

ACCELERATED LEARNING IN SECONDARY SCHOOL MATHEMATICS: A NEW ZEALAND PERSPECTIVE

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Within New Zealand there is a “growing awareness of the special needs of gifted and talented students and of the importance of providing them with an educational environment that offers maximum opportunities to develop their special abilities” (Ministry of Education, 2000, p. 6). However, despite National Education Goals that charge schools with the task of providing programmes that enable all students to realise their full potential, many (32%) secondary schools have no school-wide policy on gifted education.

This paper combines the findings of two related research projects in order to provide an overview of the types and frequency of programmes offered to secondary gifted and talented mathematics students and examines both teacher and student perceptions of accelerated programmes in mathematics.

While mathematics is the subject that is most commonly targeted for special attention for gifted and talented secondary school students, there exists a great variation in the types of programmes available. Factors such as school size, decile (SES) rating, proximity to competing schools, and school culture appear to influence both the availability and the scope and nature of programmes. Many schools that offer accelerated programmes reported problems in timetabling, parental pressure, and student achievement in subsequent years. However, 25% of respondent schools reported no problems.

In contrast, students’ perceptions of accelerated programmes (4 case study schools) were very favourable. Contrary to fears identified in the literature the students perceived that inclusion in the accelerated programme had not affected their friendship base; they believed that they had a normal adolescent social and emotional development. Participant students felt that the accelerate programmes enhanced their learning and they identified no significant problems with compaction of the curriculum or gaps in knowledge. Issues of selection into accelerate programmes and reasons for students wanting to be accelerated in mathematics were often influenced by school culture.

While acceleration is currently one way to provide for gifted and talent mathematics students in New Zealand, this research suggests the need for schools to develop more cohesive and flexible programmes, with clearly identified goals, in order to best meet the needs of talented and gifted mathematics students.

Ministry of Education (2000) Gifted and talented students: Meeting their needs in New Zealand schools. Wellington: Learning Media.