Diverse contributions to research: Understanding and recognising the allocation of credit in educational research

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Research Domains

Academic practice, work, careers and cultures (AP)

Abstract

Research activities often comprise complex processes, involving inputs from various stakeholders at different stages. Understanding, recognising, encouraging and supporting diverse contributions to research can encourage collaborative research cultures, which acknowledge and credit individuals' contributions fairly; support and incentivise collaborations and sharing; and reduce disputes among different stakeholders. This paper explores different perspectives on diverse contributions to educational research, drawing on findings gathered from the Research Culture - Diverse Contributions to Research project. We explore views on diverse contributions: a) format as an output, beyond traditional research publications to other forms of knowledge sharing such as practical resources, technical contributions, datasets, or creative artefacts; and b) knowledge agents across educational research, including researchers at all career stages, research students, practitioner researchers and collaborators, participants, professional services and technical staff. We reflect on the complexities of defining and recognising contributorship in educational research specifically, a field which is methodologically, theoretically and philosophically diverse.

Full paper

Diverse contributions to research: Understanding and recognising the allocation of credit in educational research

Research activities often comprise complex processes, which can involve inputs from various stakeholders at different stages. Understanding, recognising, encouraging and supporting diverse contributions to research can lead to healthier and collaborative research cultures, which acknowledge and credit individuals' contributions fairly; support and incentivise collaborations and sharing; as well as reduce disputes among different stakeholders when crediting contributions (Brand, et al. 2015). Traditionally, contributions to research have been recognised through references to 'authorship'. Yet, the framing of such contributions in this way is limited. Firstly, there exist ambiguities regarding whether 'the contribution(s) of a co-author to a paper extends well beyond whether there was a contribution to the writing' (Holcombe, 2019), authorship conventions often differ throughout different institutions, cultures and disciplines (McNutt et al., 2017) and authorship cannot adequately capture the many complex roles and contributions that stakeholders may have in the research process (Holcombe, 2019). Given those limitations, Brand and colleagues (2015) proposed to move away from 'authorship'

to 'contributorship' and use CRediT (Contributor Roles Taxonomy) to report and record individuals' contributions. CRediT has been supported and adopted by an increasing number of scholars, publishers, journals, and funders across the world (e.g. McNutt, et al., 2017; Holcombe, 2019). The CRediT framework is however limited in its application to many of the social sciences, initially having been 'developed and tested as a taxonomy for life and physical sciences' (Allen et al., 2018, p73).

Prior studies have revealed hierarchies, inequalities and injustice among contributors to research. Larivière, Pontille, and Sugimoto (2016) analysed data from PLOS (Public Library of Science) journals and found that 'conceptual' contributions are more often associated with senior authors, while 'technical' contributions (such as experimental work) are often associated with junior authors. Meanwhile, Benoit and colleagues' (2016, p. 1140) conducted an investigation of science and medical journals which revealed that women were often associated with the 'physical' labour – performing experiments, while men were most likely associated with resource contributions and 'conceptual' contributions.

Previous studies have therefore predominantly focused on subjects and disciplines within the life sciences, and there is a lack of research which currently examines the landscape of attributing contributions within educational research. Further, existing research tends to highlight one form of research output – journal articles, despite the notion that many research outputs form more diverse outlets (e.g. Larivière et al., 2016; Thompson, et al., 2022). There is a current lack of research evidence on how contributions to educational research are understood and acknowledged, and of on the adaptability and utility of existing crediting frameworks and practices frameworks in educational research. Thompson and colleagues (2022) touched upon this issue in an editorial, where they argued that further investigation of the utility of CRediT is needed for the field of educational technology. Considering the differences across various sub-fields in educational research, there is also a need to investigate the notions and frameworks of 'contributorship' in educational research across different sub-fields.

This paper explores different perspectives on the diversity of contributions to educational research. drawing on findings gathered from the Research Culture - Diverse Contributions to Research project at the University of Oxford. The project findings are developed from three main strands; a review of the existing literature and a documentary analysis of journal guidelines; interviews with different stakeholders who have been involved in educational research (including professional services staff, non-academic staff, research assistants and academic researchers); and workshops with different stakeholders both inside and outside a university department of education. The project is guided by the central research question of 'How are contributions to research understood and recognised in the field of educational research?' In this presentation, we will explore views on diverse contributions, particularly in terms of: a) format as an output, expanding beyond traditional research papers and publications to other forms of knowledge sharing such as practical resources, technical contributions, datasets, or creative artefacts; and b) knowledge agents across educational research, broadly defined, to include researchers at all career stages and in different roles, research students, practitioner researchers and collaborators, research participants, professional services and technical staff. We conclude with reflections on the complexities of defining and recognising contributorship in educational research specifically, such as those involved in attributing credit in a field which is particularly methodologically, theoretically and philosophically diverse.

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