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Students' Perceptions of the Formative Potential of the National Certificate of Educational Achievement

A thesis presented in partial fulfilment of the requirements of the degree of PhD in Education.

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Abstract

Research evidence suggests that appropriate use of formative assessment promotes effective learning. Improved learning occurs when assessment is viewed as integral to learning, and when it is supported by coherent assessment systems. Although assessment systems designed primarily around the formative purpose can provide both formative and summative information, a tension exists in practice between the summative and formative purposes of assessment.

Using a theoretical framework developed by Sadler (1989), this research project investigated whether New Zealand's new secondary school Standards-Based Assessment qualification—the National Certificate Educational Achievement (NCEA)—has the potential to satisfy both summative and formative purposes of assessment in mathematics. Theorising from a contemporary sociocultural perspective of learning, this project recognised the situated nature and interpersonal dimension of knowledge, and the impact of the social environment in promoting and directing learning. Theorising from this perspective offered opportunities to examine classroom assessment practices from a new perspective.

To date, insufficient attention has been paid to the 'students' voice' concerning educational matters that directly affect them. Given the situated nature of students' engagement with formative practices a case study approach was used to investigate students' perceptions of the formative potential of NCEA mathematics assessment tasks. Three Y12 mathematics classes from an urban secondary school formed the case study singularity for this study. Focus group interviews with nine students were conducted across the year, complemented by classroom observations, a focus group interview with the teachers, and a quantitative questionnaire with all students in each of the three Year 12 mathematics classes.

An examination of the philosophical and structural design of NCEA revealed a strong potential for it to serve a duality of both formative and summative purpose of assessment. However the formative potential of NCEA was yet to be fully realised in the case study classrooms. Students' underdeveloped knowledge of assessment criteria effectively reduced the potential for students' independent use of self-

assessment strategies. This project also identified that teachers and students held differing views on preferred feedback practices. The teachers perceived that students did not read written feedback, and this perception significantly influenced the amount of written feedback that they offered to students. In contrast, students clearly displayed that they read, valued and used scaffolded written feedback to improve their learning. While the teachers preferred to offer oral feedback, students preferred to engage with their peers to use feedback to develop corrective strategies and deepen learning.

The project has made a number of practical and theoretical suggestions to improve students' understandings of the assessment criteria they are working towards, and to more effectively integrate the collaborative use of formative feedback into students' learning experiences. In particular, it has suggested two additional perspectives on the development and use of formative assessment in a sociocultural learning environment. Firstly, that students' knowledge of the role of formative assessment is socially and contextually situated, and develops through the social interactions that occur in the classroom. Secondly, the potential exists for formative assessment practices to stimulate collaborative learning opportunities within communities of practice.

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