Methods and Agendas in Technology education

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This section contains papers from a wide variety of perspectives and topics, all with the common aim to advance research- and practice-based agendas in technology education. In the first paper of this section, Buckley argues that researchers in technology education should engage in discourse about the quality and rigour involved in conducting educational research. In particular, he explores issues related to replicability in the context of contemporary studies in technology education. Engaging in discussions about appropriate methodological and reporting practices could ultimately avoid a 'replication crisis' and enhance the general quality and rigour of future studies in technology education.

Secondly, Dunbar, Seery and Buckley take a practice-based approach to contribute to the research agenda in technology education. In their paper, the authors conducted an exploratory case study of practicing Irish technology teachers who are currently engaged in research in technology education. Findings from this preliminary study highlights practicing teachers' voices on the value of technology education in general, the value of stakeholders' views on the enactment of technology education in the classroom and the benefits of teacher-researchers perspectives in informing curriculum and policy development.

In the third paper, Niiranen, Rasinen, Rissanen and Ikonen investigated the impact of curriculum development on how technology education is represented in the Finnish curriculum. In their comparative content analysis of national curricula during years 1970–2014, they address such issues as the developing definition of technology in the curriculum and explore the emphasis of technology education from the perspectives of a holistic approach to education, the science curriculum and the craft curriculum. Furthermore, they speculate that the way technology education is represented in the Finnish curriculum determines the uptake of the subject by future students.

Fourthly, Varpanen argues that while there might be some tension between the aims of technology education and education for sustainability, both of these aims could be supported in a holistic craft pedagogical approach. This approach should allow students to experience craft activities, while encouraging reflection to support students' understanding of the essence of technology. Moreover, in a holistic craft approach, students should be encouraged to take responsibility for their own craft processes so that they become active respondents as opposed to 'being spoken to' by technology.

In the fifth paper, written by Huhtala and Lindfors, the issue of predicting future needed work skills was addressed. The authors found seven main categories of those for the domain of retail automotive services. It is recommendable, of course, that these are represented in future technology education curricula.

The set of five articles reveals the broad scope of methods and agendas in technology education. It is clear that there is still work to be done in the further development of technology education and that research can be a valuable support for that.