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**CULTURALLY RESPONSIVE TEACHER ACTIONS TO SUPPORT PĀSIFIKA
STUDENTS IN MATHEMATICAL DISCOURSE**

A thesis presented in partial fulfilment of the requirements for the degree of
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ABSTRACT

This study examines culturally responsive teaching to support a group of Pāsifika students aged 11-13 years old in mathematical discourse. It builds on previous work which has advocated culturally responsive practices where students learn mathematics through collaborative interaction that fosters greater student participation, engagement, and potentially better achievement in mathematics. In this study, the teacher's actions drew on Pāsifika cultural practices and the value of the family, respect, and collectivism. This was significant in the establishment of social and mathematical behaviours which were important in supporting the development of productive mathematical discourse. In addition, the communicative and participation structures within the classroom that lead to mathematics learning are also considered.

This study was situated in an inquiry classroom. A socio-cultural perspective provided the framework for analysing the classroom context. A case study approach drawing on a qualitative design was implemented. Data was collected through teacher and student interviews, classroom audio and video-recorded observations, and students' written work. Detailed retrospective analysis of the data was undertaken to develop the findings of this classroom case study.

Significant changes were revealed in the shifts of student discourse from long silences and hesitation to asking valid questions and developing mathematical justification with appropriate language and specific terms. The explicit instructional practices developed and implemented by the teacher fostered greater collaborative communication and interaction between group members and this was important in how they made mathematical meaning. The findings provide insights into the multi-dimensional ways that teachers can draw on students' cultural strengths, values, and practices as invaluable resources which potentially will make a difference in students' mathematical learning.

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