Proposal deadline	**Full submission deadline**
15 May 2022	**15 September 2022**

Volume #1 | 2021

ACCESS
Contemporary
issues in education

PESA · Philosophy of Education Society of Australasia
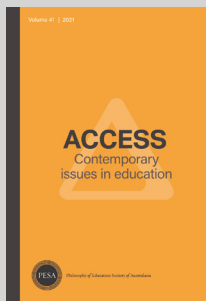
Special Issue Editors

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Computational thinking is a relatively new and rapidly growing focus for early childhood and school curricula in many of the world's education systems. Teachers are increasingly expected to learn computational thinking, its pedagogies, and to integrate it across the curriculum.

Computational thinking is considered a general problem-solving skill that includes abilities such as reasoning at multiple levels of abstraction, decomposing problems, and formulating clear and detailed instructions to program computers (Wing, 2006). For early childhood, primary and secondary school learners, computational thinking typically includes abilities such as formulating problems in ways that enable producing solutions using computers, logical organisation of data, abstraction through models and simulations, algorithmic thinking to automate solutions, and the pursuit of efficient and effective steps and resources (Sykora, 2021). Yet, in existent literature, the very meaning of computational thinking is hard to pin down (Denning, 2017; Hemmendinger, 2010; Kite et al., 2021).

Some common threads unite much of the literature. Nevertheless, the vast majority of the literature proposes 'new' and/or improved definitions and identifies different limitations to previous definitions. In addition, the nature and purpose of computational thinking in the curriculum has been the focus of critical questioning of its conceptualisation and drivers (Martins-Pacheco et al., 2020; Mehta et al., 2020). Education policy tends to guide teachers towards a simplistic, narrow, and limited understandings of computational thinking. The cultural and political dimensions of the technology curriculum have long been overlooked, in ways that add to this instrumental focus and detract from more inclusive and critical views of computational thinking (Kafai et al., 2019; Marshall, 2000; Mills et al., 2021).

This ACCESS call for papers invites proposals for research that engages with and/or contributes to teachers' perspectives of, and experiences with computational thinking.

The purpose of this special issue is to contribute to the meaning of computational thinking through sharing and analysing the perspectives and experiences of teachers. This practitioner focus contributes a community-led and community focused lens on computational thinking in contexts of dialogic learning (Freire, 1993).

Proposals for the special issue should detail how the paper explores:

1. The nature and possibilities of computational thinking
2. The views and experiences of teachers

Themes may include (but not be limited to) computational thinking and:

1. Pedagogies
2. Curriculum
3. Student voice
4. Assessment
5. Professional development
6. Social justice
7. Problem-posing and inquiry-based learning

The editors invite papers that recognise the essential contribution of critical analysis of computational thinking curriculum policies and practices, and a critical approach to the ways in which the endpoint of the algorithm constrains the actual process of thinking.

Submission instructions

Proposals for position papers (up to 2,000 words) and research papers (up to 5,000 words) should be 300 to 500 words in length.

For inquiries regarding the special issue and the submission of proposals please contact Andrew Gibbons at agibbons@aut.ac.nz

Timeline

Proposals due by: **15 May 2022**

Confirmation of acceptance by: **1 June 2022**

Full submissions due by: **15 September 2022**

Submissions reviewed by: **1 November 2022**

References

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