

World-Centred Mathematics Education: Theorising with Biesta

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School mathematics continues to suffer from an identity crisis. It is too often portrayed as a collection of facts and calculation skills to be acquired, often by mimicking the procedures demonstrated by the teacher and textbooks, and where correctness and speed matter (Boaler, 2016). This is substantially different from the discipline of mathematics, where specific ways of doing, communicating, and looking at the world brand one as being mathematical, and where criteria of judging success foreground beauty and intricacy of one's ideas. In some ways, one could say, school mathematics remains un-mathematical. The difference remains despite the focused advances in mathematics education research and curriculum shifts which advocate for a better alignment of the school and the disciplinary mathematics (e.g., ACARA, NCTM). Attempts to foreground mathematical competencies and proficiencies at times provide little more than additional processes to be itemised, committed to one's memory, and assessed (e.g., direct teaching of problem solving). Under these circumstances we wonder whether perhaps a different language, or an additional theory grounding, could guide our work of supporting the teaching of mathematics in classrooms, especially if school mathematics that is capable of turning students towards mathematics, rather than away from it, is the goal.

In this round table, we follow work of Gert Biesta and return to some of the core questions, including What is education for (Biesta, 2020, 2022). We contemplate the potential of Biesta's theorising in addressing the problems in mathematics education outlined above. Biesta posits that besides the educational purpose of qualification, which is well attended to in schooling today, there are two additional domains of educational purpose. The purposes of socialisation (e.g., into practices of doing mathematics) align well with Freudenthal's (1971) pointing out the importance of treating mathematics as a human activity when we bring it to classrooms. Finally, the purposes of subjectification are those of awakening/provoking in children the wish/aspiration to be a 'subject' in their own life (and, in a mathematics classroom, to be a subject in their mathematics activities) rather than being an 'object' responding to the requests and desires of others. Biesta associates being a subject (of one's life) with both one's freedom and one's responsibility to make choices. He also points out how being an object brings one a comfort and security of not having to make them. It is in these terms that we would like to look into a mathematics classroom, and into the work of mathematics education researchers who aim to support school mathematics. We invite participants to consider: How do Biesta's ideas fit with your current view of mathematics education? Do Biesta's views of purposes of education provide an alternative path to advocating for why and how school mathematics should become more mathematical? What does this mean for initial teacher education?

References

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