

## Perfect for Whom? Producing Mathematics Learner Identities Via Online Instructional Platforms

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Students developing positive relationships with mathematics is a core challenge within mathematics education. Yet enabling student learner identity becomes increasingly complex with the growth in use of online instructional platforms in mathematics programmes. In this short communication I share early results of case study research into students' mathematics identities as produced in two secondary mathematics classrooms using Education Perfect and other online resources for learning mathematics.

Online instructional platforms such as *Education Perfect* and *Mathletics* were already commonplace in mathematics classrooms of Aotearoa New Zealand before the COVID-19 pandemic (Darragh & Franke, 2021) and distance learning only increased their use worldwide (Williamson et al., 2020). Online platforms typically require an annual subscription, provide comprehensive curricula content, and rely on automated data-analytics to guide an individualised learning pathway. Yet research into technology in mathematics education appears more focussed on technological tools that enhance teaching and learning rather than casting a critical eye on platforms powered by artificial intelligence. One way to look critically at these platforms is to consider how they influence students' identities as learners of mathematics. In my study I use a performative notion of identity (Butler, 1988) and define identity as a socially produced way of being in relation to mathematics, enacted and recognised in various contexts (Darragh & Radovic, 2018). I contend that the context of online instructional platforms provides a stage for enacting identity that may constrain performances in different ways to other common classroom settings.

In the wider study I plan to use a case study approach to investigate five learners in each of four *different* classrooms and schools. Aotearoa New Zealand demonstrates a wide diversity of mathematics teaching and learning experiences, and thus the study aims to similarly capture some of this diversity. The two case study schools to be discussed in this communication are both at secondary level, yet one is very traditional (Year 9 to 13) whilst the other (Year 7 to 10) uses innovative learning environments (ILEs) and partners with Apple Australia in the use of I-pads. The teachers in the two case studies have very contrasting opinions of the use and value of platforms such as *Education Perfect*. I expect there to be illuminating similarities and differences in the way in which student learner identity is produced by each context.

### References

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