. The Curriculum Research Network

Joonas Mannonen¹, Felipe Urrutia², Raija Hämäläinen³, Roberto Araya², Sami Lehesvuori³

- ¹ Finnish Institute for Educational Research, University of Jyväskylä, Finland
- ² Center for Advanced Research on Education, Institute of Education, University of Chile, Chile
- ³ Department of Education, Faculty of Education and Psychology, University of Jyväskylä, Finland

Research topic/aim

Competence-based education (CBE) has been one of the most wide-spread and debated trends in education of the 21st century. Reflecting its popularity in educational policy, CBE has recently become a considerable research domain. However, there is a gap in CBE review studies to inform researchers, policymakers, and practitioners. The aim of this mapping study is to address this gap and provide these stakeholder groups with the first comprehensive overview of the CBE research domain.

Theoretical framework

We define CBE research broadly as peer-reviewed journal articles that focus on competences in educational contexts.

Methodological design

To address the high volume of literature associated with our aim, we combine two state-of-the-art bibliometric and text mining methods: direct citation network analysis with mapping, clustering and visualization and topic modelling with latent semantic analysis. First, we draw on a sample of 1090 CBE articles to study the intellectual structure of the research domain and identify its main research streams based on the network analysis. Next, we employ the topic analysis to explore the topics that the research streams have covered to date.

Expected conclusions/findings

We show that CBE is a rapidly emerging but highly fragmented research domain and discuss the implications of this finding for future research. We identified three main CBE research streams: The Higher Education Stream, the Vocational and Professional Education Stream, and the General Education Stream. We present the key features of these research streams based on various bibliometric data and introduce the topics that the research streams have covered to date.

Relevance to Nordic educational research

CBE is a relevant educational reform trend in the Nordic countries. The intuitive visual graphs, tables, and extensive bibliography of this work provide Nordic researchers, policymakers and practitioners with a comprehensive CBE research knowledge map. Researchers can use this knowledge map as an introduction to CBE, a starting point for in-depth literature reviews on the identified research streams and topics, a justification for further primary studies in areas where those are limited, and a baseline against which CBE-related research trends can be tracked over time. For policymakers, we provide a resource on the quantity and structure of existing scientific evidence about CBE for decision-making. Finally, we make CBE research more accessible to practitioners, who can use this work in their educational programme development and lesson planning. We contribute to the theme of the conference by taking the audience to the previously uncharted territories of an emerging research domain with adventurous methodologies.