

A Study of the Mathematics Experiences of Students with Down Syndrome in Australian Primary Schools

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Often, mathematics is viewed as a problem for individuals with Down syndrome, with many being developmentally “behind their class peers in attainment of mathematics curriculum milestones” (Faragher & Clarke, 2020, p. 122). Faragher and Gil Clemente (2019) challenge this position by viewing mathematics as a solution. This solution is grounded in the potential opportunities that mathematics has in allowing individuals with Down syndrome to engage with the world around them.

For students with Down syndrome, the exposure to positive mathematics experiences from an early age is crucial, to foster a ‘want’ or desire from the child with Down syndrome to engage with the subject. Developing the appropriate numeracy skills needed to be able to function in, contribute to and make sense of the world in which they live is crucial for this population of students to experience independence, develop a sense of purpose and function as a member of wider society.

With the emergence of a heightened focus on inclusive education, students with Down syndrome are in a more advantageous position to be exposed to and experience the mainstream mathematics curriculum when they are in a mainstream classroom (Faragher & Clarke, 2020). However, there does appear to be a lack of evidence of how best to teach mathematics to students with Down syndrome (Faragher & Clarke, 2020).

In this session, we outline a project that aims to generate new insight into how best to provide a positive mathematics education for students with Down syndrome. A multiple case study approach will be used in which each case will be representative of the Down syndrome student ($n=6$), the teaching team around the student as well as the students’ parents/caregivers. Additionally, six individuals with Down syndrome and their parents/caregivers who have recently graduated from school will also be interviewed to explore if their experiences with mathematics at school have had consequences for how they engage and participate in a post-school setting.

References

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