

# MASTER OF CONTEMPORARY EDUCATION

Symposium Proceedings

# 2022



**THE MIND LAB<sup>®</sup>**



Master of  
Contemporary  
Education

## C6P SYMPOSIUM 19<sup>TH</sup> FEBRUARY 2022

DIGITAL COLLABORATION ACROSS SECONDARY DANCE CLASSROOMS USING PROJECT-BASED LEARNING

**Courtney Robinson**

THE DIGITAL TECHNOLOGY INTEGRATION AND IMPLEMENTATION OF A PERSONALISED LEARNING APPROACH IN WRITING PROGRAMS WILL EFFECTIVELY ENHANCE AND INCREASE STUDENT ENGAGEMENT.

**Faaletatau Loto**

PROJECT-BASED LEARNING IN A PRIMARY CLASSROOM: INCREASING KNOWLEDGE CONSTRUCTION IN MATHEMATICS

**Gina Lee**

IMPLEMENTING A PROFESSIONAL DEVELOPMENT TOOL TO SUPPORT LEARNING THROUGH PLAY PEDAGOGY

**Jamie Rose Brown**

*"TEU LE VĀ" A'OA'AGA MALAGA E FA'AMALOSIA PASIFIKA MAFUTAGA" A LEARNING JOURNEY TO STRENGTHEN PASIFIKA RELATIONSHIPS."*

**John Lafai Alo**

CULTURAL LITERACY

**Kelly Marumar**

BUILDING CULTURALLY RESPONSIVE RELATIONSHIPS WHĀNAU ENGAGEMENT

**Michelle Adams**

DIGITAL NATIVES OF HE AWA WHIRIA

**Paul Konia**

CHANGING SCHOOLS? ESTABLISHING A PLACE TO BELONG

**Phillip Place**

SELF-REGULATION WITHIN PLACE-BASED LEARNING

**Rebecca Northe**

TEACHING SELF-REGULATION STRATEGIES TO INCREASE AGENCY IN A SECONDARY SCHOOL CLASSROOM

**Sara Speight**

TRANSITIONING WITH 'MANA'!

**Selaima Tulai**

IN PURSUIT OF EQUITY: ACCELERATING ACHIEVEMENT BY TEACHING THROUGH THE NZC KEY COMPETENCIES

**Karena Ngata**

CHANGING HEARTS AND MINDS: ENABLING THE EFFECTIVE IMPLEMENTATION OF TE ARAHŌU – THE MĀORI ACHIEVEMENT COLLABORATIVE

**Drew Manning**

THE IMPACT OF DIGITAL TOOLS ON ENGAGEMENT AND ACHIEVEMENT IN WRITING

**Claire Welch**



## Executive Summary C6P

# Digital Collaboration Across Secondary Dance Classrooms Using Project-Based Learning

---

Courtney Robinson

This project aimed to implement project-based learning (PBL) in conjunction with a digital communication tool to enhance collaboration between senior dance classes in a traditional timetable setting. The project aimed to solve the issue of siloed secondary school faculties and classrooms, which perpetuates industrial-style pedagogies and outdated views on students' success. The project's goals were to create resources for educators new to PBL in a siloed setting. These resources include a conceptual framework for implementing and evaluating peer collaboration through PBL, and a blueprint was created to assist educators in creating their own PBL units of work. Lastly, these two resources are added to the PBL Hub, a website that supports educators exploring PBL and related theories, including digital technology integration and collaboration.

Other goals included:

- To trial PBL across two senior classes and integrate the design thinking process. Including re-writing of NCEA standards and assessment schedules.
- To use student questionnaires, NCEA assessment data and focus groups to evaluate each cycle-specific digital and collaborative element.
- To assess how students can collaborate via digital technology from their separate classrooms and use assessment data from previous years to measure NCEA achievement progression.

Collaboration is embedded in the theory of constructivism by Vygotsky (1978), affirming that knowledge should be constructed through discussion and interaction with others rather than an isolated learning process. PBL is identified as a critical constructivist (Steffe & Gale, 1995) pedagogy for closing this gap between current student learning and developing the necessary 21st-century knowledge and skills (Andres, 2006).

This research also drew upon the ITL Research (2012) and the Buck Institute of Education's (2019) PBL Works initiative, using their collaboration frameworks to define and evaluate the extent of collaboration within this project.

This action research was implemented in three parts over the first three terms of the school year. The first term focused on building the necessary skills for PBL and cross-classroom collaboration. This term's work supported the students' NCEA assessments, creating a safety net of evidence for later assessment if needed. Toward the end of term 1, the design thinking framework was introduced as a format for their PBL group proposals. These proposals were critiqued and refined before the collaborative cross-classroom groups of students began their self-directed PBL the following term.





Term two began the first cycle of research. Students started working on their chosen group projects using Microsoft Teams to communicate in collaborative cross-classroom groups. It was not expected that all students would have finished their projects by the end of the term. Questionnaire data on PBL, communication skills, and digital tool effectiveness was recorded and analysed before the second cycle.

The focus for term three was the second cycle of research. Students continued with PBL in their collaborative cross-classroom groups, adjusting the process with the findings from the first cycles of data collection. Student projects were to be finished by term three, along with the second questionnaire and a focus group interview.

After implementing, collecting, and analysing a range of quantitative and qualitative data, I believe there was a moderate success in achieving the initial goals of this change project. In summary, I can conclude that:

- Students found Microsoft Teams easy to use even though Riccarton High School uses Google Workspace tools, and most students understood why the tool was relevant to their learning. Microsoft Teams could have been improved by integrating more tools appropriate to PBL, not just communication.
- Students were initially optimistic about working with a different class yet struggled with collaborating asynchronously; this sentiment is amplified in a dance classroom where physical movement is needed to create and explore ideas for their projects.
- Students can mainly identify the importance of collaboration in PBL and articulate ways to improve their collaboration through reflection.
- Students struggled with managing time during the PBL cycles yet can identify this as a skill they need to learn. The challenges presented by the covid-19 lockdown compounded the time management issues and the students' projects' overall success (and assessment achievement).
- Regular peer-to-peer and teacher-to-peer feedback is critical to students and supports the change from a teacher-led to student-led pedagogy. More regular scheduled time for feedback and reflection will support students' understanding of how tuakana teina is helpful in collaborative projects.

Schools in Aotearoa do not have the luxury of adapting their spaces whenever and however it suits them; this research provides other secondary school practitioners with solutions to teaching using contemporary pedagogies whilst remaining in an industrial-style structure.

During this project, it became clear that academic studies on digital collaboration are primarily based on STEM subjects or higher education. This project and its associated deliverables offer a yet-to-be-found understanding of collaboration across classrooms in the dance subject area and secondary education. Moreover, sharing this project with other dance teachers will support implementing the new NCEA standards using proven digitally relevant tools and successful contemporary pedagogies.

## References

- Andres, Y. M. (2006). *Project-based learning: Students learn important life skills through projects*. PMI Today, 14
- Buck Institute for Education. (2019). *What is PBL? PBLWorks*. Retrieved April 29, 2021, from <https://www.pblworks.org/what-is-pbl>
- ITL Research. (2012). 21CLD Learning Activity Rubrics. Retrieved from <https://education.microsoft.com/GetTrained/ITL-Research>
- Steffe, L. P. & Gale, J. (1995). *Constructivism in education*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. (M. Cole & S. Scriber, Eds.). Cambridge, Massachusetts: Harvard University Press.



# The Digital Technology Integration and Implementation of a Personalised Learning Approach in Writing Programs will Effectively Enhance and Increase Student Engagement.

---

## Faaletatau Loto

The use of digital technology in the classroom today has the potential to enhance and support students' engagement, and it consists of three dimensions: behavioural, emotional, and cognitive. Student engagement is likely to boost these three dimensions if the students have the power and ownership to act in their learning (Bernie, 2017). Similarly, student engagement increases if the content of the learning task is aligned and matches the learner's interest (Walkington, Sherman & Howell, 2014; Elsevier, 2020). Despite technology being sometimes seen as a threat and intimidating in the classroom (Neiterman & Zaza, 2019), many educators and teachers are keen and starting to integrate and apply various digital technology tools to promote student engagement and target the learning interest of students in the classroom. Integrating digital technology into curriculum learning areas is significant as the Ministry of Education expects every school to use and implement the new digital technology curriculum in their practice from 2020 (Te Kete Ipurangi, n.d.).

This project aimed to use a personalised learning approach and integrate digital technology into writing programs to develop and enhance student engagement. The increasingly interested number of educators in student engagement and the possibilities of digital learning make digital technology tools such as animation a powerful tool for educators (Kapp, 2012). The project's primary goal was to focus on how a personalised learning approach and digital technology integration enhance and develop student engagement in writing practice. As strongly suggested by educators in 21-st century education, the vast contribution of student agency and collaboration was also considered to enhance and support student engagement. The project goals were measured by assessing and using the artefacts -the student's final project and qualitative and quantitative data, including student responses from questionnaires and interviews. This project's intention aligned with the purpose of action research in improving the quality of teaching and learning and the conditions under which teachers and students work in schools (Elliott, 1991). The Action research methodology was purposely selected to improve the quality of teaching and learning practice.

The findings from this project illustrate that the integration of animation as a digital tool has a significant impact and gains students' interest to learn more and dig deep into their writing. Furthermore, establishing and developing a technology-supported learning environment has positively impacted and increased learner engagement and motivation.

My pedagogy in this space enables learners to participate actively in learning activities and ultimately engage and improve digital technology interests and skills. Interestingly, if learners feel engaged in their learning, educators will be likely motivated and engaged in their practice. Creating and implementing student-centred classrooms through personalised learning offered learners

opportunities to collaborate and engage in their learning environment. In addition, implementing a customised learning approach to tailored learning preferences and giving students ownership of their learning has significantly improved their interest and knowledge.

Despite the encouraging and positive findings, further studies and research are needed to create a technology-supported learning environment and use a personalised learning approach that has improved and enhanced student engagement. The Ministry of Education suggested implementing the new digital technology curriculum starting in 2020; however, the ERO's report revealed insufficient resourcing, and teachers' overall understanding of the curriculum was lacking in most schools (Education Review Office, 2019). This is significant as the teacher's ability to use technology effectively is important (Sadik, 2008). The same concerns were highlighted in a recent study by Neiterman & Zaza (2019). They revealed that using technology in class, such as laptops, computers, tablets and Ipads for educational purposes, was distracting.

## References

- Bernie, L. (2017). How can schools use student agency to optimise educational outcomes for students? Education Review Office, (2019), "It's Early Days for the New Digital Technologies Curriculum Content" Elsevier B.V. (2020). *ScienceDirect -Personalized Learning*. Retrieved from <https://www.sciencedirect.com/topics/social-sciences/personalized-learning>
- Kapp, K. M. (2012). *The gamification of learning and instruction: game-based methods and strategies for training and education*. John Wiley & Sons.
- Neiterman, E., & Zaza, C. (2019). A Mixed Blessing? Students' and Instructors' Perspectives about Off-Task Technology Use in the Academic Classroom. *The Canadian Journal for the Scholarship of Teaching and Learning*, 10(1). <https://doi.org/10.5206/cjsotl-rcacea.2019.1.8002>
- Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational technology research and development*, 56(4), 487-506.
- Te Kete Ipurangi. (n.d.). Digital Technologies and the national curriculum. Retrieved from <http://elearning.tki.org.nz/Teaching/Curriculum-learning-areas/Digital-Technologies-in-the-curriculum>
- Walkington, C., Sherman, M., & Howell, E. (2014). Personalized learning in algebra. *Mathematics Teacher*, 108(4), 272-279.





# Project-Based Learning in a Primary Classroom: Increasing Knowledge Construction in Mathematics

---

Gina Lee

My project aimed to implement project-based learning to increase knowledge construction in strand maths in a primary school classroom. On a national level, Collins (2021) reported that New Zealand students' "maths results have hit a record low." As a result, there was a need to approach maths learning from a different angle to cater to the lower-ability learners' needs. They cannot learn in the traditional methods of teaching maths.

The goals developed to work towards achieving the project purpose were to:

- implement project-based learning to create mathematics units allowing for different maths and maths skills to be applied in authentic contexts.
- implement two iterative cycles, each offering groups progressively more control over the project so that it is more learner-led.
- analyse student learning outcomes, focus group data and self-evaluation on assessing learners' maths understanding and application of maths skills.
- develop a framework that effectively allows learners to construct knowledge in a project-based learning context.
- create a website with resources to allow other teachers to carry out maths units and design their project-based learning units.

My project was informed by Bunmont et al. (2010), who urged educators to shift their mindset to succeed in project-based learning. HQPBL (2018) believes that the values must be reconsidered so that educators can play a facilitative role in learning. The learning design must be reflected upon to maximise knowledge construction in project-based learning. Dooly's (2008) research shows that collaborative knowledge construction is the most potent form. Knowledge construction frameworks from Chin and Chia (2004) and Bakırcı and Ensari (2018) allowed me to design my learning units. Their studies show that problem-solving and investigating concepts allowed for deeper knowledge construction.

I planned maths units with two iterations that allowed learners to implement project-based learning. Unfortunately, due to COVID-19, the second iteration could not be entirely implemented.

In the first iteration, learners worked in project-based learning groups to solve the pertinent matter of rebuilding the school playground. They learned to communicate, plan and devise a solution in groups, and learn relevant math skills to design a new playground. The second iteration was planned around developing collaborative skills and learning how to communicate with group members while considering the well-being of individuals and the group. Te Whare Tapa Whā was used to co-construct a framework to better support learners' collaborative skills.

The methods I used were focus groups, student learning outcomes and self-evaluations. The data collected was analysed and themed to inform the design of my second iteration and make conclusions:

- Learners enjoyed project-based learning as it was engaging and allowed them to learn creatively. The high level of engagement was because the perfect balance of curiosity, puzzlement and knowledge gap for each group allowed them to carry out their project (Chin & Chia, 2004). Project-based learning allows learner allows varying levels to work together. This is powerful in knowledge construction as misconceptions and different strategies for solving problems were questioned, clarified and elaborated.
- Learners saw collaboration as everyone in the group contributing similarly. Learners struggled to identify their strengths and weaknesses and members of their group to manaaki. I identified a need to allow learners to set goals and build a group culture to enhance collaboration and for meaningful social knowledge construction.

Project-based learning is a potent teaching tool, but educators need to understand the “why” behind the pedagogy. The local curriculum, community context, learners, and resource availability all impact how project-based learning is best delivered. The most important thing is to remember that learners are driving problem-solving and management of the project. This shift in thinking has dramatically impacted my practice. I hope that people can experience the benefits of project-based learning and how it effectively prepares our learners for a future where collaborative knowledge construction will be even more vital to function as a successful citizen in society.

The collaborative Te Whare Tapa Whā model has allowed learners to look after the group’s well-being – teaching learners the importance of holistic well-being as a collective. It also allows learners to self-reflect and become more aware of contributing to their group’s well-being. It will be interesting to investigate the effects of the framework on the collaboration skills of learners and whether it helps, especially those learners who have struggled to collaborate.

Traditional teaching methods effectively explore, categorise, and allow the construction of knowledge. My project has enhanced knowledge construction by integrating, negotiating, criticising and applying knowledge construction. However, something to explore further would be integrating student and group-led reflection and assessment in this process to deepen knowledge construction further. There is potential to harness learner-led reflection and assessment tools to inform individuals and groups to develop and become more effective learners.

## References

- Bakırcı, H & Ensari, Ö. (2018). The Effect of Common Knowledge Construction Model on Academic Achievement and Conceptual Understandings of High School Students on Heat and Temperature. *Education and Science*, 43(196). 171-188.
- Bunmont, H., Instance, D., & Benavides, F. (2010). *The Nature of Learning: Using Research to Inspire Practice. Centre of Educational Research and Innovation (OECD)*. Paris, France: OECD Publications.
- Chin, C. & Chia, L. (2004). Problem-Based Learning: Using Students’ Questions to Drive Knowledge Construction. *Science Education*, 88(5). 707-727.
- Collins, S. (2021). Maths decline - Ministry of Education calls in Royal Society to stop NZ mathematics rapid decline. *New Zealand Herald*.



Dooly, M. (2008). Constructing Knowledge Together. *Telecollaborative Language Learning. A guidebook to moderating intercultural collaboration online* (21-45). Bern: Peter Lang.

High Quality Project Based Learning [HQPBL] (2018). *A Framework for High Quality Project Based Learning*.



# Implementing a Professional Development Tool to Support Learning Through Play Pedagogy

---

Jamie Rose Brown

As the school progresses with the implementation of play, the implications for school-wide processes grow. This project aimed to use play as a teaching tool in the school setting as a professional learning development tool to support teachers' implementation of play as a pedagogical tool. Too often, teachers are left feeling inundated with professional development, and in a play context, teachers value and understand the importance of it but for many reasons, such as time, lack of support, and training, they do not implement it (Bennet et al., 1997). The main goal of this project aimed to increase the Year 1-4 teachers' participation in Learning Through Play by developing a coaching framework to support this. The second goal helped participants implement Learning Through Play via the observations and assessment scores to improve their progress over time. The primary outcome was to develop a professional development tool to support and sustain Learning Through Play pedagogy.

The project looked at how we use the same process for teaching through play over time to implement consistently from Year 1 to Year 4. Fullan and Miles's (1992) studies advocate engaging teachers in specific, practical professional development and bringing about a positive change. Therefore, the project adopted an action research approach comprising four research cycles. A coaching model framework was used to implement interventions three times a term for two iterative cycles (The National Centre of Teaching and Learning, 2014). The first cycle was the orientation phase and introduction of the tool (Synder et al., 2015). The second research cycle was implementing Learning Through Play in the Year 1-4 classes through observations (Synder et al., 2015). These observations were then recorded and coded against a 21<sup>st</sup>-century evidence-based checklist called a 'look fors rubric' that measured the effectiveness of a Learning Through Play classroom. Divided into four areas, this checklist supported the acronym of the school's vision and values. The third cycle looked at interviewing, reflecting, and feedback (Synder et al., 2015). The final research cycle looked at goals and action planning (Synder et al., 2015). Data were collected and triangulated from different sources such as interviews, observations, scoring, and action goals. In a recent study by Shannon, Snyder, and McLaughlin (2015), it was evident that sustainable professional development includes specific feedback from a coach, explicit demonstrations of practice, and coaching in the classroom.

Revisiting the research in this area indicated that open conversations about 'play' needed to happen before the observation and research implementation stages began, hence the orientation phase of this project. Teachers could only realise the importance of the play and how it had such a positive effect on the children after the year had ended. This led teachers to say how they wished they had spent more time engaged with professional development because it is only now that they see the real effect.

Some key findings suggested the following:





- participants were on their journey; some took off faster than others; therefore, suggesting an individualised 'look fors' rubric would have reflected individual growth better.
- the research project also suggested that Learning Through Play cannot thrive on set goals and time frames - and, if this is part of the school's strategic aims and vision, then it must support and reflect this as staff inherited an unreliable professional development tool, to begin with;
- by the end of Term 2, all three participants had moved from the 'emerging' scoring section to the 'partly in place' and 'established' sections, therefore making considerable shifts in pedagogy in their play environments: and
- whilst the observations and interviews only involved three teachers, there seemed to be overall support around the school-wide professional development tool.

These key findings suggest several insights and implications for practice. Firstly, we have to individualise since individual teachers are on their learning journeys; yet, notwithstanding this consideration, we can reach sustainability of practice. The following steps are looking at how we make this work for our school and make it part of our character. Secondly, this project illustrated the complexities around schools, strategic pressures and change in pedagogy. This is an important finding that will help inform future planning at a strategic level. The tool used to support and sustain this pedagogy seemed practical but needed to work in phases to reflect individual growth. Finally, teachers now see the value of play and the true meaning of Learning Through Play, especially as it gives an exciting context to develop the New Zealand Curriculum Achievement Objectives and 21<sup>st</sup>-century skills and competencies (Ministry of Education, 2007). Now, with teachers on their journeys, we can continue implementing this project. These insights have shaped an understanding of what is required to implement Learning Through Play to have a flow-on effect that can be integrated across schooling - rather than being implemented with no sustainability at all.

## References

- Bennett, N., Wood, L., Rogers, S. (1997). *Teaching through play: Teachers' thinking and classroom practice*. Buckingham: Open University Press.
- Fullan, M. G. & Miles, M. B. (1992). Getting reform right: what works and what doesn't, *Phi Delta Kappan*, 73(10), pp. 745-752.
- Ministry of Education. (2007). *The New Zealand Curriculum*. Wellington: Learning Media.
- Shannon, D., Snyder, P., & McLaughlin, T. (2015). Preschool teachers' insights about web-based self-coaching versus on-site expert coaching. *Professional development in education*, 41(2), 290-309.
- Snyder, P. A., Hemmeter, M. L., & Fox, L. (2015). Supporting implementation of evidence-based practices through practice-based coaching. *Topics in Early Childhood Special Education*, 35(3), 133-143.
- The National Centre of Teaching and Learning. (2014). *What do we know about coaching?* Retrieved from [http://s3.amazonaws.com/mncoe-documents/article\\_What-Do-We-Know-About-Coaching\\_1.pdf](http://s3.amazonaws.com/mncoe-documents/article_What-Do-We-Know-About-Coaching_1.pdf)



Master of  
Contemporary  
Education

# *“Teu le Vā” A’oa’aga Malaga e fa’amalosia Pasifika Mafutaga” A Learning Journey to Strengthen Pasifika Relationships”*

---

John Lafai Aloï

This project used Tapasā - Cultural Competencies Framework for Teachers of Pasifika Learners (Ministry of Education, 2018) to develop a Professional Development (PD) program. The aim was to create contemporary and innovative teaching approaches that would be reflected within culturally responsive practices. The implemented program was modelled on the fundamentals of Teu le vā within the Tapasā framework within the digital platform Pear Deck. The PD sessions gave opportunities for teachers to engage with their Pasifika students, where the agency of both groups was explored through culturally appropriate activities and rapport-building practices.

Houghton (2015) explains that historically many students that underachieve in a formal educational setting in New Zealand are either Māori or Pasifika and need positive academic initiatives. He further explained that the students' story needs to be understood for this to occur. From this disclosure, it became evident that developing a staff professional development plan would be beneficial in addressing these specific issues.

This project used two different forms of methodology: Action Research and Talanoa - an indigenous research method. Data was collected in an open, casual dialogue between individuals. Vaioleti (2011) explains that Talanoa is frequently compared to narrative interviews between individuals in which they share their experiences, ideas, and feelings and has an added level of privacy and security for participants in the case study. The reasoning for incorporating Talanoa as a methodology was to ensure that an indigenous model provided a culturally responsive approach to data collection and a technique for participants to use in their classrooms.

The initial consultation with the classroom specialist teacher took place in June 2021. During that time, we discussed my project, the school's goals for their PCTs (Provisionally Certified Teachers) and LATs (Limited Authority to Teach), and potential avenues to achieve these within my timeframe.

It was agreed that this professional development plan would demonstrate culturally sensitive practices while utilising a current approach for indigenous and non - indigenous teachers. It would showcase the digital tool Pear Deck and how technology could be used to become more culturally responsive, culturally aware, confident, and competent while interacting with their Pasifika students.

The incorporation of the Tapasā (Ministry of Education, 2018) served a dual purpose, as it teaches teachers according to their cultural competency journey while reflecting on the learning path Pasifika students might take. Tapasā incorporates Pasifika views, pedagogies, and culturally appropriate dialogue into effective and quality teaching practice at several phases of a teacher's career journey.

The implementation of this project happened over a six-month timeframe and was plagued by the disruption of two separately mandated Covid-19 nationwide and regional lockdowns. During this time, I learned about the benefits of digital technologies, which have changed how teachers deliver their lessons and how students learn. From this, it became evident that using a technological platform



needed to be a component of the project and integrated into the professional development plan. The challenge would be ensuring that the digital learning experiences incorporate a culturally responsive pedagogical lens and culturally appropriate activities and practices. Doing so would ensure that Pasifika students' needs, abilities, and interests were tailored to the classroom learning modules. There was a hope that the student's family would recognise the content, provide a support network for their student, and become involved in their education.

There were two cycles of gathering, collating, and analysing participants' conversations, which were collected as qualitative data, and then I adhered to Braun and Clarke's (2006) 6-step methodology. The results showed that the participants enjoyed variations of success where Tapasā provided a framework where participants found success in improving relationships with students that were previously non-existent. They learnt a variety of approaches that could be used to engage and collaborate effectively with Pasifika learners and developed a better understanding of their own identity and culture. Durie (2001) believes that if one cannot cross-cultural traditions and connect with "[an] other in a cultural relationship, it is doubtful that the requisite 'family and community participation would occur."

For participants, the digital tool Pear Deck improved engagement in the classroom while collecting formative data on every student. Participants were challenged to create an interactive lesson where PowerPoint-like slides, created through the Pear Deck application, would prompt students to interact with real-real imposing questions and require them to submit their thoughts and answers. When analysing the collected data, it was found that using the Pear Deck application not only fostered a positive and joyful experience and online classroom environment but also encouraged positive student-peer communication. It also showed that the feedback received from the students and the participants substantially outweighed the recorded negative responses expressed in the Talanoa data.

During the debriefing session with the Classroom Specialist Teacher and Tumuaki in January 2022, it was recommended that this project's professional development plan would benefit not only PCTs (Provisionally Certified Teachers) and LATs (Limited Authority to Teach) but the whole school. The recommendation from the Kura was to revise and improve the current template that would enhance the school's current pedagogy and incorporate culturally responsive Pasifika activities, practices, and values to address the educational inequality of their Pasifika students.

This project provided Talanoa at the February 2022 Waikato Pasifika Teachers Network, where a recommendation was made to revise the professional development plan. The plan would further develop upon unpacking the Tapasā - Cultural Competencies Framework within a small working group by drawing upon the group's experiences and expertise. This working group will provide different cultural aspects and practices of the Pacific and their uniqueness. Incorporating our Pasifika colleagues into the development of the PD plan ultimately provides a support network of leaders confident to lead a change in culturally responsive practices with their respective schools and the academic successes of their Pasifika students.

Another insight gained in this project is how a functional intercultural classroom empowers teachers and students to comfortably and confidently use digital technology to improve educational outcomes - thus enhancing culturally responsive digital fluency.

The final insight came from understanding leadership from the viewpoint of many indigenous peoples. What eventuated in this project was the premise of Māori leadership having high importance on human relationships and contextual relevance.

## References

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

- Durie, M. (2001). *Mauri ora: The dynamics of Māori health*. Auckland, New Zealand: Oxford University Press.
- Houghton, C. (2015). *Underachievement of Māori and Pasifika learners and culturally responsive assessment*.
- Ministry of Education. (2018). *Tapasā: Cultural competencies framework for teachers of Pacific learners*. Wellington: Author.
- Vaiioleti, T. M. (2011). *Talanoa, manulua and founa ako: Frameworks for using enduring Tongan educational ideas for education in Aotearoa/New Zealand (Doctoral dissertation, University of Waikato)*





## Cultural Literacy

---

Kelly Marumaru

The Purpose of my project is to transform my practice with the tools to engage in 21st Century teaching and learning. Change is required in how we deliver the literacy curriculum to better meet our Māori learners' needs. There is a need to embrace a multimodal curriculum where our education system has historically focused on print text.

The goals of my project were to: transform and shift my practice; collect and use data to identify the learning needs of my student group; collaborate with stakeholder groups - students, teachers, outside agencies, whanau; implement digital technology for a scaffolded journey of explicit teaching and learning, and implement digital technology to support students in leading their learning.

I led the integration of digital technologies through the National Certificate of Educational Achievement (NCEA) Level 1 subject English, using a blended learning approach. Valentine (2016) states that the 'one-size-fits-all' education no longer exists. Globalisation and Technology are driving the need for communication, Collaboration, Critical thinking and creativity skills.

This project involved collaboration, personalised teaching and learning with a culturally responsive curriculum design. When referring to Tu Rangatira- Māori Medium Educational Leadership (Ministry of Education, 2010), the leadership role and area of practice 'Kanohi Matara' means to be visionary therefore keeping the kura at the cutting edge of developments in education. Students could build agency in themselves to lead their learning and take ownership of achieving success in NCEA.

This research integrated appropriate assessment tools used in collaboration with the outside agency Resource Teacher Learning Behaviour (RTLB) service. A collaborative action plan was created via a referral based on priority Māori students transitioning from Year 10 into Year 11. The analysis of this data allowed individual learning plans for each student to co-construct alongside kaiako. It was creating tasks that were a combination of NCEA achievement standards and unit standards. Therefore, differentiation was evident and personalised for each student.

Digital Tools were used to reinforce curriculum knowledge using IXL Literacy Programme for fundamental literacy skill development alongside Google Classrooms, where activities and learning were added, and assessment tasks were completed as a central platform. Evidence of online interaction between student, parent and teacher via zoom and Google Classroom was collected within the classroom setting and with distance learning.

Whanau hui and NCEA tracking hui allowed learning via digital platforms to be promoted to support curriculum reinforcement. Clear communication was evident between home and school, supporting the project and tracking student progress.

Student Success was evident when we had student-led conferencing with students leading their own learning through reflections and next steps, reinforcing collaboration between home and school. Clear analysis of diagnostic data allowed me to plan and prepare the learning programme design to meet the varied needs of each student.

Pedagogies of the 21st Century classroom should be multiple and varied to actively engage a student. Refreshed Māori education strategies launched (The Education Gazette, August 2020) focuses on the Ka Hikitia refreshed strategies at the centre of our education system. These strategies outline the shifts needed in education for Māori to achieve and enjoy educational success. Implementing a contemporary pedagogical approach into a foundation kura posed significant challenges because we did not have the space, resourcing, or staffing.

This project strengthened our needs as a secondary team to flip our thinking on NCEA so that the learner was central to teaching and learning design. From this research, my team can move into 2022 planning kaupapa relating to our iwi curriculum and provide rich real and relevant learning. NCEA and the assessment tasks align with our learning focus during the year.

Our kura can take advantage of any opportunities to advance teaching and learning to benefit learners. Collaboration is key. He Kaikotuitui (Ministry of Education, 2010) was instrumental in developing my leadership role as a Networker (Ministry Of Education, p.34.). This is about fostering and supporting good relationships focused on learners' development and success. It informed my leadership and direction as a leader to have clear communication and develop the next steps for students in my project transitioning into Year 11 NCEA was developed with support from outside agencies such as RTLB specialists.

Teachers can collaborate, connect, and inspire 21st Century teaching and learning through a Māori lens to continue creating meaningful experiences for our learners to succeed as Māori.

Distance Learning has prioritised the needs of wellbeing. Therefore, student and teacher wellness should underpin all goals, actions and behaviours including the focus on NCEA. To support our kaiako and students with NCEA, my project reinforced how to package standards using our iwi narratives. Other secondary kaiako could link into my practice project and use this as an example to plan, teach and learn this way.

Networking and collaborating within my teaching area allowed me to connect to Professional Learning Development with Dr Phyllis Callaghan, a provider through the Ministry of Education supporting Cultural Literacy. This support allowed me to uphold my practices and build capability in others around me in pursuit of supporting students for Level 1 NCEA this year.

The Tu Rangatira- Māori Medium Educational Leadership Document (Ministry of Education, 2010) has supported my thinking in working alongside learners to monitor their performance and behaviour and learn about their needs. Tu Rangatira has informed my leadership and supported me in developing a hands-on approach to leadership, creating opportunities to experience and personalise content with learners, and instilling a sense of collective endeavour in which the common goal is valued educational outcomes for learners.

The next step is to support our kura whanau and iwi to understand and enable matauranga Maori in teaching and learning programmes. This will encourage kura whanau and iwi to support the kura through sharing and maintaining tikanga, reo and matauranga.

## References

- Education Gazette, Volume 99, Number 12. (2020, July/August 3). *Refreshed Māori education strategies launched*. Wellington: Ministry of Education.
- Ministry of Education. (2013). *Ka Hikitia: Accelerating success 2013-2017. The Māori Education Strategy*. Wellington: Ministry of Education.



Ministry of Education. (2010). *Tu Rangatira-Māori Medium Educational Leadership*. Wellington: Ministry of Education.

Valentine, F. (2016). 'The Future of Learning'. Westpac NZ. 12 September 2016. Retrieved from <https://www.youtube.com/watch?v=N5iSKGJDVvQ>.



# Building Culturally Responsive Relationships Whānau Engagement

---

Michelle Adams

The purpose of this project was to create a trusting environment where whānau felt comfortable being a part of the local curriculum, their child's learning, and the school community and where their voices and knowledge are key influencers in the topics taught in class. Whānau were invited to become active class members attending class and sharing their knowledge and skills with us, strengthening our curriculum and relationships.

The project focused on how parent voices could influence how curriculum was being taught to their children and how leadership and collaboration were used to support the development of culturally responsive relationships and academic success.

The goal was to get parents more involved in the school and their child's learning through building classroom connections:

- by building a professional, culturally responsive relationship with whānau community; and
- by improving academic success through coaching whānau and giving them the skills needed to support home learning.

Through questionnaires, hui and parent/teacher conferences, I gathered data from the parent community to gain a shared understanding of what they knew about their children's learning and what they wanted their children's learning journey to be during the time I had them in my class. My approach was informed by Berryman, Lawrence and Lamant's (2016) advice on the importance of shared understanding and knowing and responding to our student's prior knowledge and experiences.

By gaining a deeper understanding and responding to the needs of my class whānau, we created a preferred mode of communication and a shared home learning programme that meets the needs of the class community. In addition, an open classroom door policy was adopted where parents were welcome to join us at any time.

We developed authentic, culturally responsive relationships (Slatter, 2004), leading to a significant increase in parent participation both within the class and outside the classroom learning environment.

Whānau participated in unit studies taking the lead and sharing their culture, food, celebrations and country of origin with us. Birthday celebrations became a regular part of our term, with family invited to celebrate with us. Home learning programmes were influenced by whānau participation in the development and sustainability of the programme.

Identified whānau were supported in accelerated learning programmes via coaching the parents in identified learning areas of need, giving them the tools to support their child's learning at home better.



For whānau to contribute to the classroom environment, parents need to feel valued and share the same vision. Building educationally powerful connections is better when parents feel valued. Through developing authentic culturally responsive relationships and arousing an eagerness (Carnegie and Peil, 2017) in parents that rewards them, a balance of transactional and transformational leadership (Kuantan, 2015), combined with emotional intelligence and authentic culturally responsive connections is required. Positive whānau engagement that supports our diverse tamariki learning journeys increases the quality of outcomes both socially and academically. (Biddulph et al, 2003).

Spending time to build culturally responsive, authentic, mutually trusting relationships with whānau will benefit all. Taking time to learn about our whānau, providing a variety of ways they can engage without judgment, and acknowledging that everyone views school engagement differently supports an authentic transformational leadership style. Being creative and having a range of approaches to engage whānau and show appreciation for them is key to building an authentic home-school partnership. (Bull, Brooking, and Campbell, 2008).

## References

- Biddulph, F., Biddulph, J., & Biddulph, C. (2003). The complexity of community and family influences children's achievement in New Zealand: Best Evidence Synthesis (BES). Ministry of Education: Education Counts - Iterative Best Evidence Synthesis.  
<https://www.educationcounts.govt.nz/publications/series/2515/5947>
- Bull, A., Brooking, K., & Campbell, R. (2008). Successful home-school partnerships. Ministry of Education.  
[https://www.nzcer.org.nz/system/files/884\\_Successful\\_Home-School\\_partnership-v2.pdf](https://www.nzcer.org.nz/system/files/884_Successful_Home-School_partnership-v2.pdf)
- Carnegie D. (2017). *How to Win Friends and Influence People*. London: Vermillion.
- Slater, L. (2004). Collaboration: A framework for school improvement. *International Electronic Journal for Leadership in Learning*, pp. 8, 1-13.
- Kuantan, P. (2015). Transactional or transformational leadership: which works best for now? *International Journal of Industrial Management*, pp. 2289, 9286



## Digital Natives of He Awa Whiria

---

Paul Konia

This project investigated if personalised e-portfolios could help to improve engagement for a year 9 and 10 boys Puna Ako group (Form Class) in Kōmanawa (bilingual learning hub) at Haeata Community Campus, a year 1 to 13, urban, area, state school, in Christchurch.

It is essential to mention that Kōmanawa sees things through a Te Ao Māori perspective using Mason Durie's Te Whare Tapa Wha Model (1984). When ākonga (learners) are enrolled, the whole whānau are enrolled. For this project, I have used He Awa Whiria or Braided River. The significance here is to our local river - Waimakariri. So Awa Whiria symbolises the braided river of ākonga learning and Digital Natives refers to ākonga who are Māori indigenous users of digital technology. The project participants were exposed to learning from all their subject areas, education outside the classroom, our school cultural narrative, along with their goals and reflections where ākonga input their data into personalised e-portfolios.

The aim of this action research project was to use ePortfolios as a vehicle to make a positive difference in learners engaging cognitively, socially and behaviourally in new ways across a variety of contexts, while developing their critical thinking and collaborative skills. According to Ambrose, Martin, and Page (2014) ePortfolios can become fundamental in the realm of teaching practice by enhancing educational engagement, and cognitive and individual development.

Data was collected through Kaiako (teacher) observations, ākonga conversations and reflections, attendance data, whānau conferencing data, and assessing files, photos, blogs and graphics to ascertain the extent of learner engagement and inform the next steps for each action research cycle.

The results show that the majority of ākonga understood what ePortfolios were, what they were used for, and how they could be used for themselves and benefit them in the future. A limitation of the study was the small sample size; more group surveys and interviews would have accomplished a better collection of ākonga input and data to help gauge quickly and thoroughly how ākonga are feeling about their learning, what impacts their behaviours, well-being, and relationships. As a practice-based researcher, I learned that this type of project is a lengthy process. It requires patience, guidance, continual feedback and feedforward on my part so that ākonga can make the necessary improvements and enable them to take greater responsibility for their learning. As a result, what is most important here is the experience of my ākonga rather than the performance of my ākonga.

The findings of my project support the need for Kaiako of my Kura to engage ākonga in various contexts involving shared learning, experiences, shared resources, and shared passions. With the purpose of ākonga driving their learning and leading whānau hui.

The project demonstrated that ePortfolios are not a quick-fix scheme but a long-term, complex integration and accumulation of learning over time. Eportfolios can be transformative in concept, approach and strategy, as I have seen first-hand through the results and research of the cross-cultural



knowledge, cross-cultural communication and cross-cultural relationships between all major stakeholders under the umbrella of engagement.

I am most proud of the changes that ākongā can drive their learning with greater autonomy and capacity. Lead their whānau hui, by sharing their learning experiences, goals, and narratives from their own personalised ePortfolios. I had transitioned from the planner, organiser, implementer, and controller to finally just a facilitator.

I have learned that creating an engaging atmosphere where ākongā feel safe, valued and supported is essential for establishing and maintaining positive relationships. It is also vital to engage with whānau by involving them just as much as informing them of the culture, teaching and learning processes. As a Kaiako, engaging in new ways of learning and engaging collaboratively with all major stakeholders in the pursuit of opportunities and experiences where ākongā can engage cognitively, socially, and behaviourally across various learning contexts.

## References

- Ambrose, G. A., Martin, H., & Page, H. (2014). Linking advising and eportfolios for engagement: Design, evolution, assessment, & university wide implementation. *AAC&U Peer Review*, Winter.
- Durie, M. H. (1984). "Te taha hinengaro": An integrated approach to mental health. *Community Mental Health in New Zealand*, 1(1), 4-1





## Changing Schools? Establishing a Place to Belong

---

### Phillip Place

Students who change between high schools, often struggle to achieve at the same level as those who do not change schools. This small but diverse group of students face a wide range of challenges to successfully integrate into their new school. Current practice is, in effect, a 'sink or swim' model that sees new students immersed into new and unfamiliar cultural, social and academic environments with minimal support provided to aid in their integration into existing cultural, academic and social groups.

The 'sink' sees these often-vulnerable students overrepresented in school drop-out rates, Board of Trustees disciplinary hearings, and underachieving academically.

Even the students who 'swim' can face a setback of up to six months of academic achievement as they adjust to the new learning environment (Collins, 2018). The effects of poor transitions between schools extend beyond school life. Young people who experience difficulties transitioning to a new school are at a greater risk of poorer social outcomes in the long term if these difficulties are not identified and successfully dealt with (Wylie, Hodgen, Hipkins, & Vaughan, 2008).

This project aimed to investigate the phenomenon of students changing secondary schools after the initial orientation period that occurs at the beginning of Year 9. In identifying the challenges and obstacles these new students experience, the goal was to develop a process and associated support structures to smooth new students' transition into their new school. This would be achieved through building a sense of connection and belonging between the student and their school. Social belonging and connection to a place is a basic human motivation (MacDonald & Leary, 2005), and these connections are a predictor of positive educational outcomes (Jethwani-Keyser, 2008; Webber, McKinley & Hattie, 2013).

To obtain the initial data, a case study was designed and implemented to investigate the phenomenon of the transition process for a small number of new students. The aim was to better understand the stresses involved in transitioning to a new school and how these can be minimised or more easily navigated. The case study consisted of an initial survey, interview, and follow-up surveys. Field notes were also taken to record relevant observable information. This data would then be examined and used to inform and develop resources to smooth the transition process of future new students.

This research revealed that students' felt unease during multiple and varied aspects of their transition to a new school. These stresses could be characterised into the three categories I have identified as the domains of belonging: Social, Cultural; and Academic.

Belonging socially requires students to feel valued by their peers and contribute as part of a social group as their true selves. It is a feeling of being appreciated for whom you are rather than tolerated or simply ignored. The new students identified belonging to a social peer group as their main priority and one of the more complex transition challenges to navigate.



Cultural belonging incorporates feelings that you are a valued member of the school; you can contribute as your true self and feel that you are treated fairly and respectfully. Your culture is recognised and valued within the school. For new students, feelings of cultural unbelonging extended from uncertainty around how others would perceive them to whether their personal and family values aligned with those of the school, teachers, and their peer group.

Academic belonging relates to students learning relevant skills and knowledge in a relevant way and at a suitable level. This aspect is especially difficult for students transitioning into the senior years of new schools as schools plan for continuity of learning between year levels in most subject areas.

The case study also highlighted a significant list of administrative barriers to belonging that impedes integration into the new school by obstructing access to school communications, social and extracurricular activities, and academic content.

One of the surprising learnings from this project is the vast differences and yet striking similarities between the experiences of the students who participated in this case study. The differences highlight that there will be no magic bullet or one size fits all approach to smoothing this process. However, the similarities indicate that schools can utilise different tools and strategies to alleviate some everyday stressors.

The following is a summary of methods identified to aid new student transitions.

1) Removing administrative barriers: checking student device availability; demonstrating to students and whānau how to access the school portal and view school communications, and ensuring student access to Google Classroom and 3<sup>rd</sup> Party online learning applications.

2) Improving social interactions: utilising a Peer Mentor trained for this process, encouraging extracurricular involvement (having Peer Mentors do this); and utilising class buddies.

3) Fostering a positive cultural environment: through positive contact with whanau, such as inviting whānau into school for relevant events, developing school-wide culturally responsive practice, and communicating support network availability.

4) Ensuring learning is accessible: through appropriate course/timetables, testing for support entitlements, and providing catch-up and study sessions.

These tools, worked alongside a staff-student mentoring programme, allow the staff member to guide the student's transition into their new school. This aspect of the project was based on Rutherford College's successful Haere Tahī (Go Together) student championing programme. Staff and students meet regularly to help work through any challenges they face at school and provide access to support and further opportunities for growth.

## References

- Collins, S. (2018, May 24). Shifting schools sets children back half a year - report. New Zealand Herald. Retrieved September 2020, from [https://www.nzherald.co.nz/nz/shifting-schools-sets-children-back-half-a-year-report/SCDP66BWQ4KA62B5ENQLLEQDBA/?c\\_id=1&objectid=12057923](https://www.nzherald.co.nz/nz/shifting-schools-sets-children-back-half-a-year-report/SCDP66BWQ4KA62B5ENQLLEQDBA/?c_id=1&objectid=12057923).
- Jethwani-Keyser, M.M. (2008), *"When teachers treat me well, I think I belong": School belonging and the psychological and academic well being of adolescent girls in urban India*", Unpublished Dissertation, New York University, New York, NY
- MacDonald, G., & Leary, M. R. (2005). Why Does Social Exclusion Hurt? The Relationship Between Social and Physical Pain. *Psychological Bulletin*, 131(2), 202-223. <https://doi.org/10.1037/0033-2909.131.2.202>
- Webber M., McKinley E., Hattie J. (2013) The importance of race and ethnicity: an exploration of New Zealand Pakeha, Māori, Samoan and Chinese adolescent identity. *New Zealand Journal of Psychology (Christchurch. 1983)*, 42(2), 17-28.

Wylie, C., Hodgen, E., Hipkins, R. and Vaughan, K. (2008). *Competent Learners on the Edge of Adulthood: A summary of key findings from the Competent Learners @ 16 project*. Report prepared for the Ministry of Education by the New Zealand Council of Educational Research, Wellington



## Self-Regulation within Place-Based Learning

---

Rebecca Northe

This project aimed to create opportunities that would allow teachers to employ place-based learning/education principles whilst also increasing student self-regulation. Within my school context, teachers apply traditional models of transformational pedagogy, and limited opportunities to self-regulate exist for students. Learning is generally not based on the local environment. Creating opportunities for students to learn about their place and community and self-regulate learning projects was key. This resulted in the following:

- teachers developing a clear understanding of what self-regulation and place-based education/learning (PBL/E) looks, sounds and feels like within the classroom;
- development of explicit self-regulated learning (SRL) phases and dimensions resulting in explicit strategies and techniques being applied by teachers within classrooms to improve SRL;
- development of PBL theory and application of PBL levels within various classroom settings;
- development of an SRL rubric for students to self-assess, seek feedback; and
- shifting parameters for success from being primarily measured against Literacy & Mathematics to learning-centred/student agency.

Action Research (McNiff & Whitehead, 2005) was the selected methodology for this project, and the intent was to act purposefully on information gathered within my context (classroom and community of learners - COL) to actively improve practice or conditions of learning within social settings. PBL/E can be summarised as a holistic approach to education, aligning well with action research as authenticity is required - link to research-based changes. Within this project, PBL/E placed the community and learners' location at the centre of pedagogical changes. Organised, clear data collection points and purposes ensured that triangulated data could convey clear themes and results.

Students were challenged to inquire and investigate local contexts using the SRL phases. They were challenged to think beyond the classroom. Students were asked to engage in a confronting global issue (climate change): showing that they were the kaitiaki of our local environment, linked to environmental and experience-based activities. Mixed methods data was collected from students during iterations one and two: participant surveys (whole group, pre/post); participant interviews (target group); and self-regulation data linked to the SRL rubric (target group and students who worked in subgroups with my context). Within iterations three and four, teacher perspectives were collected from the COL PBL professional learning group (pre/post-four colleagues - Year 4 teachers), linked to PBL resources created for this project and then shared. This included participant interviews and qualitative data collection.

Explicit teaching of SRL phases and dimensions throughout iterations one and two occurred through regular support, guidance, feedback meetings, and one-to-one interviews. This allowed a learning community to be established with students, meaning they could see me as more than just a teacher. The students' impact-based projects allowed for collaboration, and learning moved beyond a traditional transmission model, where content knowledge is acquired. Hence, embedding SRL within

PBE created opportunities for metacognition to occur. Positive outcomes were linked to agile management approaches (Turner, 2020) that were applied—allowing the learning coach to explicitly teach SRL processes allowed for more excellent individual and collaborative success, as learners were challenged to address and comment on accomplishments, and obstacles and to establish clear next steps. Data analysed within the project supports SRL findings by Blaschke & Hase (2019), who argue that teachers must play a more passive role, modelling and offering external reinforcement, demonstrating principles of heutagogy, creating opportunities for learners to direct, seek and acquire learning more holistically.

Conversational analysis of target students' data showed they could make links across PBL experiences, from forethought to self-reflection (SRL phases in iterations one and two). Whole group quantitative data collection demonstrated apparent factual shifts in student behaviours. They were allowing the conclusion to be drawn that SRL phases were successfully implemented by most of the students, linked to agile management. Quantitative data collected linked to the SRL rubric showed varying trends based on the students themselves and their impact projects' focus. A limitation for PBL and SRL is age or behavioural maturity. Students “develop an increasingly differentiated understanding of academic tasks, and their monitoring of differential effects of cognitive strategies for learning grows with age” (Zimmerman, 1990, p. 13). SRL phases were only embedded by myself, not my co-teacher, who worked within my PBL/E context with sub-groups (iterations one and two). Therefore target students' outcomes were inhibited by varying SRL application. Year 4 students lack the learning maturity required to embed SRL phases fully, therefore SRL was not embedded in iterations three and four. Data communicated during iteration four showed shifts in teacher understanding linked to PBL, these were limited because of barriers beyond the project's control (Covid-19 Lockdown). All four teachers developed a clear understanding of PBL/E definitions and the importance of grounding PBL/E within a context that is relevant to and for the learners.

Project findings confirm that seizing opportunities to focus on experiential learning, allowing for a social constructivist approach to education alongside SRL dimensions, allows for improved engagement and motivation of learners. This means that young people's lives, cultures and interests can align to thrive within communities and community-orientated schooling, resulting in improved outcomes for learners and allowing them to develop ecological consciousness. The SRL rubric acted as an alternative tool for assessing student metacognitive success. High self-regulating students perform better than those with lower SRL, affecting academic results (Triquet et al., 2017; Peel, 2019; Zimmerman, 1990). Overall, success was seen as all learners, both students and teachers, being able to self-direct/govern their learning. This was enhanced by not micro-managing people, applying agile management approaches, and giving control to the participant. Peel's (2019) findings show that frameworks empower individuals to think and feel as participants in their learning processes. Therefore, SRL and PBL definitions and professional development support resources created for this project enabled success for the greater group.

## References

- Blaschke, L. M., & Hase, S. (2019). Heutagogy and digital media networks. *Pacific Journal of Technology Enhanced Learning*, 1(1), 1-14. doi:10.24135/pjtel.v1i1.1
- McNiff, J., & Whitehead, J. (2005). *Action research for teachers: A practical guide*. ProQuest Ebook Central <https://ebookcentral.proquest.com>



- Peel, K. (2019). The Fundamentals for Self-Regulated Learning: A Framework to Guide Analysis and Reflection. *Educational Practice and Theory*, 41(1), 23-49. doi:10.7459/ept/41.1.03
- Triquet, K., Peeters, J., & Lombaerts, K. (2017). *Self-Regulated Learning Online Benefits, Empirical Foundations, Multi-level and Multi-modal Promotion, and the Evaluation thereof for Teacher Professional Development*. Department of Educational Sciences, Vrije Universiteit Brussel. [http://teachup.eun.org/documents/556205/1092039/TeachUP\\_D1.1b\\_Self-Regulated-Learnin\\_g-Online.pdf/3d155d94-8a05-4cde-b18c-d6a33f4fc2b9](http://teachup.eun.org/documents/556205/1092039/TeachUP_D1.1b_Self-Regulated-Learnin_g-Online.pdf/3d155d94-8a05-4cde-b18c-d6a33f4fc2b9)
- Turner, J. (2020). *Agile Project Management: 3 Books in 1-The Ultimate Beginner's, Intermediate & Advanced Guide to Learn Agile Project Management Step by Step*. Publishing Factory.
- Zimmerman, B. J. (1990). Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist*, 25(1), 3-17. doi:10.1207/s15326985ep2501\_2



Master of  
Contemporary  
Education

# Teaching Self-Regulation Strategies to Increase Agency in a Secondary School Classroom

---

Sara Speight

In 2019 my school worked on a Teacher Led Innovation Fund (TLIF) Project with two local primary schools on the transition of learning between Years 8 and 9. This highlighted the differences between the level of agency and self-regulation skills that students demonstrated in their learning between primary and secondary schools. In 2020 when we went into lockdown, the importance of developing these skills was reinforced for me. It became apparent that whether students held the requisite competencies to engage in the more independent learning style of lockdown, was vital in determining their engagement and learning outcomes (Hood, 2020). From these experiences, I started to question how self-regulation skills could be taught to increase agency in secondary schools.

In 2021 my project focussed on a Year 9 class I taught for both English and Social Studies and Tūhono (form class). I hoped that through doing this, I could integrate their curriculum-based learning and include teaching the skills that my project focussed on. My project aimed to increase agentic belief and behaviour by teaching self-regulation skills to the Year 9 ākonga in my target class. I planned to teach students strategies that they could use to increase agency in their learning, to gather evidence on how to best develop these skills in Year 9 students and throughout high school, and to create resources to support other teachers in teaching these strategies in their classrooms.

In Term 1, I analysed literature to inform my teaching of these strategies to the students. I developed a cycle of self-regulation that I considered appropriate for Year 9 students (Fig 1) and broke this down into sub-processes that students learnt about and practised in the classroom. This cycle combined Zimmerman (2002) and Boekaerts' (2011) models. Some of these strategies were integrated into my teaching of the class in the curriculum areas of Social Studies and English. In contrast, others were incorporated into Tūhono (form class) lessons that were implemented with the whole Year 9 cohort. This was informed by evidence that using a socio-cognitive model over metacognitive strategies resulted in more considerable shifts and the ability to use self-regulation strategies for younger adolescents (Panadero, 2017).



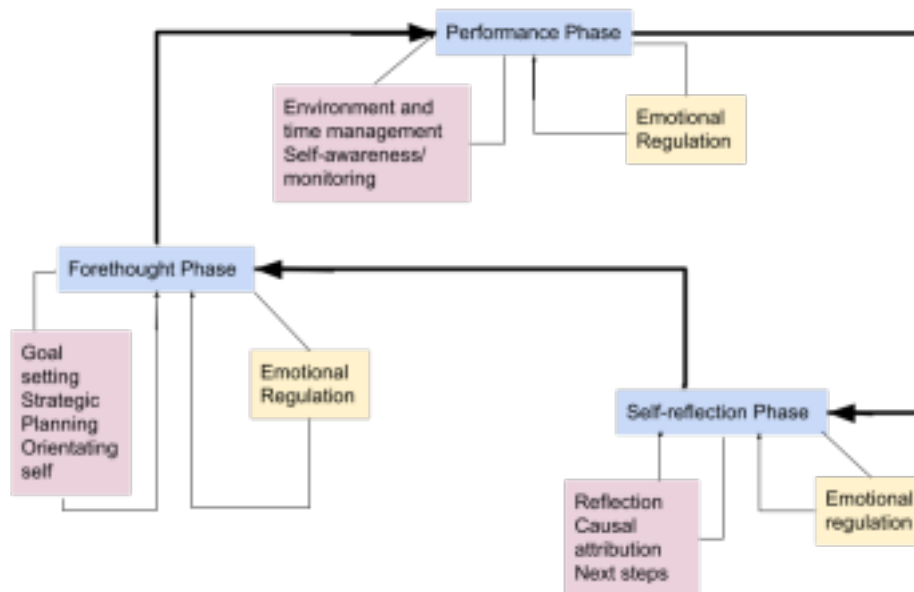


Figure 1. Model based on a Zimmerman and Boekaerts' models

The emotional regulation strategies we explored in class were practical and easy to implement. However, further teaching this model to Year 9 students was challenging, and students struggled to understand how they would set and implement goals. I started to question why this had been ineffective, and after exploring literature, I focussed on developing a range of metacognitive strategies in my second iteration. I hoped that developing these skills and strategies would support students to independently use a cycle or process of self-regulated learning in the future. The teaching of these skills was much more straightforward than attempting to teach a cycle of self-regulation.

To gather data to support my conclusions, I used surveys and interviews in Terms 1, 2 and 3. I also used fieldnotes and an analysis of student artefacts, which were based on activities they had completed in class on self-regulation and metacognitive strategies. I analysed this data to see if there had been shifts in

agency and self-regulation. I coded the surveys and interviews, looking for patterns in student responses and comparing these between sources (Male, 2016). While the short-term teaching of self-regulation and metacognitive strategies in one class had limited long-term impact on student agency, my research's many findings are helpful in informing future actions in this area.

My research had four main findings. The first was that emotions, and the ability to regulate these, have a significant impact on students' ability to self-regulate and demonstrate agentic behaviour. Students could articulate the impact of their emotional state on their learning and identified that learning strategies to regulate this was helpful. Incorporating strategies to do this, such as mindfulness, was also the most straightforward thing to implement in the classroom. Secondly, to independently identify and use metacognitive and self-regulation strategies, students need to be taught these and have multiple opportunities to practice these with increasing independence. This means that to develop these skills effectively, secondary schools need to integrate these teaching and use them across multiple curriculum areas and years. Thirdly, students value the teaching of self-

regulation, metacognition and other key competencies and dispositions above learning subject-specific skills and knowledge. My final key finding was that the learning transition between years 8 and 9 significantly impacted students' ability to self-regulate, even in students who had highly developed skills at primary school. This gives primary and secondary schools opportunities to work together to better plan this transition and the progression of these skills.

## References

- Boekaerts, M. (2011). Emotions, Emotion Regulation, and Self-Regulation of Learning: Center for the Study of Learning and Instruction, Leiden University, The Netherlands, and KU Leuven. In *Handbook of self-regulation of learning and performance* (pp. 422-439). Routledge.
- Hood, N. (2020). Learning from lockdown: What the experiences of teachers, students and parents can tell us about what happened and where to next for New Zealand's school system. The Education Hub.
- Male, T. (2016). 'Analysing Qualitative Data. In I. Palaiologou, D. Needham and T. Male (Eds). *Doing Research in Education: Theory and Practice*. London: Sage, 177-191.
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in psychology*, 8, 422.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, 41(2), 64-70



## Transitioning with 'Mana'!

---

Selaima Tulai

The aura of whakawhanaungatanga, manaakitanga whakapapa and the 'Whare Tapa Wha' are fundamental to ensuring Māori and Pasefika students thrive but are lacking in transition processes and programmes (Durie, 1984; Macfarlane, 2004; Savage et al., 2012).

This project aims to determine the effectiveness of transition processes and whether they are culturally responsive to ensure all students have the knowledge of belonging, the feeling and the sense of belonging, and the connectedness of belonging.

Reflective thought, discussion, decision, and action concerning an issue emerges when Action Research methodology is used (Adelman, 1993). A survey was distributed to Year 8 and Year 9 students, their parents, and teachers, and the responses were ranked from 1 to 4. Braun & Clarke's (2006) Thematic analysis was used to analyse the questionnaire and interview transcripts. The key themes were belonging, valuing culture and the importance of digital learning.

The data demonstrated that culture and language are fundamental to Māori and Pasefika students' success and well-being (Anae, 2010; Fa'avae, 2012). Culturally responsive approaches, practices and pedagogy are salient in schools with Māori and Pasefika students. Concepts such as whakawhanaungatanga, whakapapa, belonging, values, and culture should be immersed in all curriculum areas and the school environment.

Therefore, the results suggest that enhancing the 'mana' of our students is fundamental to their growth and wellbeing. Schools should exist as 'Turangawaewae' - a place for all students to stand firm, feel empowered and connected (Ministry of Education, 2018).

Paramount to the success of Māori and Pasefika students is acknowledging, accepting, and respecting what it means to be Māori (Bishop & Glynn, 1999) or Pasefika (Ministry of Education, 2018). Transitioning with 'mana' focuses on using culturally responsive approaches, practices, and pedagogy to empower students. Findings from the project recommend that information regarding the students must be shared with all parties. Furthermore, schools should seek other techniques to transition learners due to the disruption of Covid. Moreover, additional research is required to establish the effectiveness of the selected culturally responsive approaches and practices.

### References

- Adelman, C. (1993). Kurt Lewin and the Origins of Action Research. *Educational Action Research*. 1:1, 7-24, DOI: 10.1080/0965079930010102. Retrieved from: <https://www.tandfonline.com/doi/pdf/10.1080/0965079930010102>
- Anae, M. (2010). Research for better Pacific schooling in New Zealand: Teu le va - a Samoan perspective. Retrieved from: <http://www.review.mai.ac.nz/mrindex/MR/article/download/298/298-2299-1-PB.pdf>.
- Clark, J., Porath, S., Thiele, J., & Jobe, M. (2020). Action Research. Retrieved from: <https://newprairiepress.org/cgi/viewcontent.cgi?article=1034&context=ebooks>

- Durie, M. (2004). An Indigenous Model of Health Promotion. Retrieved from: <http://hauora.co.nz/assets/files/Maori/Te%20Pae%20Mahutonga%20IUHPE%202004.pdf>
- Bishop, R., & Glynn, T. (1999). *Culture Counts: Changing Power Relations in Education*. Dunmore Press. Palmerston North.
- Fa'avae, D. (2012). The role of culture in teaching and learning. Exploring culturally inclusive pedagogy and its possible implications for Tongan boys in secondary schools. [Masters-Thesis of Professional Studies in Education, The University of Auckland]. DOI: <https://doi.org/10.18296/set.0096>.
- Glynn, T., Cowie, G., Otrell-Cass, K., Macfarlane, A. (2015). Culturally Responsive Pedagogy: *Connecting New Zealand Teachers of Science with their Māori students*. Retrieved from: <https://www.cambridge.org/core/journals/australian-journal-of-indigenous-education/article/abs/culturally-responsive-pedagogy-connecting-new-zealand-teachers-of-science-with-their-mori-students/D6F2268A377C857513E2526339371822>
- Macfarlane, A. (2010). Huakina Mai: Doorways toward culturally responsive education. Retrieved from: <https://ako.ac.nz/assets/Knowledge-centre/GPPG-Huakina-mai/GOOD-PRACTICE-PUBLICATION-huakina-mai-doorways-toward-culturally-responsive-education.pdf>
- Macfarlane, A., Macfarlane, S., Savage, C., Glynn, T. (2012). Inclusive education and Māori communities in Aotearoa New Zealand. Retrieved from: [https://www.researchgate.net/figure/The-Educultural-Wheel-Source-Macfarlane-2004\\_fig1\\_330185643](https://www.researchgate.net/figure/The-Educultural-Wheel-Source-Macfarlane-2004_fig1_330185643)
- Ministry of Education. (2018). *Tapasā: Cultural competencies framework for teachers of Pacific learners*. Ministry of Education. Wellington.
- Ministry of Education. (2018). T.K.I website- He Reo Tupu, He Reo Ora. *Turangawaewae-What is a Marae?* Retrieved from: <https://hereoora.tki.org.nz/Videos/Te-marae/Turangawaewae-What-is-a-marae>
- Savage, C., Macfarlane, A., Macfarlane, S., Fickel, L., & Te Hemi, H. (2012). Huakina Mai: A whole school strength based behavioural intervention for Maori. Retrieved from: [https://ir.canterbury.ac.nz/bitstream/handle/10092/10763/12651977\\_Huakina%20Mai%20Full.pdf;sequence=1](https://ir.canterbury.ac.nz/bitstream/handle/10092/10763/12651977_Huakina%20Mai%20Full.pdf;sequence=1).



Master of  
Contemporary  
Education

# In Pursuit of Equity: Accelerating Achievement by Teaching Through the NZC Key Competencies

---

Karena Ngata

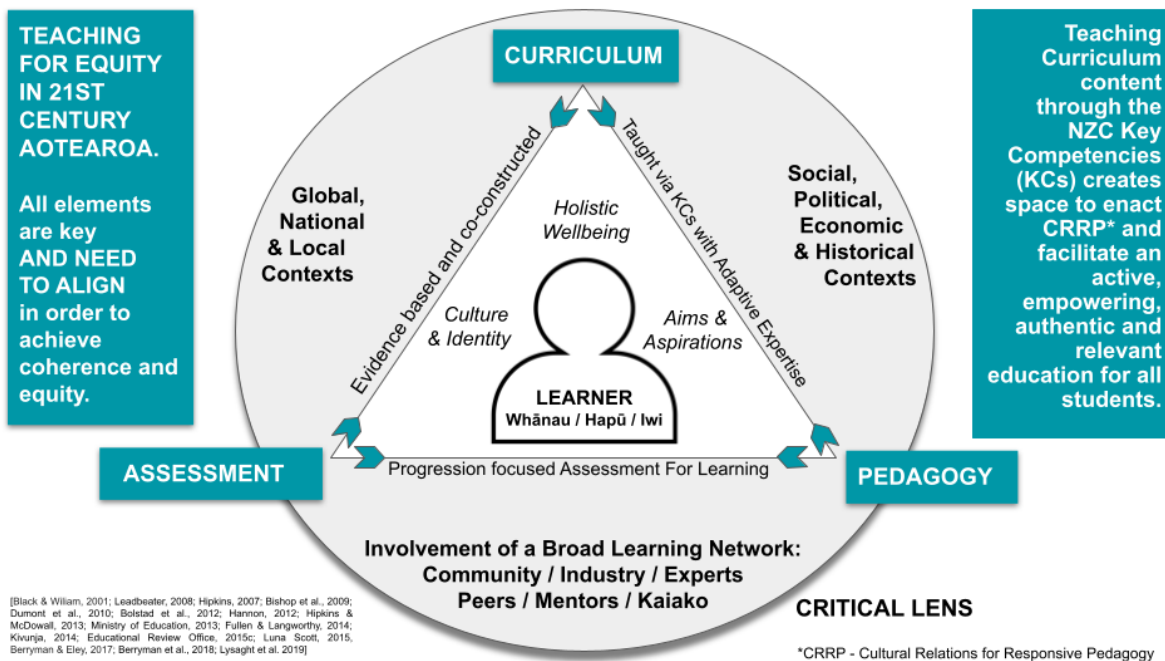
In 2018, UNICEF produced a damning report on Aotearoa, New Zealand's education system. Their research revealed that we have one of the most inequitable education systems in the developed world (Chzhen et al., 2018). Aotearoa New Zealand educators are working hard, which shows improved educational outcomes across the board. However, our efforts are not addressing an enduring disparity as Māori and Pacific Peoples continue to lag significantly behind Pākehā and Asian students across every measure of educational outcome.

This writer argues that the disparity and its continued presence in educational outcomes are rooted in and perpetuated by the physiological, psychological, and social conditions from our colonial history. This was acknowledged in 2019 by our Minister of Justice, Andrew Little, who, in delivering Aotearoa New Zealand's Human Rights report to the United Nations in Geneva, stated, "The impacts of colonisation continue to be felt today, through entrenched structural racism and poorer outcomes for Māori" (Little, 2019). Whether the racism underpinning this continuing disparity is internal, interpersonal, institutional or societal, whether it is deliberately subversive or completely unintentional, racism in all its forms exists in Aotearoa, New Zealand - it has a history here, an enduring legacy, and a debilitating presence in our society today.

As an educator at a Decile 3 school with an 80% Māori demographic, my Action Research project was destined to be about equity. Concerned about my Year 9 Social Studies students' written literacy and my ability to adequately help prepare them for NCEA success in Year 11, I challenged myself to find a way to *accelerate* their achievement so that they were able to progress more than two stages per year in our formal writing requirements.

In order to form an effective strategy about *how* to address the issue of inequitable educational outcomes, I needed to understand the causes of the issue better. To use the well-known axiom "Ngā tapuwae o mua, mō muri" - I had to understand what had not worked, before I could design an intervention that could work. I also knew that if any positive findings I arrived at in my research were sustainable and transferable, I had to understand the role such changes played within a broader, more coherent strategy.

## THE TEACHING FOR EQUITY MODEL



The literature-based Teaching for Equity model I devised illustrates the multiple elements and multiple tensions in the education system. My theory is that inequity has room to flourish when the elements are misaligned, and summative assessment will drive practice. Conversely, when the elements work synergistically, I believe that an important shift occurs, where learning is more relevant, empowering and authentic. In such an environment, more equitable outcomes can be achieved.

In 2021, I undertook an action research project based around the inquiry question “How do I accelerate academic achievement?” Preliminary reviews of literature indicated I would need to lift collaborative practices and broaden learner networks and foster greater student agency in order to promote engagement, motivation and confidence. Strengthening metacognitive skills was the next prevalent theme, and featuring throughout was the need to transition to Assessment for Learning practices. I was more than a bit overwhelmed until I realised that the framework I required to implement and track these “soft skills” existed in our very own NZC Key Competencies. Through the design and use of customised tools such as student Digital Learning Logs with interactive Key Competency progression tables, students were provided platforms with which to track their progressive development. These tools focused on facilitating reflection and “next steps” goal setting, as well as supporting Assessment for Learning practices with input from a broad learning community. Summative assessments on samples of formal writing were measured against TEXAS marking and SOLO rubrics, which indicate that the goal of accelerating written literacy was achieved.

The reality that pervasive racism exists in our workplaces and classrooms is confronting. Not everyone is operating in a space where they are ready to acknowledge it, let alone address it. However, I believe that many more people are ready to genuinely address inequity and be more culturally responsive in their practice but may lack the cultural capability, support or access to professional development to understand how to enact change. Such practitioners may ask questions



such as, "What does it mean to be culturally responsive?" "How does that *look* in my classroom?" "What steps can I take right now that will make a difference?" "Do I need to learn Te Reo Māori before I can enact it?" These practitioners who are willing but may not yet know how to bridge the theory to practice divide may be interested to hear that one way to resist the institutionalised racism of our education system has been hiding in plain sight since 2007 - teaching *through* the NZC Key Competencies.

My research findings indicate that within the NZC Key Competencies lies a largely unrealised potential to transform pedagogy and assessment. By teaching and assessing a student's understanding of curriculum content *through* rich tasks designed to strengthen the NZC Key Competencies progressively, my experience is that important space is created for culturally responsive practice and learning to be enacted, which in turn, can lead to accelerated achievement for Māori students (Berryman & Eley, 2017) and ultimately, more equitable education for all.

## References

- Berryman, M., & Eley, E. (2017). Accelerating success and promoting equity through the ako (note 1): Critical contexts for change. <https://researchcommons.waikato.ac.nz/bitstream/handle/10289/11415/126-204-1-PB.pdf?sequence=8>
- Berryman, M., Lawrence, D., & Lamont, R. (2018). Cultural relationships for responsive pedagogy. Set: research information for teachers, 1, 3-10. [https://www.nzcer.org.nz/system/files/journals/set/downloads/2018\\_1\\_003\\_1.pdf](https://www.nzcer.org.nz/system/files/journals/set/downloads/2018_1_003_1.pdf)
- Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2009). Te kotahitanga: Addressing educational disparities facing Māori students in New Zealand. *Teaching and teacher education*, 25(5), 734-742.
- Black, P., & Wiliam, D. (2001). *Inside the black box: Raising standards through classroom assessment*. Northumberland LEA. <http://www.wyoaac.org/Lit/Inside%20the%20Black%20Box%20-%20Black.pdf>
- Bolstad, R., Gilbert, J., McDowall, S., Bull, A., Hipkins, R., & Boyd, S. (2012). Supporting Future-oriented Learning and Teaching: A New Zealand Perspective. Ministry Of Education. <http://openrepository.aut.ac.nz/handle/10292/12336>
- Chzhen, Y., Rees, G., Gromada, A., Cuesta, J., & Bruckauf, Z. (2018). An Unfair Start: Inequality in Children's Education in Rich Countries. Innocenti Report Card 15. UNICEF. [https://www.unicef.org/media/47496/file/%20UNICEF-An-unfair-start-inequality-children-education\\_En.pdf](https://www.unicef.org/media/47496/file/%20UNICEF-An-unfair-start-inequality-children-education_En.pdf)
- Dumont, H, Istance, D and Benavides, F (2010) *The Nature of Learning: Using Research to Inspire Practice*, OECD Publications, Paris. <http://www.oecd.org/education/cei/50300814.pdf>
- Education Review Office. (2015). Raising Student Achievement Through Targeted Actions. <https://ero.govt.nz/sites/default/files/2021-05/ERO-15298-Raising-Student-Achievement-FULL-v6b-WEB-002.pdf>
- Fullan, M. & Langworthy, M. (2014) *A Rich Seam: How New Pedagogies Find Deep Learning*, London: Pearson. [https://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich\\_Seam\\_web.pdf](https://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich_Seam_web.pdf)
- Hannon, V. (2012). Learning futures. <http://www.oecd.org/edu/cei/Valerie%20Hannon.Learning%20Futures.pdf>
- Hipkins, R. (2007). Assessing key competencies: Why would we? How could we? <http://nzcurriculum.tki.org.nz/content/download/818/5876/file/Key%20Competencies.pdf>
- Hipkins, R., & McDowall, S. (2013). Teaching for Present" and Future" Competency: A Productive Focus for Professional Learning. *Teachers and Curriculum*, 13, 2-10. <https://files.eric.ed.gov/fulltext/EJ1122036.pdf>



- Kivunja, C. (2014). Do You Want Your Students to Be Job-Ready with 21st Century Skills? Change Pedagogies: A Pedagogical Paradigm Shift from Vygotskyian Social Constructivism to Critical Thinking, Problem Solving and Siemens' Digital Connectivism. *International Journal of Higher Education*, 3(3), 81-91. <http://www.sciedu.ca/journal/index.php/ijhe/article/view/5156>
- Leadbeater, C. (2008). What's Next?: 21 Ideas for 21st Century Learning. Innovation Unit. <http://charlesleadbeater.net/wp-content/uploads/2010/01/Whats-Next-21-ideas-for-21st-century-learning.pdf>
- Little, A. (2019) Speech to United Nations Human Rights Council for the third Universal Periodic Review. Delivered to the United Nations at Geneva, 21 January, 2019. Retrieved from: <https://www.beehive.govt.nz/speech/andrew-little-speech-united-nations-human-rights-council-third-universal-periodic-review>
- Luna Scott, C. (2015). The future of learning 2: What kind of learning for the 21st century? UNESCO Education Research and Foresight Working Papers Series. [http://unesdoc.unesco.org/images/0024/002429/24\\_2996E.pdf](http://unesdoc.unesco.org/images/0024/002429/24_2996E.pdf)
- Lysaght, Z., Scully, D., Murchan, D., O'Leary, M., & Shiel, G. (2019). Aligning assessment, learning and teaching in curricular reform and implementation. <https://ncca.ie/media/3925/aligning-assessment-learning-and-teaching-in-curricular-reform-and-implementation.pdf>
- Ministry of Education. (2013). What could key competencies look like in teaching? Principles that underpin the key competencies. Te Kete Ipurangi - The New Zealand Curriculum Online. <https://nzcurriculum.tki.org.nz/Key-competencies/Tools/Key-competencies-in-teaching>



Master of  
Contemporary  
Education

# Changing Hearts and Minds: Enabling the Effective Implementation of Te Arahōu – The Māori Achievement Collaborative

---

Drew Manning

Mā ngā huruhuru ka rere te manu.  
Adorn the bird with feathers so it can fly.

Te Arahōu - The Māori Achievement Collaborative (MAC) - is an organisation committed to Māori Achieving Success as Māori in educational settings throughout Aotearoa, New Zealand. Established in 2013, the MAC kaupapa holds principals as the key levers to drive transformation within their kura: "Schools won't change unless the Principal does" (Māori Achievement Collaborative, n.d.). It has been suggested that the oppression inherent in colonial systems like education in Aotearoa, New Zealand, is often inadvertently perpetuated by people with no racist intentions (Paradies, 2006). In order to address this, MAC facilitators work to build the capability of school leaders in Aotearoa, New Zealand, to intentionally inquire into, recognise, and remove barriers impeding cultural and educational success for Māori in partnership with ākongā, whānau, hapū, and iwi.

The MAC kaupapa has not been equally effective in all schools, however. While many MAC schools have successfully lifted Māori academic success as Māori, in some instances, schools have left the programme after a short time, while others are still on the programme but have failed to see the same results. So, what characteristics enable the effective implementation of the Māori Achievement Collaborative kaupapa? Which of these is within the capability of the principal to influence? What is the most effective way to implement the kaupapa within a given school?

The purpose of this project is to identify the contexts and characteristics of schools and principals that enable the effective implementation of the Māori Achievement Collaborative kaupapa, to produce a best-practice synthesis that other MAC facilitators and MAC principals could use to help improve the effectiveness of current and future implementation of the Māori Achievement Collaborative kaupapa.

To balance the complexity of an educational environment and the cultural nature of the subject matter, this project used a combination of Case Study (Crowe et al., 2011) and Kaupapa Māori (Pihama, 2001) methodologies. Four schools that had successfully implemented the MAC kaupapa as described by the six MAC *Measurable Gains Framework* areas were identified. To understand the causal link between the contexts and characteristics of each school and principal - and the success of the Māori Achievement Collaborative kaupapa, data were collected through research, observation, and semi-structured interviews with the principal and at least one Tangata Whenua representative from each school. This qualitative data was then used to create four case studies, which were then

used to familiarise the researcher with the contexts of each school, the leadership attributes of each principal, the strategic implementation of the MAC kaupapa they had undertaken, and how each had engaged with their MAC facilitator. Content analysis was then undertaken to identify themes that they had in common with one another.

After researching four MAC schools, interviewing their principals and tangata whenua representatives, spending some time observing their kura, and then comparing and contrasting how they implemented the kaupapa within their specific contexts, the project revealed that the Māori Achievement Collaborative kaupapa is more likely to be effective in schools when:

- principals assume an adaptive leadership style;
- the principals recognise the importance of normalising Te Ao Māori within their kura;
- principals have joined MAC voluntarily in order to support the normalisation of Te Ao Māori within their kura;
- principals see themselves as an integral part of the school community;
- the principals are willing to step outside of their comfort zones in order to establish and grow positive relationships with whānau, hapū and iwi;
- principals are able to establish a strong relationship with at least one key member of the school's Tangata Whenua;
- principals are capable of acknowledging the effects of colonialism on their ākonga Māori and are willing to challenge the status quo in order to affect change.

It is hoped that the findings of this project will be useful to other MAC facilitators and MAC Principals to help improve the effectiveness of their implementation of the Māori Achievement Collaborative kaupapa now and into the future. These insights may also be of value to educational leaders and trustees who choose to pursue the normalisation of Te Ao Māori in their schools without the support of MAC, as well as leaders outside of the educational domain in Aotearoa New Zealand and overseas who see the benefits of normalising cultural responsiveness in their organisations.

## References

- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheik, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11, 100. <https://doi.org/10.1186/1471-2288-11-100>.
- Paradies, Yin. (2006). Defining, conceptualizing and characterizing racism in health research. *Critical Public Health*, 16, 143-157. <https://doi.org/10.1080/09581590600828881>
- Pihama, L. (2001). *Tihei mauri ora honouring our voices: Mana wāhine as a kaupapa Māori theoretical framework* (Unpublished doctoral dissertation). University of Auckland, Auckland, New Zealand.
- Māori Achievement Collaborative. (n.d.). *Te Arahōu o Aotearoa - Māori Achieving Educational and Cultural Success as Māori: Ko Wai Matou?* [www.mac.ac.nz/programs](http://www.mac.ac.nz/programs).



# The Impact of Digital Tools on Engagement and Achievement in Writing

---

Claire Welch

The purpose of this project was to investigate the use of digital tools to improve engagement and achievement in writing for some learners. The purpose of the digital tools was to provide an alternative to pen and paper to remove or reduce barriers some students face when writing by acting as a scaffold. I aimed to achieve this by investigating how digital tools could support ākonga in the writing process and improve engagement and success.

My specific goals were to:

1. engage ākonga in writing by offering an alternative mode of recording to traditional pen and paper by utilising the technology available on the class set of Chromebooks;
2. by using technology available on Chromebooks, improve learner success and achievement in writing, as measured by the e-asTTle tool; and
3. by using technology available on Chromebooks, assist ākonga to overcome some of the barriers they experience during writing instruction.

I investigated the impact that Google 'talk to text' function had on learner engagement and achievement and how this tool removed perceived barriers to writing. The methodology for this study was action research - to take advantage of the in-service and contextual nature of the problem.

A group of 8 students, who represented one third of my total class cohort, took part in the project. These eight students were achieving below the expectation of my kura in writing. All ākonga took part in the usual classroom writing programme which was planned and implemented following a best-practice process approach model: using a prompt or topic co-constructed with ākonga; followed by class discussion and idea generation; strong modelling; and clear and concise instructions and success criteria. The study group used Chromebooks every day and, owing to the nature of the 'talk to text' function, used spaces outside the classroom. Consequently, they were not always directly supervised by a staff member. Students created a Google document as a Digital Writing book which was shared with me. Daily work was dated, and version history enabled monitoring of ākonga output.

Data and information was collected during the project as follows:

1. conducting a literature review and analysis of current expertise;
2. gathering qualitative data from interviews, surveys and classroom observations; and
3. collecting achievement data using the e-asTTle writing assessment tool.

Analysis and reflection of qualitative and quantitative data, cross-referenced with literature, gave a broad understanding of the impact of using the 'talk to text' tool on ākonga engagement and achievement.

Combining all data types led to a common trend. Across the range of qualitative and quantitative data, improvements in learner engagement and achievement were found. An unexpected by-product of the use of digital tools was greater collaboration among the members of the study.

From the data collected, it could now be stated that ākongā demonstrated higher levels of behavioural, cognitive and academic engagement through the use of digital tools rather than pen and paper writing. Students who had previously demonstrated a degree of anxiety during writing instruction also displayed less anxiety and produced more work.

The literature suggested that, if mechanics of writing are removed, students can attend to higher order skills. My data supported this proposition as students made achievement gains across the range of deeper and surface features of writing, as measured by the e-asTTle tool.

All students made progress, as measured by the e-asTTle tool, with 75% making progress at a greater rate than they had been moving through curriculum levels in previous years.

Some disadvantages of using the 'talk to text' tool were found, including limited grammatical editing, spell checking and speech recognition.

Ākongā wrote significantly more, which supported evidence in the literature that students are able to concentrate on ideas rather than being interrupted by effort put into mechanics and phonetic spelling (Dahlstrom and Bostrom, 2017; MacArthur, 1999). This has led me to consider future pedagogy to ensure student barriers are removed to create more equitable conditions in the classroom.

The use of a dictation style tool raised issues of speech and oral language. It was found the link between reading and writing for idea generation was not strong as students were gathering their ideas aurally and from visual aids such as YouTube - rather than written text. Further research could be carried out regarding the use of oral language and written text, as they relate to writing.

Recommendations may now be made for writing instruction to ensure greater equity for those students who experience minor learning disabilities and barriers to writing. It is recommended that Literacy Progressions are not followed in a linear fashion for all ākongā, and teacher judgement and expertise should be used to create learning conditions that suit individual learners.

## References

- Dahlstrom, H. & Bostrom, L. (2017). Pros and Cons: Handwriting versus Digital Writing. *Nordic Journal of Literacy*. 12 (4), 143-161.
- MacArthur, C.A. (1999). Overcoming barriers to writing: Computer support for basic writing skills. *Reading and Writing Quarterly*, 15(2), 169-192