

Primary Principal Sabbatical Report
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Ōtaki School
Term II 2017

Theme:

To investigate whether the use of 1:1 devices is having a positive impact on student outcomes at Ōtaki School.

Acknowledgements:

I wish to thank TeachNZ for providing opportunities for the Primary Principals Sabbaticals.

I also would like to express my thanks to the Ōtaki School Board of Trustees for supporting my application for my sabbatical.

Special thanks to Yvonne for assuming the Acting Principal role and to the management team who took on extra responsibilities in my absence.

Background Information:

In early 2014 a number of teachers, principals and interested parties from Ōtaki visited Point England School and other schools in the Manaiakalani Cluster to observe the work being done in those schools with digital learning.

We were also interested in the Manaiakalani Educational Trust that had been formed to enable parents and whānau to purchase devices over 1-2-3 year period.

Post visit we returned to Ōtaki buzzing after witnessing the high levels of pupil engagement in the schools we visited. and after several hui the Ōtaki Educational Trust “Te Reanga Ipurangi” was formed.

This is made up trustees and all schools in Ōtaki, being Waitohu a Year 1-6 mainstream primary school, Te Rito a year 1-13 Kura Kaupapa Māori, Whakatupuranga Rua Mano a year 1-13 Kura a Iwi, Otaki College a year 7-13 college and ourselves Ōtaki Primary.

The Trust decided to go with Chromebooks due to their long battery life, ease of use and relative robustness.

Ōtaki School established four “Chromebook Classes’ in term 4 2014

1. A Year 5/6 Mainstream class
2. A Year 5/6 Bilingual class
3. A Year 5/6 Level 1 Immersion class
4. A Year 7/8 level 1 Immersion class

This has continued to the present day, we have been thrilled with the uptake from our parent community with over 95% of parents entering into purchasing agreements with Te Reanaga Ipurangi Trust (The school provides devices to those few students whose parents are unable to purchase)

From 2014 - 2016 the school was involved with intensive moE funded PLD on Learning with Digital Technology, this was for all staff members as LWDT is also imbedded in the junior class curriculum.

So there has been a considerable investment from our school community and our school/Board of Trustees into Learning with Digital Technology, therefore the purpose of my sabbatical is to investigate what, if any, impact the use of 1:1 devices and our PLD in LwDT is having on student achievement.

Benefits of Learning with Digital Technologies

As Tom Vander Ark noted in his report “ The Shift to Digital Learning” there are many noted benefits for students when working in a digital environment.

1. **Personalized Learning** - the opportunity to help every student learn at the best pace and path for them is the most important benefit of digital learning. One on one tutoring is a good example of personalized learning but in the school context it is impractical and expensive. The shift to digital learning can approximate the benefits of tutoring while freeing up time for teachers to address individual and small group needs.
2. **High Engagement Learning** - The shift to digital can boost student motivation. High agency learning recognizes learners as active participants in their own learning and engages them in the design of their experiences and the realization of their learning outcomes in ways appropriate for their developmental level.
3. **Expanded Learning Opportunities** - Digital learning is extending learning opportunities worldwide. Learning happens at many times and in many places and intentionally leverages its expansive nature in the learner’s development of competencies. learners with authentic, rich, and diverse learning opportunities.
4. **Collaborative Learning** - Digital learning powers collaboration. Collaborative authoring environments like Google Docs make it easy for teams (near and far) to co-author documents and presentations.
5. **Quality Learning Products** - Digital learning tools allow students to produce professional quality products and to share them with public audiences. Presentation and publications change the classroom culture from finish and hand it in, to production for public audiences. Digital tools means more and better writing.
6. **Relevant and Regularly Updated Content** - Regardless of age students have more access to relevant and regularly updated content. The ability to update easily, means access to updated material and features on a regular basis.
7. **Sharing Economy** - There has been an explosion of free and open content and tools. Schools can save money while ensuring equitable access. Sharing platforms have made it possible for millions of educators to share tools and resources across state lines.
8. **Assessment** - Digital learning powers continuous feedback from content-embedded assessment, games, simulations, and adaptive learning. When students can track their own progress it can improve motivation and agency.

The above benefits of working 1:1 with technology are all very real and evident in our Chromebook classes. But did our school assessment data reflect these benefits, was an upward trend evident over the 2014-2016 period, both in individuals and collectively.

Analysing Student Achievement Data

I began by looking closely at our school wide achievement data from 2010 - 2016.

I wanted to include both pre and post 1:1 device years as I sought to compare overall rates of progress from students who had not had 1:1 access, students who had access over some of their time and students who had 1:1 access for all of their time.

The curriculum area in which teachers remarked they observed the greatest increase in engagement from students working with devices was in writing, and especially in boys writing.

Over the three years, in our digital classes I have heard much anecdotal evidence from class teachers relating to greatly increased levels of engagement and output quantity when discussing boys writing. Male students who previously had been very reluctant writers were observed readily engaging with writing tasks and producing far more in terms of quantity than previously when using school books. When asked why this was, many students noted, on a Chromebook everyone's work looked the same. They did not have to laboriously attempt to produce neat writing, or produce fantastic illustrations. The devices put all students on a level playing field in terms of work presentation.

From here I looked at our e AsTTle writing scores and National Standards/Nga Whanaketanga results from 2010 - 2016.

The percentages of students attaining "AT" or "ABOVE" in National Standards writing over this period varied from year to year with an overall upward trend of 13%.

This was reflected in Ngā Whanaketanga with an overall upward trend also of 13%.

Could this be attributed to the use of 1:1 devices? it's hard to say definitively.

Maths and reading did not show an overall trend upwards, there were highs and lows in both areas and in both National Standards and Ngā Whanaketanga results. This was not too unexpected as when analysing school data for the Board and for MoE I had not noticed an overall upward trend in these areas.

Where to Next?

I agree with the benefits of LwDT as noted by Tom Vander Ark. I have seen the increased levels of student engagement in classes, I have seen the quality learning products, we are all aware of the high levels of quality content available.

Why to date has there been no obvious correlation between these benefits and student achievement??

I believe the answer could lie with teaching pedagogy.

In late 2017 all of the schools in the Ōtaki cluster agreed to become an outreach for Manaiakalani. We have signed a 3 year contract 2018-2021. We have Manaiakalani trained facilitators working alongside our staff in the 1:1 classes, we have regular Principal/Manaiakalani hui. All of our staff are becoming conversant with the Manaiakalani pedagogy of LEARN-CREATE-SHARE.

As part of the contract our school has to submit school-wide assessment data twice yearly to the Wolf Fisher researchers who work out of Auckland University on behalf of Manaiakalani.

As most educators are aware the Manaiakalani Cluster in East Auckland has achieved outstanding results with its students. All of whom come from decile 1 schools.

Hopefully over the next three years and beyond with the successful LEARN-CREATE-SHARE pedagogy ingrained in our philosophy and programmes, with the continued support of our community and whānau and the continuing hard work from our dedicated teaching staff we will begin to witness a similar positive

impact.