Master of Teaching & Education Leadership
Symposium Proceedings 2020

MASTER OF TEACHING & EDUCATION LEADERSHIP SYMPOSIUM PROCEEDINGS 2020

The Mind Lab

Contents

Foreword

Joni Angeli-Gordon

Kia hora te marino,

Kia whakapapa pounamu te moana,

Kia tere te kārohirohi i mua i tō huarahi

May peace be widespread

May the sea glisten like greenstone and may the shimmer of light guide you on your way

   This edition of The Mind Lab e-Press presents the abstracts of graduates' from the Master of Teaching and Education Leadership (MTEL) final reports.

   At its heart, MTEL, in partnership with Ako Mātātupu | Teach First New Zealand is concerned with Social Justice, Collaboration and Leadership as a pathway to address inequity in education. This placement-based teacher education masters programme, which works in communities throughout Aotearoa from Kaitaia to Invercargill, has contributed to the education landscape as a whole in really important ways.

   Although each candidate was embedded in their own context and journey, the similarities in the themes that emerged was striking. Without exception, each project centred around engaging learners through promoting agency, adopting innovative approaches, promoting wellbeing or localising and

indigenising curriculum. All projects worked to challenge the status quo

One wonderful element in each project was that we could see how each graduate brought themselves to their research through culture, language, identity alongside the passion to lead, transform and most importantly, serve communities. They embody the Sāmoan alagaupu (proverb) O le ala i le pule o le tautua – leadership is through service.

Through the turmoil of 2020, these graduates' displayed resilience and grit. Without exception, every single graduate was impacted by COVID-19 in their projects and despite this, they adapted, persevered and presented exceptional work.

It is a great honour to offer the foreword for the symposium proceedings for the 2019 Cohort, a cohort incredibly close to my heart. This set of abstracts serves to celebrate and disseminate their impactful work.

Nāku iti noa,
Nā, Joni Angeli-Gordon

Introduction

The abstracts are presented in two sections. The first section covers presentations in order of appearance at The Mind Lab MTEL symposium on the 6th November 2020. The second section shares the abstracts of the poster presentations which were presented in the afternoon on the same day, you will also find the link to the online posters in the second section.

The image above summarises the frequency of words used in the 63 abstracts. The size of the word indicates the frequency of use, the analysis was run on NVivo12 covering the most common words with 5 or more letters, synonyms were combined by the software. It is no surprise that students are at the heart of all projects, there are several other interesting themes including such as engagement, Māori, mindfulness, and achievement. We hope you find some interesting projects in

this publication from The Mind Lab e-Press, if you would like to contact any of the authors please email auckland@themindlab.com.

Symposium presentations

The following abstracts are printed in order of presentation at the symposium.

[1]

Building foundational mathematics skills through effective learning strategies

Melissa Elliston-Boyes

This research explores the use of an easily implementable learning tool to improve the numeracy, confidence and math anxiety of high school students in New Zealand. Only half of the adults in New Zealand have the numeracy skills considered essential to participate fully in society, and this results in many negative life outcomes. Poor numeracy is more common for people in certain groups such as those from low socio-economic backgrounds, Māori, Pasifika and people who speak a language other than English at home. Therefore, the consequences of poor numeracy disproportionately affect these groups. Research has demonstrated the effectiveness of distributed practice (the repetition of a concept to be learned over time)) as a learning tool in improving retention of facts, procedural understanding and problem-solving. Despite the evidence supporting this tool, it is not common practice at some New Zealand schools. This research explores the application of distributed practice to improve the numeracy and confidence and reduce the math anxiety of a year 10 mathematics class in a decile 4 school in New Zealand. This involved the use of a daily, personalised online quiz using spaced repetition to

practice arithmetic. Numeracy, confidence, and math anxiety was tested using a quiz and a survey before and after the intervention. There was a positive relationship between engagement in distributed practice and test score and confidence and anxiety, but due to a small sample size and external challenges during the experimental phase, further investigation is required to ascertain the effects.

[2]

How can regularly solving open-ended Mathematics problems create equitable outcomes in Junior students' Mathematics?

Lauren Kosovich

Walk into any Mathematics classroom and you are bound to hear the question 'Is this the right answer?'. There appears to be a belief amongst many students that true Mathematics is following an algorithmic process, using numbers, to achieve a single, correct answer. However, in the real world, Mathematics requires critical thinking, problem solving and communication. In fact, in NCEA assessments, those skills are required to obtain Merit and Excellence grades. Unfortunately, there continues to be a disproportionately lower percentage of students obtaining Merit and Excellence course endorsements at low decile schools compared to high decile schools. One pedagogical approach used to help students develop these skills is the use of open-ended problems, problems that can have different answers and solutions depending on the assumptions you make and what you take into consideration. For students to be able to use these skills in NCEA assessment, they need to begin to develop them when they are juniors. The aim of this inquiry research was to investigate how the use of open-ended problems could create more equitable outcomes for junior students, in particular

through the development of mathematical confidence, critical thinking and engagement. Students were observed, in groups, completing open-ended problems, interviewed about their experience and their work was collected for analysis. Overall, students' had more confidence completing open-ended problems and engaging in meaningful Mathematics discussion with their peers. Students also found these problems more accessible than close-ended problems, with many students opting to complete sections of the task involving mathematical communication and thinking, instead of basic number skills. In addition to this, students felt successful simply by being able to complete the problem, modifying the aforementioned question from 'Is this the right answer?' to 'does this solution seem reasonable?', a far more meaningful question.

[3]

Statistics for social justice (DW)

David Waters

Statistics is not about telling a story about numbers; it's telling a story of what those numbers reveal about people. Based on inquiry research conducted with 55 students in an Auckland high school this thesis follows an attempt at implementing social justice contexts into the year 12 NCEA statistics curriculum. We investigated the associated impact on students' use and development of social, emotional, and cultural intelligences (SECi). We discovered that integration of local-real-world social justice contexts appears to increase students' use and development of SECi; with use being biased toward social and emotional intelligences. It appeared that the contexts used were not the biggest influencer, but that the teacher's approach was. We suggest that there are certain conditions that may need to exist for SECi to flourish in mathematics contexts and identify a number of systemic barriers to this

[4]

Statistics for social justice (NM)

Niharika Manchineela

Statistics is about us. It is the science of dealing with the data about the society we live in and the people that constitute it. Based on inquiry research conducted with 55 students in an Auckland high school, this report details an attempt at implementing social justice contexts into the NCEA Level 2 curriculum. We investigated the impact of this change on students' engagement and understanding of statistics. Our findings indicated that the integration of local-real world social justice contexts do increase engagement and understanding. This was indicated through various forms of student feedback as well as academic results. We also found that despite the engaging contexts, it was the teachers pedagogical skills that had a greater influence. We recognised that there were numerous systemic barriers and limitations that had an effect on our data.

[5]

The Impact of the Teacher-Student Relationship on Hauora during a Global Pandemic

Chelsea Mudge

This project seeks to understand the impact of the teacher-student relationship on hauora. Teacher-student relationships are essential for student success but the route to developing strong teacher-student relationships can be unclear. Research was undertaken with students from two year 10 mathematics classes as at large, co-educational, decile 4 school in Hamilton. Data collected from the students established three main areas fundamental for developing teacher-student relationships; respect, fun and sharing of identity. The researcher, in their role as the classroom teacher, attempted to adapt their practice to focus on these three key elements and measured the results through likert scales, surveys and observation. Findings, while indirect, suggest that a teacher's attempts to create fun may not necessarily translate into increased enjoyment for students and that a focus on the joy of Mathematics learning is more beneficial than the use of activities believed to be enjoyable in other contexts, which don't directly relate to the mathematics learning taking place. Although a direct relationship between teacher-student relationships and hauora was unable to be concluded within this research project, generalisations indicate

that student-teacher relationships, along with enjoyment by both students and teachers are connected to hauora for both students and teachers and remain an area for further investigation.

Effects of a House System on Health and Wellbeing

Ken Fale

This project explores the impacts of a house system on a Decile 1 co-educational secondary school of predominantly Pasifika learners. Located in a low socio-economic suburb in South Auckland, it has been presented with its own challenges in the community and also within the school such as educational inequity and deficit disparities, students have developed a lack of identity, belonging and pride, are disengaged and misbehaving in class, the absence of positive student teacher relationships and a decline in academic achievement. To address the challenges, junior staff leaders developed a house system to provide an opportunity to foster a sense of belonging, identity and pride and improve relationships and achievement. The research used a survey to gather qualitative and quantitative data to examine the changes of perception in the school community from the house system. From the surveys, 31 Year 9 students and 16 teachers responded. The results have indicated positive impacts of the house system on relationships, belonging, identity, pride and on health and wellbeing, yet also revealed an impartial view of the impacts on student engagement, behaviour and achievement. Furthermore, comments made by teachers agreed that the house system previously imposed belonging, identity and pride which were

more identified through students' own ethnic cultures. It was also interesting to read a comment from a teacher who shared about the previous house system lacking purpose and the assumption that everyone has a clear understanding of what a house means or represents, to which they responded was untrue. It is possible that this may have been the point of view that supports the lack of participation of teachers in a house system and not seeing the values and benefit from this model. Essentially, for the house system to be successful and sustainable, the need to have strong leadership with clear vision and purpose is required. The results indicate the implementation of the house system has positively impacted the students and the school community.

[7]

Implementation Strategies of Diverse Gender and Sexuality Support in Schools

Sean Tholen

People of diverse genders and sexualities often face marginalization and struggles in life, especially in a school setting. Research and resources around these identities are from a 'white' perspective, ignoring cultural heritage of indigenous peoples; our research aimed to fill this gap. Findings presented here derive from investigating the obstacles faced by Maori and Pasifika Rainbow Students in Auckland, New Zealand. Our aim was to critically evaluate and develop supports for rainbow students in secondary schools. Data was gathered from interviews conducted with experts and school staff, which was processed through an action research framework involving 3 phases: Phase 1 looked at local experts and schools, Phase 2 investigated the needs within the school, then Phase 3 looked at implementation. We found that diversity groups are the most common and effective implementation of support for rainbow students, as in line with current literature. We also found unique obstacles that Maori and Pasifika youth face when it comes to expressing diversity involving the intersectionality of Family, Faith and Cultural Identity. From this we have indicated guidelines for supporting our Maori and Pasifika youth.

Te Wero

Shandley Aupouri

E rua ngā tino take mo tēnei rangahau, tuatahi he wero ki te tahuhu, ki te whakae kia whakaako tātou i ngā kaupapa maori, me whakae kia maori te whakaako, kia kaua a tauiwi mā e tohutohu ki a maori me pēhea te whakaako kaupapa maori, tuarua he whakamatau i ngā ahuatanga whakaako e rua ki te kite he aha te mea pai ake mo ngā tauira maori, ko ngā ahuatanga whakaako o ēnei rā, ko ngā rautaki whakaako o ngā tipuna me kii te nehera rānei. No reira e ai ki ngā korero o te tahuhu N.C.E.A ki te whakamārama mai te tauira i ngā momo Haka e toru me tō rātou hiroti, kua kairangi tera tauira ki tēnei kaupapap o te Haka, ēngari ko ngā ahuatanga o te whakapapa me te karakia kei te ngāro tonu, ēngari mena ka hoki tatou ki ngā akoranga o ngā tipuna i a rātou e whakaako ana i tēnei taonga o te Haka, ko te karakia me te whakapapa ngā akoranga tuatahi ka ako, ā, ko tenei te wero, i te mea ki au nei e whakae ana ahau ki ngā whakāro a ngā tipuna ēngari i te mutunga iho ko ngā tauira te mea nui, kaua ko ahau, tera pea e pai ake ngā rautaki o inaianei te ako i ngā momo Haka anake aua atu i te karakia me te whakapapa, e aua, mā tēnei rangahau ka kitea ko ngā rautaki whakaako o inaianei e pai ake ki ngā tauira o Te Wharekura o Arowhenua, ko ngā rautaki whakaako o te nehera ranei. Kia kite he aha te rautaki whakaako pai ake, kua whakarite ahau i tētahi Anga Putanga Ako me tētahi pata pātai kia 2 whakamatau i te huarahi o te tamaiti ko te Anga Putanga

Ako he kāri, kia kite kei tehea taumata te taimaiti, ko te Paetae, te Kaiaka, te Kairangi rānei kei ia wāhanga, he paku whakamārama me mohio te tauira i te aha kia noho ki taua taumata. Me te mea hoki kaua e wareware kei te kimi au i te rautaki pa pai mo aku tauira maori e toru kaore mo ngā tauira maori katoa o te motu, kei te korero mo aku tauira e toru.

Tōku Kahungunutanga

Te Pō Mārie Hawaikirangi

"Ko te tuakiritanga o te rangatahi, ko te tāhuhu o tōna wharekōrero" This whakatauki emphasises the importance of my rangatahi Māori having the tools to explore their identity in a mainstream context. Their ahurea Māori is the backbone of their whare. Their māori identity and culture are their birthright.

This mahi rangahau was focused on reconnecting rangatahi Māori to their ancestral lines through whakapapa, mātauranga Māori and Tūrangawaewae. The key investigation was "How does learning about Te whānau Marama in a Ngāti Kahungunu context enhance Māori identity within students in this region". This kaupapa arose through my senior te reo Māori students having to learn in a mainstream setting that consists of traditional classrooms with no heavy emphasis on kaupapa māori of this region.

The structure and design of this research project was carried out through pedagogy of place based learning. This allowed and offered my students an opportunity to learn through exposure of our taiao, through learning in the different realms of our Atua Māori, through learning outside in the community. That is where the Mauri is ignited, through a collective of teachings out in the community.

This research project specifically focused on Kahungunu content which took on a Mātauranga-ā-iwi /rohe approach.

Ngāti Kahungunu is the tribal area of our kura and the region we live in therefore it must be enhanced."Me whakanuia kia tika i te tipuna a Tamatea Pōkai Whenua, Pōkai Moana, Tamatea Ure Haea" The specific teaching and learning of this iwi is merely a window into the wider context of who they are as rangatahi Māori, no matter which iwi or hapū they come from.

Throughout the application and findings of this research project there was a Kaupapa Māori approach of manaakitanga, Ako, wānanga, Mana Motuhake, and whakawhanaungatanga.

The findings of this research project came through the acknowledgement of the students being active in participating and engaging with the units of work that were carried out. The feedback and the collection of data found that confidence and awareness of tipuna of this region was a key outcome for the students who underwent the process.

Mauri ora!!

[10]

Te Reo Karanga

Marlene Wilkinson

The New Zealand mainstream secondary school system continues to perpetuate inequitable outcomes and social injustice for Māori learners seeking to achieve success as Māori. Te Reo Karanga is a research project that came from Māori learners and notices leadership, collaboration, social justice and equity for Māori learners. Te Reo Karanga investigates how culturally sustaining practice and authentic Te Ao Māori experiences can promote growth in student agency, student self-identified recognition and intrinsic aroha of Te Reo Māori me ōna Tikanga. The Year 11 Te Reo Māori me ōna Tikanga Kōhine (Te Pīhinga) at a mainstream secondary school participated in noho marae and Kāhui Korowai and were the primary participants in Te Reo Karanga. Due to CoVid 19 lockdown, data for He Purapura (Y9) and Te Kākano (Y10) has also been included. He Whakautu was done through kōrero, surveys, relevant literature review and most importantly, spontaneous student reported decisions and learning related choices post noho marae and belonging to Kāhui Korowai. Analysis of He Whakautu clearly demonstrates student agency and intrinsic value is enhanced through authentic Te Ao Māori experiences (noho marae) and culturally sustaining practice (Kāhui Korowai) both within and noticeably significant, outside of school. On this basis, Te Reo Karanga recommends that for Māori learners to feel that they are achieving success as Māori

in a mainstream secondary school, authentic Te Ao Māori experiences are imperative and compulsory. Te Reo Karanga was significantly affected by the CoVid 19 lockdown and therefore, further research is required to further investigate how authentic Te Ao Māori experiences and culturally sustaining practice can be implemented as core curriculum for Te Reo Māori me ōna Tikanga learners in mainstream secondary schools.

Peduckogy: How Rubber Ducks could help bridge the Digital Divide

Felicity Powell

The 'Digital Divide' is the colloquial name given to tech inequity, one of the root cause and effect loops of inequality in education today. In Aotearoa, digital deprivation pervades our lower decile schools. Solutions to this deprivation are often costly and involve direct intervention with the lack of devices, without addressing the social context in which the digital deprivation has taken hold – including interpersonal and personal attitudes to digital technologies. Rubber Duck Debugging involves solving problems in programming simply through discussing them with a Rubber Duck. As a Computer Science teacher in an urban low-decile high school, I saw an opportunity to adapt this practice for students to develop confidence-building and problem-solving skills in digital technologies classes. In 2019, I created what would later become The Peduckogy Project, a program where students participate in targeted reflection activities while working towards 'adopting' a Rubber Duck for life. For this research, I developed the Peduckogy Project to collect data on whether the Duck activities had a meaningful impact on students' digital fluency, confidence, and competence – their ability to use and understand digital environment, and their belief that even if they don't, they are capable of learning how. A small cohort of

Year 9 students were able to apply to participate and complete the reflection activities ("Quacktivities", or "Quacks" for short), and successfully graduate to become Duck Guardians. Despite the limitations of running the program between two lockdowns, which required a change from in-person Peduckogy to online, 100% of participants expressed increased confidence with using Digital Technologies. The Peduckogy Project gives an insight into the intangible complexities of the Digital Divide, and is a continually evolving set of tools and approaches to integrate inclusivity in low-resource tech classrooms. The small, yet profound, success of the first official cohort of Peduckogy participants indicates that there is some merit to prioritising the 'soft skills' of digital technologies. To continue this research, I am writing a workbook on Peduckogy for other teachers to use and apply in their own classrooms, to be released as part of the Google Innovator Program in late 2020.

"This is a Special Place" Localising Learning in an Integrated Junior Classroom

Sam Cameron

This report pertains to the construction of a local junior curriculum in a small town decile 1 Modern Learning Environment (MLE) school. Low levels of student agency have been noted for some time, and it was hypothesized that this condition was linked to a progressive loss of connection to and pride in the lands, forests, rivers and seas surrounding the town. A redesign of the curriculum was undertaken by the author, leading a team of five curriculum specialist teachers and in collaboration with school leadership and education consultants in order to make learning local, authentic and relevant to the learners. This redesign included a series of integrated termly inquiry projects relating to issues affecting the regional environment, supported by local speakers and field trips. Agency was measured via surveys carried out in Terms 1, 2 and 3, and a series of group kōrero sessions with participants were held during Term 3 to collect student voice and add richness to the survey data. The results showed a large drop in measured agency in Term 2, shortly after the COVID lockdown, followed by a bounce back to near pre-lockdown levels by mid Term 3. Student voice showed a strong preference for local trips, local

contexts and local speakers, while conveying frustration with certain aspects of the open environment. Overall, while the results seem promising for this form of learning, the research question was unable to be conclusively answered, in part due to externalities imposed by the pandemic, but also due to the short time period of the study. Further study should therefore be carried out, as well as physical changes to the classroom environment to reduce distractions for the students.

[13]

Battling Hegemony: The Impact of Student Agency on Learner Outcomes in Senior English at a New Zealand boys' high school

Magdalene Woodhouse

Student Agency is often touted as a key determiner of a student-centred classroom. Traditional English classrooms often lack student agency and awareness of the many different ways in which students learn, playing into the hegemonic hands of our colonial education system. This research looks at the impact of student agency on learner outcomes in English, focusing on a Year 11 class at a boys' high school as they study creative writing. It discusses the role of self-management and self-efficacy in the successful use of agency. Findings suggest that within the subject of English, literacy and content knowledge are central to students' abilities to make personalised decisions and utilise their agency, and the inability to use such skills impacts both agency and learner outcomes. As a result, it is evident that the teaching of core reading and writing skills, and opportunities to practice these skills alongside those involved with decision making, must be offered to students consistently, in order for agency to be of use to them.

[14]

Digital integrated learning with sustainable cultural pedagogy

Monnier Tauliili-Lia

This project seeks to address the issue of digital inequities by using social media as a digital learning tool which encourages student agency and engages Pasifika learners. The project gave Pasifika students an opportunity to choose a person who inspires them and to share stories, experiences, challenges and accomplishments of that person on a social media platform. Students are unfortunately pushed to remain engaged and try to complete tasks and assessments through digital learning platforms such as google classroom. Platforms such as these limit student voice and creativity space. As well as lack of accessibility to devices for students due to affordability and underfunded school resources. However, through implementing the 'Ula paradigm' (Sauni, 2011), this project was designed around the values and principles of the samoan culture benefiting Pasifika students to engage within the project. The project found that using instagram as a tool increased engagement as well as student agency in learning and co-constructed knowledge, especially that of Pasifika learners.

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Nōna te Ao

Samantha La Hood

Despite the wealth of knowledge available through mātauranga Māori ways of knowing, science education is often only reflective of western values and knowledge. This project aims to explore how Science content can be delivered in order to reflect equity between the Māori and Pākehā bodies of knowledge and how this might enhance the perceived value of Science for Māori-medium and bilingually educated students. The outcome of this project highlights the positive impact that inclusion of Māori culture can have on typically non-Māori subjects in the high school context. The literature supports this and states that when Māori students can see themselves reflected in their learning they are more likely to engage with the learning and achieve successfully. The data in this project was generated from a cohort of 7 Year 9 students that were participating as the premier cohort in a new Rūmaki in a secondary school in West Auckland. The students completed a survey to generate quantitative and qualitative data that explored their perceptions of how their Pūtaiao class was able to engage Māori culture and how this may have influenced their ideas around their own identity as Māori, their learning experience in the classroom, and the value that they give to the understanding of Science ideas. The findings show that not only did the students have a positive experience in the classroom but they also found that this enhanced their connection to their

Māori identity and that they perceive science as being valuable to themselves and their futures. These findings have great importance in the context of education in regards to the devaluing of Māori ways of thinking throughout colonisation and the role it can play in meeting the Tiriti o Waitangi responsibilities and addressing the impacts of colonisation. It also highlights a pathway for improving Māori success in the Science classroom which is generally lower than that of their non-Māori equivalents. The students of the Rūmaki unit have taken a central role in the design of their learning environment and they have been the driving force behind the findings and important implications of the project.

[16]

Ngā Rangatira mō āpōpō

Te Moana Maika

This project focuses on further developing the leadership skills which the year 12 Māori students already possess. This project will explore different elements stemmed from Whakaaro Māori to assist in building students' confidence as Māori. Leadership for students within the educational system revolves around academic success, being in roles of leadership at school and being successful in their studies and their attitudes at school which is never exemplified through a cultural lens, but through a westernised lens. Though these concepts of leadership must be adhered to within a school setting, this project aims to combat and disrupt a westernised lens of leadership and success by focusing on a cultural approach to leadership.

Kia Mau ki te Aka Matua: Māori Mindfulness and Student Agency

Michael Gaastra

Learner agency is key to ensuring lifelong educational success and ensuring Māori achieve success as Māori. For some students wellbeing needs in class are more immediate than their learning priorities. For these students, learner agency (the ability to set learning goals, their perception of their ability to achieve these, and the initiative taken to do so) is often low. This study aims to improve mental wellbeing outcomes for students through the use of mindfulness exercises based on mātauranga Māori and, thus, develop student agency in the classroom. This research was conducted within a kaupapa Māori framework and was designed in collaboration with research participants. Through an initial series of wānanga, mindfulness exercises drawn from a Māori understanding of mental health were developed. These were practiced for five minutes in each Māori class over a period of 6 weeks. Qualitative data was used to inform findings in the form of a research journal, a post-practice wānanga with participants, and a participant questionnaire. As well as a number of "Māori mindfulness" exercises developed by participants through this research, it was found that through mindfulness practice participants experienced increased levels of calm in class. It was also found that focus increased, enduring throughout the school day. These findings suggest that

mindfulness has a role to play in developing learner agency. However, a number of challenges present in the research limit the conclusions that may be drawn. As this research endeavoured to present findings in terms of participants' experience, no efforts were made in the analysis of data to mitigate participant bias. Placebo and confirmation bias, therefore, may have contributed to the positive effects reported. Research examining the relationship between mindfulness and learner agency is extremely limited. Future research seeking generalizable findings would benefit from a much larger and demographically diverse sample group, and could be strengthened by a case study approach. This would provide greater context in which to understand findings from individual participants.

Hīkoia Te Whenua: how does exposure to local whenua affect the cultural identity of young urban Māori?

Zachary Press

The important role that a connection to whenua plays within Te Ao Māori cannot be understated, however, if an individual has not had opportunities to make these connections the benefits cannot be realised. The challenge I identified is that many young urban Māori display some level of disconnect with whenua. I investigated whether opportunities to connect with, and develop an understanding of, whenua could support young Māori in engaging with their culture and identity. To explore this I designed a program that had year 8 students from Middle School West Auckland's Pōhutukawa Villa take part in a 13 week program that provided them weekly opportunities to connect with local whenua through facilitated activities such as bush walks, fire lighting and a workshop about rongoa Māori. Throughout the program I collected data using interviews, focus groups, surveys and anecdotal observations. I found that throughout the course of the program students displayed a slight shift towards positive connections with whenua and they were able to improve on their knowledge about how whenua was important in their lives. This work highlights one of a wide

range of effects that colonising practices have had on Māori and provides a potential means to begin to remedy the negative effects associated with a disconnect to whenua.

Māori Mindfulness

Ashley Craig

Exploring culturally based mindfulness can become a tool for disconnected Rangatahi to decipher their own mental health and unconscious actions that cause harm to the mauri, to themselves and other students.

The reason for culturally based mindfulness was twofold, there is a lack of academic research on the positive holistic values cultural based mindfulness can have on disconnected minorities. Secondly there is a clear disparity in terms of statistics for Māori youth in mental health, suicide, and incarceration. Culturally based Mindfulness looks to create tools around these factors, this is largely theorised through engagement with targeted learners who believed they don't have tools to calm themselves when they become emotional. Culturally based mindfulness has been conducted in kura by myself and other Kaiako to address the mental health struggles that our tauira face on a daily basis. This has involved a range of activities including group waiata, journal writing, and sculpting, The idea of mindfulness has been adapted to our Te ao Māori environment to make our Rangatahi proud to be Māori.

Prior to Mindfulness there was a hall pass system that allowed students to go outside to calm themselves down. Once we had introduced mindfulness before class students began class settled and we longer need to implement the hall pass system. Students have began to direct mindfulness sessions through different

team building games. Mindfulness has created a calm and safe environment as a result.

I believe the implementation of different mindfulness activities that are first role modelled by Kaiako can have a positive effect for Rangatahi. This isn't a silver bullet for wide range of low socio-economic issues but it can be a tool to utilise if proper relationships have been developed with Rangatahi. Mindfulness should be adapted to the context of your environment.

[20]

What is the impact of differentiated teaching using digital learning platforms on the engagement and assessment outcomes of NCEA Level 1 Science students?

Emily Duke & Rajal Singh

The achievement and engagement of NCEA Level 1 Science students was investigated through the implementation of a differentiated digital and hybrid-learning method of teaching. The project was implemented during Level 4 Lockdown due to the COVID-19 pandemic, and therefore was an important aspect of the continuation of teaching and development of alternative approaches to distance learning while attempting to address low achievement and engagement at the school among students of the Science Learning Area. Investigating how differentiated teaching via digital learning platforms would impact engagement and assessment outcomes allowed for identification of digital issues with a social justice lens and an inequity issue of access to technology. Methods used were teacher tracking of engagement with the Google Classroom platform, Education Perfect and online work through applications such at Google Forms. Qualitative data in the form of surveys, exit cards and group discussion was also used. It

was found that the digital approach to external standards was ineffective, however a hybrid approach within a school environment resulted in high achievement in internal assessments which were differentiated based on ability with teacher clarification. Māori students were more likely to miss assessments entirely as a result of absences and lack of home access to digital assessments and content. The findings in this project are considered as a part of a broader enquiry into the use of digital assessment, access to devices and differentiated learning at the school. Access has been identified as a key issue with respect to both physical access, digital fluency and literacy. These aspects of digital learning impact both assessment outcomes and completion of internally assessed standards.

Can you catch the woah? The impact of social media techniques in flipped learning

Madeleine Gray

Students are spending more and more time on their phones, with participants in this study reporting over 3 hours of social media use daily. As teachers we fight to be more interesting than the instant-gratification in their pockets. But what if we could harness those highly engaging techniques in the classroom? This project analyses the impact of using techniques from Tiktok-style videos to engage students and therefore increase their confidence and efficacy in Science. Using these techniques and input from the students, a series of video content was created to measure the impact of this style of design. There was evidence, through the use of formative and summative assessment, that these techniques increase the ability for students to achieve higher grades. Allowing students to input their own voice into their content may help power shift away from a Eurocentric style of learning, but a lot more research would be needed to show if this continues as a trend. Overall, there needs to be more research into the impact of Social Media techniques, but building educational content that is as engaging as social media might be the future of education.

An Evaluation of Flipped-Learning Pedagogical Approach for Future-Focussed Education

Devender Chendri

The research suggests that attendance matters for academic achievement and progress, and also highlights that as absence rates of the learners increase, their educational achievement continues to decline. The current problem in many mainstream schools is that students who were unable to attend school on any particular day are struggling to catch up on the lessons because they are finding it hard to establish the link with the previous lesson. This project aims to evaluate flipped-learning pedagogical approach by creating researcher's own instructional videos and incorporating open-ended questions for year 13 maths students. To support this the quantitative (questionnaires) and qualitative (interviews) data collection methods are used to track and monitor students' academic outcomes. The findings suggest that flipped-learning significantly improved students' academic achievement and progress, and students who missed the lessons were able to understand the concept and complete learning activities before coming to the next lesson. However, the results about the evaluation of flipped-learning pedagogical approach on student achievement and progress are inconclusive due to some limitations with the design of the methodology

and further investigation would be beneficial. Furthermore the flipped-learning approach has encouraged the students to make them responsible for their own learning and bring questions to the classroom to extend their conceptual understanding, and develop mathematical reasoning and thinking skills.

[23]

Student Concepts of Leadership: High school students' leadership values in an Aotearoa Pasifika context

David Holt

Leadership attributes prized by student leaders align more closely with relational leadership theories than the more traditional servant leadership opportunities created for students or the transformational leadership approach applied by school leadership. While the impact of student voice and leadership opportunities on student achievement has been closely studied, there is not a lot of literature on what students value in a leader. This research was undertaken to gain a better understanding of what pre-existing ideas students have about leadership in order to create more equitable leadership opportunities for students. A talanoa/workshopping approach was used with 5 groups of student representatives to collaboratively explore the leadership values held by these students. Students valued inspirational, inclusive and supportive qualities in leadership and had high expectations of a leader's relational abilities. These leadership concepts are similar to the four values of talanoa which were used in the methodology, which suggests a possible framework for leadership education. Using a talanoa approach also deepened my own understanding of what attributes learners

value in a classroom teacher and changed what I expect of myself as a leader of learning. This research provides a case-study of how talanoa can be used to collect student voice and of how engaging in talanoa in a teaching inquiry can shape change practice.

Building Bridges: Evaluating Academic Mentoring as a Means to Raise Student Engagement

Linda Evers

This project asks, 'To what extent can academic mentoring raise student engagement in a classroom?' To answer this question, a mentoring programme was developed in a low decile school in West Auckland. Students from an English Communications (ECM) class were invited to attend an English specific mentoring programme weekly after school. A focus group was then held with participants to evaluate their experiences with the ECM course, as well as the mentoring programme. Another focus group was held with teachers of ECM classes to contextualize student responses and determine further iterations of an academic mentoring programme. Changes in student engagement were unable to be determined due to interruptions to the project as a result of Covid-19. The findings, however, of this project suggest that academic mentoring has benefits for raising the educational achievement of students. The findings from the focus groups saw three key themes emerge for a successful mentoring programme: relationships need to underpin everything; mentoring takes time; and the mentoring environment is important. These themes were used to develop the next iteration of the mentoring programme. The findings

also had wider implications for school practices with the initiation of discussions about the ECM course and methods of teaching this course.

[25]

Aro Mātauranga: A Co-Constructed Peer Support Model

Hannah Grant

Education in Aotearoa New Zealand 2020 has been greatly disrupted due to the COVID-19 pandemic. This has been felt unevenly throughout Aotearoa. One of the many factors for engagement in distance learning is the importance of self-management and self-regulation. In the context of a small, low-decile, provincial high school in Aotearoa New Zealand substantial differences in ability of students to self-manage was observed. This project looked to address the development of these skills whilst asking the question: how can student voice be valued when developing a model of support? Year 12 and 13 Biology students co-constructed a model of peer mentoring in order to support development of key skills. Over Term 3, multiple wānanga were run during school time, where students had the opportunity to self-reflect, develop tuakana-teina relationships, set goals, and add their voices to a support system model. The peer mentor model that was co-constructed, named Aro Mātauranga was; relationship focused, had interlinks with classroom culture, gave opportunities for development of self-reflection and self-efficacy, and gave space to develop in skills which were co-constructed. Importantly, our model Aro Mātauranga gave a space to hear and value all voices in the classroom. Key findings included the importance of student

agency in the development of a support network, and the necessity for time to be dedicated specifically to whakawhanaungatanga for a peer mentor relationship to be successful. Next steps of this project are for the students to actually practice peer mentoring and implement their peer mentor model: Aro Mātauranga.

Raising Literacy in Lea Faka-Tonga through Tongan music

Vaha Tu'itahi

This project looks at using music to raise the literacy of students in lea faka-Tonga at a South Auckland High School. It is not only aimed at making a difference in the learning of lea faka-Tonga for students but to also address issues of social justice in the education in Aotearoa. This project is aimed at addressing learning issues for students in my Tongan language class. Underlying issues of identity are also addressed within this project through the learning about Tongan music on a deeper level Fa'avae, D (2017), Whitinui, P (2008). This will have hopefully served to corroborate existing literature regarding the use of music to learn language by academics such as Schellenberg (2005), Gordon RL, Fehd HM and McCandliss BD (2015) among others. The project was run during class time with my Year 10 and 11 Tongan class where we used Tongan songs to learn about the language through literacy based activities to develop their knowledge and skill in lea faka-Tonga as well as learn about the meaning and history of the song with relation to Tongan history and culture. This project was run collaboratively with fellow C19 participant Iunisi Paea who teaches Tongan at another South Auckland School. The responses from the students were quite positive and they quite enjoyed the activities. There was some critical feedback from students that

was powerful and noted for future planning. This project has corroborated the arguments of academics about the usefulness of music in learning language and literacy. Furthermore, it has indeed addressed underlying issues of social justice through the research questions discussed in talanoa with the students. The project presentation can be found on this padlet which I have created as an output.

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[27]

Enhance Lea Faka-Tonga literacy through Tongan Music

Iunisi Paea

We are all capable of learning and being successful in the education system. Our people just needs the opportunity provided in their own method. There is an educational gap in literacy among young Pacific learners. This project addresses the learning needs of young New Zealand born Tongan students. The Pan-Pacific methodology of Talanoa was used to gather data from students of Year 10 Lea faka-Tonga. I was able to converse and have insight to the experiences of young New Zealand born students learning lea faka-Tonga. The findings showed that both young New Zealand born and Tonga Born students suffer from an identity crisis. Their desire to learn and speak fluent lea faka-Tonga increases with age and perception once they grasp the pride of speaking their mother tongue language. This research discovered the need for students to learn lea faka-Tonga through the school curriculum from a young age regardless of whether they were born in Tonga or New Zealand. Both groups experience similarity in the need to speak the language to validate their identity. Thus, there is a great need for further study. Music attracts all people of cultural background, age, social status and learning ability. This research discusses the different ways of using Tongan music to enhance the lea faka-Tonga reading and writing of year 10 students.

O ai a'u, O ai oe

Uliana Sekene

As educators of New Zealand born Pasifika students, we must begin to truly acknowledge and understand the vital concept of identity through a culturally holistic lens. New Zealand born Pasifika identity is multidimensional and ever evolving, thus our practice and knowledge too must shift when teaching and learning beside our Pasifika students. In this research I explore the participants' own perception of their identity with a culturally holistic approach. Our education system is one that is based on the dominant Western culture and ideology, thus failing to acknowledge and effectively support the growing demographic of Pasifika students in education. It is important to acknowledge that the New Zealand education system does not adequately reflect the values, world view, and beliefs of my Pasifika students. The study was conducted with five tama'ita'i Samoa who were identified as being New Zealand born Samoan. The Talanoa methodology was best suited for this study as it was underpinned by Samoan cultural values. The findings of this study have shown that participants heavily attributed mental and social wellbeing as key factors in building and forming their identity in a classroom setting. The importance of this finding placed an emphasis on the notion that understanding identity with a holistic approach is important for Pasifika wellness and achievement. This report is the navigation into understanding

the stories of young tama'ita'i and their own perceptions of self, resilience and success.

How does inter-departmental collaboration impact/change student engagement in low decile schools?

Nicholas Chan

The purpose of this research was to find out whether student engagement could be improved through inter-departmental collaboration. Engagement is a particular issue at my secondary school. In multiple studies, it has been shown that inter-departmental collaboration can improve student attendance, but these studies were not conducted at low decile secondary schools, hence the need for this study. In this project, a collaboration was conducted between the Digital Technology and Music department in which students were to create a music video in both classes. Five Year 9 students were chosen as participants. Their attendance rates were recorded before, during and after the collaboration and interviews conducted to investigate any qualitative changes in students and teachers involved.

[30]

Deeper and differentiated learning through curriculum integration

Shreyoshi Ghosh

The purpose of this project is to integrate science with another learning area and understand the impact of curriculum integration in promoting differentiated and in-depth learning. The project took place in a year 10 science class of 13-14 years old students in West Auckland, New Zealand. An integrated english-science activity was implemented as a pilot study for this project. Student voices collected through Google form surveys from the pilot study were taken into account into the development and implementation of a second integrated activity. The findings from this project show that curriculum integration could provide in-depth learning and improve students' engagement to achieve a better learning outcome. It could also provide opportunities for differentiated learning when the cultural and personal interests of students are carefully considered in the planning process of the integrated activity.

Ko taku ako reo taku ohooho: language learning as a social justice exercise

Alec Redvers-Hill

In his 1921 Treatise on Logic and Philosophy, Austrian philosopher Ludwig Wittgenstein wrote that 'die Gretzen meiner Sprache bedeuten die Gretzen meiner Welt' ('the limits of my language are the limits of my world'). The phrase is often used to capture the community-enhancing, horizon broadening, door-opening potential that foreign language learning can have. In New Zealand, we find the inverse to be true: the limits of one's world dictate the limits of one's language opportunities. In this country, students' access to language, and foreign language learning in particular, is subject to systemic barriers that constitute a social justice issue. This work-based action research project comprises the establishment and running of an extracurricular Japanese language learning group at a New Zealand school as a Social Justice initiative, utilising a range of leadership and collaborative approaches to provide learners with development opportunities which might otherwise be limited. This report utilised narrative inquiry and thematic analysis to explore the participants' experiences of the project over the course of two terms. The project is shown to have had positive social justice outcomes for the participants'

agency, access, advocacy and solidarity action, working within the BCTF Social Justice lens, and also provides a model for how these leadership and collaborative approaches could potentially be applied in other contexts. Within the world of te reo Māori revitalisation, it has been said "ko taku reo taku ohooho", "my language is my awakening". In the case of initiatives such as the Japanese Language Group at the heart of this study, it might be said that, even (or maybe especially) with languages that are not our own, the act of simply trying to learn it, in a collaboratively led, social justice minded group, can itself be an awakening; ko taku ako reo taku ohooho.

[32]

How can hidden samoan cultural enrichment through pastoral care improve my students identity

Marion Lilo Iosefo

The teaching approach I will implement is through pastoral care. This was fuelled by having restorative conversations with students and aiga about how we can navigate their learning journey. This teaching philosophy will be in a Pacific lens where I can better understand the girls. A majority of the students have stories that they feel uncomfortable to share and therefore lack motivation to come to school. By knowing our students' well-being is taken care of using traditional cultural values was pivotal to the research going back to our central focus of identity and cultural knowledge. This also meant familiarising the space that they have at home and connecting this with the space at school will acknowledge our girls in a more meaningful way. Students are provided a space within the school that allows them to thrive as who they are as tamaitai Samoa. The pastoral approach gives incentive for me to teach and help girls from a Pacific way with the cultural values being part of the class environment. Allowing the students to be Samoan in the space creates emphasis on student identity. This means being able to converse in the language, structuring the classroom environment in a fa'asamoa way. The students will therefore

have a more secure sense of identity with a plan in place of where they are heading. If a person knows who they are then they will know where their place is in the world. Having a kaiako (culture advisor) come into the classroom space and talanoa with my students about cultural practices was important and then having students perform these practices on their own was the output. It was unpacking the hidden cultural knowledge of our ancestors and tipuna and passing indigenous knowledge from experts. This research has changed my practice significantly because I have looked at the importance of pacific paradigms and knowledge to support students on their learning journey. We need to adapt the way that we create curriculum and learning spaces to accommodate the needs of our learners.

[33]

Hard Times Require Furious Dancing: Spoken Word at the Intersections of Students' Literacy Practices"

Zechariah Soakai

This study was conducted in a low decile school in South Auckland, and initially set out to analyse the different ways in which a Spoken Word Program might help to contribute to Māori and Pasifika students' literate identities. The initial purpose was to draw on Māori and Pasifika students' literacy practices that were situated outside of school, in order to reinvigorate their belief that they too, might just be able to read and write the world as they see fit. A number of modifications had to be implemented to ensure that the mana of the participants was upheld, in spite of unprecedented times in a COVID-19 infested world. The findings suggest that Spoken Word Poetry largely is an effective pedagogical tool for practitioners, insofar as it provides a safe space for students to explore their lived experiences in a literacy rich environment. Additionally, Spoken Word Poetry has the potential to carve out performances of literacy that are centred in young people's experiences, that are powerful in allowing student's an organic opportunity to experience the power of language. These findings were gathered using talanoa. Talanoa was used as it

allows for open conversations that champion the students, teachers and parents that the researcher engaged with. Leadership and social justice were evident, as the project brought the local school community i.e. students and staff, together to critically engage with the importance of creating and maintaining safe space(s) for students' literacy learning. These spaces are iterative spaces that allow students to explore their emotions, write narratives that liberate, and co-construct genuine goals that are modelled after high expectations teaching, and underpinned by a trusting environment.

Experiences of self and other lived realities through Diasporic Literature

Kevin Xu

The aim of the project was to help the Year 12 Pacific male learners access and engage more with reading, critical thinking and responding to texts. The project seeks how studying migration literature (diaspora) in the subject of English addresses the inequity of learners accessing reading, critical thinking and understanding written texts. This study was done in a decile 1 South Auckland Secondary School, which the majority of learners are of Pacific descent. As such, the research question looks at: How does studying diasporic texts (migration texts) allow learners to critically engage with the texts, self and other people's lived experiences?

The methodological approach used was through Talanoa and Talaloto. These approaches were also reflective of my leadership style – relational and servant leadership – embodying and bringing the participants' stories and thoughts to the forefront. There were five Pacific male participants in this project. The findings have found six different themes that have emerged from each of their talanoa in engaging with diasporic texts (migration texts). The six themes relate to:

-Relevance to one's immediate context

-Personal and Unique Lived Experienced Matter

-Confidence with reading and Critical Thinking

-Tauhi Vā – The Relational Space Between Learner and Teacher Matters

-Restorying Narratives for Self and Others

-Empathy for other people's lived experiences and Realities

Overall, diasporic literature allows learners to engage critically with text, self and other people's lived experiences as it demands learners to practice critical reflections on their own lived realities and experiences beyond their own (Marsh, 2010; Teaiwa, 2010).

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[35]

How might a diverse educational offering incorporating POGIL support better and more equitable educational outcomes for learners in Chemistry 201, in the wake of the COVID-19 lockdown?

Alistair Kendrick

The COVID-19 lockdowns have been incredibly disruptive, and have been particularly challenging for senior students, who are worried about NCEA assessments. Lockdown is also likely to disproportionately impact the communities that are already disadvantaged by our education systems (lower socioeconomic students, Māori, and Pasifika), due to lack of access to technology and competing time commitments. For my Chemistry class, lockdown compounded a pre-existing problem – external results have been disappointing for years, particularly for Māori and Pasifika students. I therefore wanted to try a different pedagogical approach, that would help all students, but particularly Māori and Pasifika, to succeed, taking lessons from the COVID-19 lockdowns.

The approach I envisaged was based on Action Research. Action Research is an iterative process, where the researcher

is also the teacher. I attempted a teaching intervention, and then received feedback from students through focus groups and surveys. This data allowed me to alter my pedagogies and then proceed to the next iteration. In total, my project went through three iterations, with feedback at the end of each. Teaching techniques used in this study included POGIL (Process Oriented Guided Inquiry Learning), online tools, interactive games, and the use of models.

Although the study was severely impacted by Auckland's second COVID-19 lockdown, there were some promising results. The action research cycle helped me to develop as a teacher, by collaborating with students and incorporating constant reflection in my practice. I formed a stronger rapport with the students who regularly attended the focus group meetings. These students valued the opportunity to effect change and became more engaged as a result.

The study did produce some interesting insights into how students learn best during lockdown, and there are recommendations for teachers in case of further lockdowns. Teachers should be empathetic and understand that many students will not be able to engage in work for legitimate reasons. Teachers should have greater awareness of how long assigned work will take, be more consistent when assigning work, and use a wide variety of teaching techniques.

Using critical dialogue to understand engagement in a Year 9 Science context

Eleanor Adviento

Social justice issue: Student engagement is a complex human condition theorised to be a prerequisite to learning by educators. However in practice, the way we characterise and measure engagement to inform our practice at the teacher, department, and school level has been too simplistic. My research aimed to use critical dialogue as a broad lens to understand engagement in a Year 9 Science context. Methodology: I used an action research approach that was creative, open-ended, and iterative, to answer four sub-questions around describing engagement, my students' interests, critical dialogue in context, and evaluating the impact of critical dialogue on understanding engagement. I collected data by way of surveys, focus group sessions, and my reflections. Findings: On the surface level, engagement was no more than variations of the word 'fun'. Dialogue within my focus group revealed differences in perspectives on engagement and disengagement, between teachers and students. Critical dialogue, established only after pre-existing power structures were broken down, allowed us to see that engagement, on a deeper level, is all about connectedness. Students were most

interested in connecting with their homeland, different cultures, the wider world, and most importantly, with those around them. Therefore, students were most concerned by the bullying and harassment that was a barrier to their engagement and learning in Science. By sharing the responsibility for change, one-by-one, teachers and students were transformed, ultimately creating a safer and more secure culture in our Science classroom. Conclusions: Student engagement is so much more than just observable behaviours made by teachers. Engagement is connectedness, on the foundation of a safe and secure classroom environment, free of bullying and harassment. Critical dialogue, created by strong leadership, was a student-led way of finding practical solutions to create a nurturing environment for student engagement.

[37]

Collaborating with Learners and Whanau for Engagement and Achievement

Kate Bayram

Inequitable education outcomes for Maori, Pasifika and male students are a social justice issue of national concern in New Zealand. Kaupapa Maori principles and research suggest that the understanding and impetus required for change needs to be found through engagement with Maori communities and giving value to matauranga Maori. This project sought to discover how pursuing a collaborative, power-sharing relationship within the classroom with both students and whanau, within the limited context of one Year 10 English class at a Northland College, could positively affect student engagement and achievement. Although attempts to collaborate with whanau were unsuccessful, through an iterative process of questioning, responding to and conversing with students a limited level of collaboration, power-sharing and joint ownership of the classroom was achieved. The narrow context of the classroom and time frame of the project, within the wider context of the Covid-19 pandemic, was shaped and influenced by a complex array of factors making it difficult to accurately define the impact of this collaborative approach on student learning. However the positive indications of engagement, as ascertained

both from quantifying and comparing observational data and the themes found in qualitative data collected as student voice, would suggest that the foundations laid are worth building upon.

He Reo Reitu

Mere Waaka

"He wahine te kaitohu i te tapu, ko te wahine hoki te kai-whakanoa i te tapu."

I runga ngā kōrero whakawhiti a tōkū tumuaki o te Kura a Rohe o Uawa me Kahukuranui, ka kōrero hoki ki ētahi o ngā kaumātua / pakeke, otira mai ngā kai korero katoa, mai i te hāpori o Uawa ka whakaurahia te tauihu o tēnei kaupapa, kia tūteitei ai ki ngā whakangarungaru o te ao hurihuri nei, kia ora mo ake tonu atu. Ka karapinepine i ngā māramatanga me ngā kōrero tuku iho ā rātau mā ka whakatakoto i waenga i ngā reiputa o te iwi o Te Aitanga a Hauiti kia whiriwhiria mai ngā whenu o te karanga.

I au e whakaritorito i ngā pūkōrero, ngā kai kōrero, ki ngā kōtiro hoki mai te whārua o Uawa, ka tō te aro, ki te hanga he rauemi, ki te whai take a hangarau, ki te pāhekoheko ki te ahurea wānanga, ki ngā horopaki o tēnei wā, ko te karanga hei ako. No reira, nā runga i te rongo i te karanga a te kura, te karanga a te hāpori kei te mimiti te reo karanga ki runga i ngā marae, ka pūmina ake te whakaaro, "he reo reitū" te kaupapa.

Ko tōna tikanga ka āhei te ākonga ki te whanake, ki te whakapakari, ki te whakangungu, i runga i te tika me te pono, ngā whenu o te karanga. Ko rātau hoki te reo reitū, mo apōpō, hei kanohi mo te reo okawa, hei pupuri te reo mana-aki o te marae, kia ora ai tēnei taonga ki tua o pae.

No reira ko te ahunga o te reo reitū kīhai ki ōku tīpuna, koinei

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te reo ka rangonatia ake e te ao wairua kārekau rawa e ōrite ana ki te kōrero ā-waha.

Developing Men of Valour

Taiamai Bracken

This project proposal focussed on identifying the factors that affect our young Māori males in achieving the Te Aratika Academy graduate profile. The Te Aratika Academy (TAA) graduate profile was designed to provide a positive platform for change that aims to educate our students and reduce inequality and social injustice through the pursuit of matauranga Māori. It also takes into consideration the importance of Kaupapa Māori pedagogy within the TAA model.

The project focused on our Māori male taiohi based in the Hawkes Bay within the context of our Designated Character Secondary School as part of the New Zealand mainstream education system.

It was conducted with the intention to gain knowledge to be able to better support our taiohi to mitigate risks and to amplify opportunities that build their pathways to success. My findings from this project can be classified into three main categories. 'Category One' are factors based on the personal choices and abilities of each taiohi, 'Category Two' are factors where our taiohi have limited control over their decisions and are influenced by the context and environment they are in and finally 'Category Three' are the factors/circumstances that affect our taiohi that they can't control or change.

What I have learnt from my findings are pathways/opportunities we as Kaiako, Pou Arahi or Pou Awhina can

identify and utilise to make positive impacts for our taiohi using their learning environment as the platform. I believe it to be useful for not only myself but also others to better understand the factors our taiohi face in 2020 to be able to bring an innovative and relevant approach to our taiohi's education. It has encouraged me to continue to strive to provide a learning environment that is culturally relevant with a strong academic core that is delivered from a Matauranga Māori lens.

Ehara taku toa i te toa takitahi, engari he toa takitini.

My strength is not that of a single warrior but that of many

"Tū Pakari, Tū Rangatira Hei Raukura Mō Tō Iwi" Te Aho Matua, Championing An Inclusive Education Learning Environment for Māori Deaf and Hard of hearing Tauira and Their Whānau.

Rewi Pene

This report is based on my experiences as a Music teacher at Te Wharekura o Arowhenua, titled "Tū Pakari, Tū Rangatira Hei Raukura Mō Tō Iwi, Te Aho Matua. Championing an Inclusive Education Learning Environment for Māori Deaf and Hard of hearing Tauira and Their Whānau. This report poses the question, How do the principles of Te Aho Matua underpin the learning & teaching programmes for diverse learners, notably Deaf and Hard of hearing tauira and their whānau? It places Te Aho Matua, the principles of Kura Kaupapa Māori under the microscope to be examined. Over the course of terms two and three of 2020, whānau, pouako and tauira shared their own experiences and stories to help shape an understanding of Te Aho Matua that places Deaf and Hard of hearing tauira at the heart of the issue. After much reflection and wānanga by participants, feedback was collated to support the writing

of this report and to create guidance by which the Arowhenua can support tauira turi to implement a strategy or framework throughout the Kura Kaupapa Māori.

Poster presentations

The posters can be found at the following link.

[41]

Online distance learning meets Ka Hikitia: A study into achievement for Year 12 chemistry students in Aotearoa

Richard Pollard

This study seeks to understand how the Māori education strategy Ka Hikitia can be applied to developing online learning tools to improve achievement in science at a time when learning from a distance is becoming ever more prevalent. The Ministry of Education (2018) highlights that many Māori students are disengaging before gaining the skills, knowledge, and qualifications that will help them to reach their full potential. Hook (2006, 2007) tells us that the relatively poor educational outcomes seen for Māori can be attributed to the imposition of a culturally inappropriate set of Eurocentric expectations. Contemporary reports of student experiences also highlight the systemic racism experienced by many students at school in Aotearoa NZ (Berryman & Eley, 2017). This 'action research' project is focussed on answering the question "how can the goals of Ka Hikitia be used to inform the development of online learning tools for Y12 chemistry students, and what effect does this have on their achievement?". The findings were that the principles of Ka Hikitia could be used as important guiding elements for the success of an online learning tool for the year

12 chemistry students participating in the study. For both Māori and non-Māori learners, it was found that for online learning tools to be effective they must first be perceived as relevant and engaging to the learner and strongly support their academic objectives, which were identified as achieving NCEA credits and gaining access to tertiary education. It was found that if an online tool is not perceived as highly relevant it would not be utilised. Higher engagement was observed when whānau were aware of the expectations around completing learning activities. The most effective application of the recommendations of Ka Hikitia in this project were focussed on valuing identity, culture and language and helping learners to know their potential through meaningful interactions with a relevant positive role model. This experience was shown to be positively received by all in the class and had a positive impact on their perceived career prospects, optimism, and self-belief. The experience was particularly effective at engaging the Māori learners and they reported higher levels of confidence in achieving their academic goals following the event.

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A continuous voyage: Exploring students' views on how Pacific Studies can move forward

Tony Patolo

The aim of this study is to gather stakeholder insight regarding the current NZQA Pacific Studies subject. It is a qualitative exploration primarily based on a focus group conducted with year 12 Pacific Studies students at a New Zealand secondary school. This eventuated into having meetings with NZQA, several other Pacific Studies educators in secondary schools, a tertiary educational provider, a junior Pacific Studies research group (in school) and Senior Leadership Team (in school) to gather additional insight. The major theme to emerge from this study was to implement Achievement Standard assessments in the Pacific Studies curriculum. It is believed that this will enhance achievement, engagement and student integrity. In its current Unit Standard form, Pacific Studies does not allow for university entrance or any direct career pathways. Current students enjoy the subject, but the consensus was Unit Standards take away merit from student success. Stakeholders strongly felt that there is much potential for Pacific Studies to be an empowering educational experience for many more students should it be weighted the same as other NZQA Achievement Standard subjects.

Kia tu Whakatane au I ahau

Alexis Teepa

Kia whakatane au I ahau is a kaupapa maori framework formed around the Tauparapara (chant) Tenei au, tenei au. The framework was created as part of this project to support learners to succeed in their context. These pedagogical strategies will be used to help answer the question, will the incorporation of a kaupapa maori framework and pedagogy in science, raise the achievement of Maori students? These frameworks were applied to year 10 Marine Studies classes and focus on the teacher leading and implementing these into the classroom and wider school context. Based on the cultural living practice of ako these frameworks have been designed very specifically for young Māori students who take science at a Bay of Plenty high school, the processes, practices, philosophies and values can be restructured to help develop many teachers' professional practice. The results from this study found that by linking Te Ao maori and western worldviews changes in effort within the classroom increased slightly. As an educator effective reflective practice, authenticity and feedback are key to the continuation of this into my living practice.

The effect of targeted metacognitive journal writing on the learning of problem-solving

Ben Roberts

This project looked to research the effect that targeted metacognitive journal writing had on a students problem-solving ability. It was grounded in a Vygotskian theory of learning and a framework for problem-solving combining cognitive and metacognitive strategies. This took part in a Year 9 (aged 12-13) mathematics class in Tairawhiti (Gisborne), New Zealand during a measurement and geometry topic. Regular activities were planned across an 8-week period in which students were given specific problems to solve that emphasised a certain stage of problem solving. Students would attempt to solve the problem while communicating the metacognitive processes they were using. This was achieved in written form as well as pair and group discussions. Specific instruction was also given from time to time to discuss specific skills and processes to be used. Data was collected in the form of a pre-test and post-test coded against implicit/explicit use of metacognitive problem solving processes and the level at which these processes were used. Initial conclusions derived from the data was that there was no increase in the problem solving processes used nor the level of the processes used. In fact, by and large

there was evidence that problem solving ability decreased. However, this should not be taken at face value due to low count statistics, as well as an ever smaller population that took both the pre-test and post-test. Data from a student voice questionnaire were also analysed, showing that there was some indication that students found solving problems somewhat easier and more enjoyable. Nonetheless, stemming from the dissemination of these results have been constructive discussions within the mathematics faculty as to the importance of both problem solving skills and communication in mathematics. A recognition of their being missing from the schools mathematics curriculum, has led to a focus on including them in the upcoming year and beyond through faculty goals. This research may not have provided the solution, but it has demonstrated that there exists an important improvement that can be made to the curriculum and for student outcomes.

From defeat to accomplishment: disentangling Technology understanding from written language capability

Reid Douglas

This inquiry investigates the low literacy levels of many of my senior students that hinders learning in the area of Technology. This occurs specifically in written literacy; using written form English to identify, describe and explain their design process as it relates to technological and design principles.

The project adopted an iterative, action research methodology to work with a class of Year 12 product designers at a low decile Auckland secondary school.

When students are unable to express or articulate knowledge they already possess, their motivation and confidence is impacted. This in turn translates into 'failed' assessments and a sense that what they know implicitly is not valuable.

This research aimed to find practical ways to support learners to strategise and write accurately about their technology practice, monitoring student's self efficacy beliefs as it relates to written assessment. Key methods included co-created learning artifacts with students to support comprehension of fundamental subject terminology, (with a specific focus of visual

learning) and thorough documentation of each student's design process.

One of the main research findings was that both capable and low literacy learners benefited from a class focus on subject specific vocabulary at senior level. In particular, co-creating pictograms as a class solidified learning for more capable students while providing more direct support to low literacy learners. A related finding is that thorough documentation of practise aids students' ability to reflect accurately on what they have done and connect their learning to key terminology.

This research will be useful to other practice based subject teachers, especially those balancing theory components alongside the completion of a technological outcome.

A video abstract can be found at this link.

[46]

What doesn't kill you makes you stronger: How student stress, anxiety, and confidence influence Level 1 NCEA achievement during COVID-19

Jeska Martin

Students in 2020 have experienced unprecedented levels of anxiety and stress as a result of the global COVID-19 pandemic. This pandemic has affected not only students' experiences of academic achievement in their first year of NCEA assessments, but also their wellbeing. This action research, which was conducted in inquiry with 23 female Pasifika Year 11 students, looked at the drivers of stress and anxiety in students, and investigated methods of minimising and managing these stressors. Another focus was the impact confidence has on agency and expectations of achievement in Level 1 NCEA. My research findings indicate that students are not aware of the prevalence, nor normalcy, of anxiety and stress experienced by people in daily life. Conversations are presented confirming that students struggle to know how to manage achievement-related anxiety or cope in a learning environment when it becomes overwhelming. This work finds that students would appreciate if teachers and adults were more transparent and

vulnerable about their own anxieties, and that teacher practice would improve in turn. It suggests that classrooms that serve as safe spaces for mutual sharing about anxiety allows for the sharing and construction of healthy methods for dealing with achievement-related anxiety.

Begin Where You are Standing: Developing a Critical Pedagogy of Place in a Bicultural Senior English Class in Te Tai Tokerau

Timothy McVicar

A critical pedagogy of place with overt social justice aspirations is one such way the school can realise its aspirations. A critical pedagogy of place encourages learners to examine unequal power structures within a community, and develop responses to these. Evidence suggests a critical pedagogy of place improves the engagement and assessment outcomes for indigenous learners, especially when undertaken in ethnically homogeneous classrooms (Milne, 2013; Gordon, 2016). It has potential traction in mainstream public education, provided educators and learners are willing to engage with it. This is because a truly transformative critical pedagogy of place requires buy-in from all to be truly transformative.

The project involved collaborations with several departments in the school and used an iterative spiral of inquiry-based research – to examine the effects of a critical pedagogy of place on Pākehā learners, in a Level 1 English class. The project tracked if learners made notable shifts in their perspectives about Māori inequality in Northland. My results found that a critical pedagogy of place was initially confronting for Pākehā

learners. However, Pākehā learners began to articulate a more nuanced and constructive understanding of the effects of the Northern wars, colonisation, institutional discrimination, and inequality faced by Māori, by the end of the project. A critical pedagogy of place, in this sense, was 'consciousness-raising' (Milne, 2016). Formal writing and interviews of participants at the end of the project showed increased empathy to Māori concerns within their communities. More broadly, the project depicted a way that schools can legitimise, support, provide the tools, as well as a safe space for the analysis of challenging aspects of New Zealand's past and present. It is hoped that by doing so, there is the potential for the development of greater tolerance and respect between ethnic groups in Aotearoa.

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How effective teacher collaboration facilitates enhancement of professional teaching practice in a Modern Learning Environment benefiting student learning

Stephan Roessner

Within the last decade innovative learning environments (ILE) became increasingly popular in New Zealand. By changing the spatial typology of traditional classroom spaces to accommodate curriculum change a misalignment has been created between the space and established pedagogical concepts. Furthermore, an additional tremendous difference is the shift from solitary teaching to collaborative teaching, the teaching space is not occupied by one single teacher anymore. This project aims to investigate a pathway of building the capacity of successful teaching in an ILE with a focus on social justice. It seeks to illustrate that effective collaboration in an ILE facilitates an enhanced improvement of professional teaching practice ultimately benefiting the learner. Two rounds of inquiry are conducted, with the inquiry into collaboration being the first one and inquiry into transforming teaching practice being the second one. Findings followed by applied changes of the first inquiry are used to leverage and accelerate the inquiry

of improving teaching practice. Understanding the underpinning values and beliefs of teachers in an ILE seems to be an important step in the process to inquire about collaboration. Results show a strong link between a functioning team operating through collaboration catalyzing change in teaching practice. The extent to which change can happen seems to be largely limited by the capacity of teachers to collaborate and the willingness to improve their pedagogy. These findings could be used to further develop a framework for a smoother transition into ILEs.

[49]

Using a Mātauranga Māori Mathematics Programme to Increase Mathematical Self-Efficacy and decrease Mathematics Anxiety in Year 10 Māori Girls

Miriam Curnow

Māori achievement in mathematics is a concern both in New Zealand and at the school in which I teach. Research has shown that two of the major driving forces behind underachievement in mathematics internationally are low mathematical self-efficacy and high mathematics anxiety. I formed a Participatory Action Research Group (PAR Group) to come up with solutions to address these issues. Under advisement from members of this research group I instituted a programme based on the principles of Ka Hikitia and Te Kotahitanga. I found that using these methods in the classroom resulted in an increase in participants' self-efficacy, and a slight decrease in mathematical anxiety. I have concluded that if used over a longer period of time such increases have the potential to increase the achievement of Māori Girls' in mathematics.

Changing the Narrative: Looking at the impacts of teaching local history

Charlie Holland

In an attempt to change the narratives of how students, in particular Māori students, receive information of local history, this research project looked at keeping an iwi perspective at the forefront of taught lessons about significant historical events. Currently the New Zealand government does not plan on implementing New Zealand history as a subject until 2022 and until that happens, there is a chance that Maori students will miss out on significant knowledge that could further develop their understanding of identity as well as impact their attitude towards learning.

The research project produced a teaching unit in History that looked at the first encounters between Māori and Europeans, through an iwi lens. By using an Indigenous research methodology with a Strengths-Enhancing Evaluation Research (SEER) approach (Mataira & Morelli, 2010), it ensured that the communications between the researcher and key members of local iwi trusts' were received mindfully to acknowledge that each iwi or hapu had their own unique accounts of what happened during that time and the repercussions that were to follow.

The teaching unit was piloted with a Year 7-10 class of students who affiliate to local iwi and are descendants of the tupuna

who experienced that eventful time in 1769. It concentrated on using narratives as a resource, and also used as a technique to collect qualitative data from students to monitor their learning progress, to create what Russell Bishop (1996) described as a community that "became a story" through a collection of individual stories, through the lives of the people who share.

With a running theme of navigation and voyaging, a Wayfinding Leadership philosophy (Spiller, 2015) was adopted to further develop a relationship between the school and their community through an understanding and enjoyment of learning. This was shown most effectively amongst teaching staff who contributed and led different aspects of the unit in effort to reach our shared goal of helping students to enjoy and achieve educational success as Māori. The website created to accompany the unit supports a 'flipped' learning approach, intended to be used by educators as a guide for their own lessons.

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Improving Reading Comprehension in a Digital Technologies Context

Eros Malele

My aim for this project was to explore strategies with my students to help improve reading comprehension within my year 10 robotics class and see how that correlates to success within that class. I noticed many students struggled with following written instructions posted on either Google Classroom or on the whiteboard. Unless I had the opportunity to verbally process the instructions or readings with the students, they would generally not be able to process that information themselves. Reading comprehension is a skill that is important in all subject areas and is especially important as students grapple with their future life journey outside of the classroom. Inability to comprehend or engage with the written word can hinder their progress in the future as students progress from high school to tertiary education and employment where they will have to process things like insurance policies, bills, mortgage repayment agreements; hence being a barrier for these students to be able to participate fully in society and truly become independent. I took an action-research approach to address this issue. Action research was an appropriate approach for this particular research focus as the nature of this type of research was directed at producing an outcome that would be beneficial for myself and other teachers

but also positively benefit the student participants as well (Cohen, Manionand, & Morrison, 2007). Analysis of the qualitative and quantitative data gathered during this project produced some useful insights and perspectives to consider when implementing and improving reading comprehension strategies within a digital technologies based course (in this particular research project – a robotics course). One of the predominant themes that has resulted from this research have included the importance of engaging with student voice in order to create outcomes that will benefit students.

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[52]

The impact of student choice on ngakāu in the context of learning mathematics

Agata Orowicz

The research is being conducted in close collaboration with a year 9 class. The project investigates the impact of increased amount of student choice in the context of learning mathematics impacts their ngakāu for the subject. Aspects of learning that have been subject of student choice thus far include: the timing of topics, online vs not learning, collaboration vs individual work, decisions around groupings, types of tasks undertaken, types of resources used as well decision making around solving any surfacing issues in classroom culture. The spiral of enquiry methodology is used to guide the collaboration on the research.

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Te ao and engagement

Savenaca Matanawa

This project sets out to answer the question "how can te ao Māori be incorporated into Achievement Standard AS91063 and how might it benefit Māori and non- Māori alike"? In other words, it ponders if the introduction of te ao Māori could improve student engagement. This takes place in a state secondary school in the hub of Manukau City, Auckland. There are approximately 1500 students who comes from 50 different ethnic backgrounds. It is a decile four school and the project involve a level 1 and level 2 design and visual communication (DVC) class. Twelve students agreed to participate in my class, eight of which are DVC level 1 students and the rest are DVC level 2 students. The findings of this research suggest that there has been an increase in engagement this year, likely caused by the introduction of te ao Māori. This is because te ao Māori places great importance on relationships and centres their learning on the immediate environment, making it relevant for the students.

The effects of a growth mindset intervention and reflection journaling on learner confidence

Lauren Jeffares

Students often express their lack of confidence in difficult subject areas, or self-assess as incapable if they get something wrong. This prevents them from fully engaging with content in the classroom, becoming comfortable with themselves as learners, and shy away from failures. Carol Dweck's growth mindset theory (Dweck, 2008) is about the use of a positive mindset towards learning and the improvement of one's ability. A healthy mindset, by Dweck's standards, promotes persistence, resilience, confidence in learning, higher chance of seeking challenges, and a framework to understand failure and struggles as part of a learning journey instead of the end-of-the line. A disparity of confidence exists between students who already display a growth mindset and those who do not. Those who display a growth mindset show less stress response to assessment (Lee, Jamieson, Miu, Josephs, & Yeager, 2019), tasks in class, and asking questions (Donohoe, Topping, & Hannah, 2012). This impacts the well being and ease of academic progress of the students without a growth mindset comparatively. This project looks to address this disparity by teaching the students of a year 8 class, about the growth

mindset. Students are facilitated to develop their mindset over time with the use of reflection journaling, as a support framework. The reflection diary provides clarity for teachers to assist students in shifting their mindset and helps teachers understand where their students are at. Students report more clarity and control over their learning because of this. Overall, a positive shift was made across the class towards seeking challenges, not using difficulty to prove ability, decrease in avoiding new tasks, and increased confidence in learning. Students reported a positive change in their mindsets, reduced stress towards assessment, less fear towards asking questions and seeking help, increased ability to persist with difficult tasks.

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Breaking Down Internalised Beliefs to Build Up Student Self-Perception in Mathematics

Delaney Abeyesundere

This report aims to evaluate the effect of a social-psychological intervention on students' perception of self-efficacy in a Year 9 Mathematics Classroom. This intervention was administered in response to a distinct lack of self-belief and self-esteem that students had, specifically in regards to maths. The intervention was based on aspects of positive social psychology founded in academic literature. It was intended to teach students healthier responses to specific challenges faced in a mathematics-learning context to improve their perception of their own self-efficacy in mathematics and their relationship with mathematics as a subject. Due to the hierarchical nature of learning in mathematics, students are more likely to compare themselves to others and lay judgement on their overall intelligence based on their achievement in maths. This is compounded by the historically low expectations of our students to achieve well in 'academic' subjects , a message which is unintentionally perpetuated by the wider community and school. This develops into feelings of inadequacy and ultimately makes students view themselves as having low efficacy in mathematics as well as a poor relationship with the subject. This project sought to make

students more aware of how they process successes and failures in mathematics and understand the impact that this has on their self-confidence in the subject. Teaching around metacognitive and positive psychology based topics was administered alongside curriculum learning over four weeks. Students were asked to self-reflect pre-project, post-project and during the intervention to track potential shifts in student perspective. Intended methodology was adapted and revised throughout the project based on student collaboration and feedback. Individual baseline student opinion data was collected at the beginning of the intervention and at the end of the intervention. Overall student reflection statements suggest an improvement in students' individual personal relationships with maths and awareness of extrinsic factors impacting their motivation for the subject. This project suggests that targeted teaching around aspects of social-psychological understanding in maths is beneficial for students' awareness of their inner voice and ultimately their relationship with mathematics. Furthermore, extensive research in the area would provide more robust findings for long-term shifts in students' perception of their own self-efficacy in mathematics.

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Rīpoata Mātauranga Māriko Māori

Terangingahina Moeahu

This project focuses on a figurative marriage between Māori culture and Pākehā culture, in an educational setting. It will report on the use of digital forums as a medium to grow 21st century learners into their Māori Identity, while also using Pūrākau as its vehicle. Mātauranga Māriko Māori aims to address the need to continually grow Māori learners' lens in Te Ao Māori by understanding their indigenous customs, principles and protocols in a forever evolving world. Te Ara Rangahau, supplemented with a mixed method approach, was used to navigate this research to enable a thorough management of stakeholder feedback, thoughts and feelings that contribute to this project, with the use of wānanga in digital spaces and in-school spaces. This research found that by adapting a culture to the demands of evolution, Māori learners will not only have the fundamentals of a Māori World View, but possess the ability to use their Aronga Māori in the past, the present, and have a vision for their future.

Montessori Principles in Mainstream Science Classes: The Impacts on Engagement

Chloe Wilshaw-Sparkes

This project sought to investigate how Montessori Method principles could be applied to enhance student engagement in science class. It was intended to evidence the benefit of a Montessori approach for students in Aotearoa/New Zealand, but especially Māori students. This comes from an awareness that my practice and the practice at my school does not always encourage intrinsic motivation in the students. Thus, this project sought to produce and increase engagement by leading a collaborative change. It also sought to address a social justice issue that decreased engagement in school often leads to inequitable outcomes in education and wider life. This project was conducted on year 10 science students in a mainstream, secondary co-educational school setting, in Whangarei, Aotearoa / New Zealand. Montessori principles were implemented in the Year 10 science cohort to support students develop a sense of agency and intrinsic motivation with the intent that this would lead to an increase in engagement. This was done by producing a range of resources for the Forces and Motion unit and providing them to use as they felt ready to. The teacher did not plan individual lessons, rather they supported

students to pursue the learning at their own place and in their own way. Data was collected through student self-reported surveys and through teacher-reported student engagement. Results demonstrated a consistent drop in engagement in science across ethnic, gender, and core class lines. Given the wealth of existing research suggesting the opposite, the upset of Covid-19 is theorised to be the primary contributing factor. In a 'normal' year, this project would be one change in an otherwise consistent environment, yet Covid-19 has created upheaval for many students which resulted in them feeling confused and underserved by the teachers. In future, a more disciplined approach should be taken by educators, in order to build the students' self-regulation capabilities to support them to succeed and feel capable of success under a Montessori approach.

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Impact of using sport on engagement and achievement in science

Garweth Smith

Research on teaching content's effect on student engagement is sparse (Nguyen et al., 2018). This study attempts to understand the impact of teaching science content through sport, on students' engagement and achievement in science, and how this affects achievement in science amongst Māori students. This study involved a year 9 and a year 10 streamed sports class in Rotorua, New Zealand. Curriculum and assessments were altered for two units to incorporate a sports context. Data was collected through a content knowledge test and an engagement survey at the commencement and conclusion of this study. This qualitative data was also supplemented by conversations with the students and teacher observations. The findings of this study showed a positive effect on students' engagement and achievement from the sports context in science. Additionally, a positive effect was seen in Māori and Non-Māori at similar rates. The next steps in this project are to share the learning from this project to strengthen the collaboration between departments to ultimately support learners' success.

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Digital Technologies | Hangarau Matihiko – Alternate ways of knowing?

Sarah Loggie

This research emerges in practice; in recognition of the role I hold as a leader of the Digital Technologies Learning Area within Zayed College For Girls, Mangere, Auckland. I position this body of work as a pedagogical change initiative: How might a responsive approach to pedagogy facilitate the integration of the New Zealand Digital Technologies – Hangarau Matihiko Curriculum? This work is an argument for an equitable approach to curriculum design. Responsive pedagogy describes an approach to teaching and learning that is predicated on reciprocal, robust cultural relationships: Learning is seen to take place in dialogue between teachers-learners and in dialogue with socio-cultural context or place. As a head of learning area, I am afforded extensive power to define the process that determines how the national DTHM curriculum comes to be enacted in our school context. This situation troubles me. My aim here is to make decisions with learners rather than for them. Creating curriculum with students requires a shift towards learner agency: learners are encouraged to explore, identify, create and refine their own learning experiences. This research takes form in a local curriculum design process. As

a community; a research collective, we will work to design a framework that enables learners to be digitally capable and engages our community in teaching-learning practice. This is a qualitative research project. We engage a mixed methods approach that draws on Action Research, Spiral of Inquiry, and Design Thinking: It is action oriented, practice-based, emergent and 'situated' in order to underscore the bearing that context has on this research. This research is radically partial, and is located in a particular space-time. This involves 'situated conversation'; a dialogue involving a multiplicity of actors; a heteroglossia of partial perspectives all grounded in practice. Data will be collected to document the action that takes place as well as the experiences of learners (and myself) as we participate in the change process. Our work here is aligned to The Ministry of Education (MoE) led Strengthening Local Curriculum initiative. The MoE suggests an approach to local curriculum design, that is a community-driven process rather than a teacher or school-led process. This is a local curriculum for equity.

Fa'asoa - How Whanau/Aiga/ Family engagement can impact their children's learning experience

Lastman Sooula

While working with my Year 13 students, I noticed a disparaging amount of students who were handing in their assessments late – well overdue the deadline. Within our school, many teachers have also expressed the same issue with students handing in work late. In the wider scope of my project, this issue is a contributing factor as to why Pasifika achievement was in the lower percentile. With a focus on my Year 13 Samoan Language class, my Fa'asoa project investigates the reason why this happens, and to implement a new strategy on how to resolve this problem through Student Agency and Self regulation , with the added support of whanau/ aiga/ family. By tracking students progress, we were able to co-construct plans for reaching our targets, and goals we set to complete. With the support from whanau, we gave our students support from inside, and outside of the classroom. We learnt skill on how to make better decisions towards studying, and a habit of self reflection so that students understood what they needed help with. Success was shown when students were able to hand in work on time, and when they had developed their own study plan which they were able to follow. This was definitely a strategy that improved

results which highlights the importance of the relationship between the students, family and the school.

As COVID 19 affected the nation, so did it affect my project, and some elements of my project had to be amended, including the timeline to complete the project, meeting in person with whanau, and deadlines for students.

Deficit Thinking vs. Student Agency: This research project analyses six male students' perception of themselves in their English work.

Melissa Bell

A widely known challenge in education is the lower engagement, results and motivation of teenage boys, in comparison to the girls (Marc Jackman & Morrian-Webb 2019). According to Marc Jackman and Morrian-Webb (2019) boys did not have any motivation because there was a lack of freedom and choice in their education. In this way, social justice and inequities in relation to education, engagement and agency are a key area of educational research that underpinned this project. Based on collaboration with six male students, the project explored whether deficit thinking is a hindrance in their ability to have student agency. The approach used in this project was based on the Ula Model (Sauni, 2011) that encompasses the Samoan culture values, and the use of Talanoa to enable deeper conversations of students' thoughts and feelings, focusing on the power imbalance in the class, and how to minimise this. Underpinning this approach, the Ula Model values of alofa (love), fa'aaloalo (respect), fa'aleagaga (spirituality), fesoa'aiga/ fesuiaiga (reciprocity), gagana (language), tautua (service), and va (the male and female boundary) helped to minimise power

imbalances between students and teacher. The project provided insights into the ways that students' awareness and capabilities impacted their learning. For example, the emergence of accessible technology and social media, had a great impact on a students' engagement and motivation to execute agency. Another key finding was the student voice, giving the boys options in their work. It gave them a sense of ownership in their learning journey. To fully understand the role of technology in engaging students and providing choice, the report recommends that further research is undertaken in this area.

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[62]

How Does Peer Accountability Affect Engagement in a Year 10 Mathematics Classroom?

Emily Snelgrove

The current report seeks to address the effect of peer accountability on engagement in a Year 10 Mathematics Classroom. Due to a noticeable lack of cohesion and detrimental social hierarchies in a Year 10 mathematics classroom it was predicted that if students were accountable to each other, that positive relationships and role modelling would enhance engagement. In a typical classroom teachers hold power over students and their learning however, what the current project sought to address was whether dissolving of these dynamics and engaging in a power-sharing approach would result in more engagement from students. In conjunction with teacher-student hierarchies, the current project looked at how utilising existing social dynamics influenced the overall ecology of the classroom. Along with the students, an accountability model was used, whereby students rated themselves and a peer after each lesson based on how their behaviors aligned with each of the school values (as a measure of engagement). After several iterations it was clear that the interpersonal relationships of a learner had an effect on their engagement, however more research is needed in order to

thoroughly assess the impact of accountability models on engagement in the mathematics classroom. The current project does propose promising findings into a positive relationship between the two.

Collaborating with students to provide opportunities and engagement through e-learning experiences

Christian Malaitai

Student absences are known to have an association to lower academic performances (Hancock, Gottfried & Zubrick, 2018). At my school, student absenteeism affects performance in school, however many of the students are absent through no fault of their own. Some are absent from working to provide for their families or looking after unwell family members. To address this, I collaborated with my frequently absent students to develop e-learning experiences that could support them when they missed school. Through action research (McNiff, 2017, Taylor, 2007, 2010), cooperative inquiry (Heron, 1996), and servant leadership, I worked collaboratively with my secondary school student participants to discuss their views on absenteeism, what success means to them, the pressures of Covid-19 and how I could support them more through e-learning. Data were collected using talanoa. I learnt more from students about what affects their ability to engage in learning when frequently absent and I learnt more about the personal and whānau struggles experienced during Covid-19, which meant that some of them had been dependent on sacrificing

their time in school in order to survive. I found student voice essential for co-creating e-learning experiences that meet the needs of my students. The opportunities for success that came through collaboration, student voice and e-learning provided value for students who were absent and needed extra support. This extra support happened at a time that suited students, often in the evening, so that family commitments could be met.

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