DEVELOPING IN DIGITAL WORLDS

Te Tipu i te Ao Matihiko

Findings from kaiako and
tauira in Māori medium kura

Phase One
2015-2017

Kia Ata Mai Educational Trust

THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

EDUCATION AND
SOCIAL WORK
WOOLF FISHER
RESEARCH CENTRE

Project Overview

- Developing in Digital Worlds is a four-year project conducted by the University of Auckland's Faculty of Education and Social Work and Kia Ata Mai Educational Trust, with funding from the Ministry of Business, Innovation and Employment

- This is the first study in the world to identify links between teaching, family participation and game-based learning in order to promote educational outcomes and equity

- The project focuses on children aged 4-17 years to test how to promote cognitive and social development in the '21st Century' digital world

Study Aims

- How does participation in the digital world influence the cognitive and social development of tamariki?

- What skills, knowledge and capabilities do tamariki need to manage, engage, and benefit from participating in the digital world?

- How can whānau, educators, and society effectively support involvement of tamariki in the digital world?

KAIAKO QUESTIONNAIRE

5 kaiako

3 kura

Ngā kaiako reported their use of digital technology, and the impact of digital environments on the cognitive and social skills of tauira

- Two kaiako reported using digital technology weekly or daily to teach the following three sets of skills: those important for interacting with others; those important for managing oneself; those important for critical thinking

- The other three kaiako said they use digital technologies infrequently to teach these skills

- Across English, mathematics and science, most kaiako reported there are more opportunities to teach the skills in digital environments

- All kaiako reported that digital learning environments provide more opportunities to develop collaborative reasoning in science

- More kaiako reported that digital learning environments provide reduced opportunities to teach self-regulation skills

- There was a positive indication that kaiako would use digital technology more frequently to support instruction if professional development was provided

TAUIRA QUESTIONNAIRES

Ngā tauira were in **Years 3-8**

138 completed the social and digital questionnaire

31 completed the critical thinking questionnaire

Ngā tauira were asked about social behaviours in online contexts, and asked to read science, maths, and Māori texts online

- Most tauira found the critical thinking questionnaire difficult

- Tauira reported higher confidence in their interpersonal skills (e.g. empathy, cooperation). For example:

I try to be nice to others online, I care about their feelings

very like me ← → does not describe me well

- However, they reported less confidence online in their intrapersonal skills (e.g. self-control). For example:

It is hard for me to get off some sites when asked
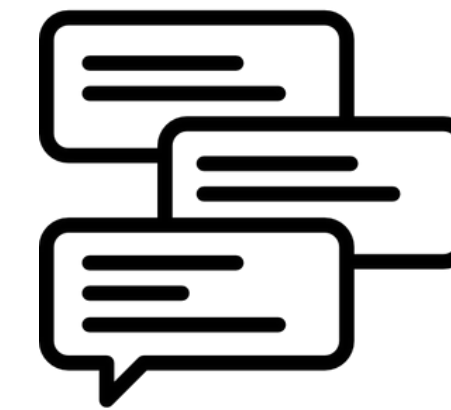
very like me ← → does not describe me well

- Tauira reported less confidence in their self control in digital environments compared to non-digital environments

- These results show that the skills for online information literacy, critical thinking and self-management can be further developed
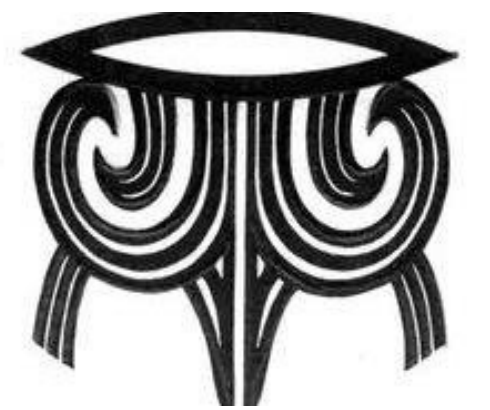
DISCUSSION BOARD FOR TAUIRA

Ngā tauira were in **Years 5-8**

23 completed the discussion board

A specially-designed activity to show how well tauira could reason critically in a digital context

Ngā tauira discussed the following topic online, using sources from One News, Stuff.co.nz, Native Affairs, and Waateanews.com

"Me mau moko kauae te tane? Should men wear moko kauae?"

- Discussion board posts suggest that tauira could make a claim and state their view, but found it hard to integrate perspectives of others

- Most reasoning by tauira demonstrated a single, own perspective (76%)

- 16% of tauira could question or critically evaluate another's perspective
- 9% could make a claim which integrated different perspectives. For example:

"In my opinion I agree with both sides. The Moko Kauae is something that empowers women and to also signify their rank...All Males should not have a Moko Kauae because of the WEIRDNESS, because how [would] people feel if all women wore a full facial Moko?"

- Tauira were unlikely to verify evidence by integrating hyperlinks in support of their claims

More Information

If you have any queries, you are most welcome to contact the project manager, Angela McNicholl, at a.mcnicholl@auckland.ac.nz or 09 923 8978, or email the principal investigator Professor Stuart McNaughton on s.mcnaughton@auckland.ac.nz

Visit the Developing in Digital Worlds website to find out more:

developingindigitalworlds.blogs.auckland.ac.nz

Ngā mihi mō nga hua kua puta mai.
Thank you to all those who contributed to this research.

Kia Ata Mai Educational Trust

THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

EDUCATION AND SOCIAL WORK
WOOLF FISHER RESEARCH CENTRE