

How Kura Kaupapa Māori Supports Learners to Develop Positive Mathematics Identities

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The Māori language of New Zealand was considered endangered due to colonial policies, and Kura Kaupapa Māori (KKM) schools were established to resist colonisation and revitalise the language. The KKM education model places the child and their whānau (family) at the centre, embracing the knowledge they come with and working with the community to support them to reach their full potential from a te ao Māori perspective (Smith, 2012; Tocker, 2015). KKM aims to support Māori children to live successfully in the Māori and globalised worlds, including pursuing careers in STEM fields; such a career choice requires developing a positive mathematics identity.

Mathematics Identity is socially formed. It involves the narratives, discourses, and behaviours people employ to define who they are concerning mathematics and in relationship with other simultaneously lived identities (Darragh & Radovic, 2018). The research on Mathematics Identity considers how mathematics learners are perceived and treated by others and how the local teaching practice is defined. Yet there is a lack of research on how KKM graduates develop positive mathematics identities (MLI) and transition into STEM careers. This study aims to explore how KKM schooling has influenced students to pursue STEM careers and to investigate Māori learners' self-reported mathematics identity in relation to approaches to teaching and learning in New Zealand society.

The study design incorporates narrative inquiry methodology in the form of pūrākau to capture the participants' lived experiences. Pūrākau were traditional stories but are now used in contemporary ways to create new knowledge based on Māori culture, worldviews and inspiration, which are at the core of Māori identity. Pūrākau as methodology also draws from and responds to the wider historical, social and political research contexts. The study will recruit six graduates from KKM schools, their family members, and teachers who were integral to their identity development. The findings can lead to strategies to support schools and families to build positive mathematics identities in KKM children. Initial findings from interviews with core participants, teachers, and family members will be shared.

References

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