The Use of Contextual Patterning Tasks with Young Pāsifika and Maori Students in New Zealand Mathematics Classrooms

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Mathematical achievement of culturally diverse students is a challenge in many countries. Teaching in ways responsive to the cultures of our students is vital towards enhancing equity of access to mathematics achievement and putting educational policy (e.g., Ministry of Education, 2011) into practice. Similar to other countries, New Zealand has a changing student population that is increasingly culturally diverse. This population includes a large number of Pāsifika and Maori students whose educational results are characterised by unenviable statistics in which a large percentage are under-achieving compared to their peers. Educators frequently attribute this under-achievement to the learners themselves and position Pāsifika and Maori cultures as being mathematically deficient (Hunter et al., 2016). However, both Pāsifika and Maori cultures have a rich background of mathematics, including a strong emphasis on patterns used within craft design (Finau & Stillman, 1995). In this presentation, we report on the preliminary findings of a study in which we are investigating how contextual Pāsifika and Maori patterning tasks can potentially support young children to develop their understanding of growing patterns.

References

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