Innovative Learning Environments

Student centred learning, agency and self-regulation.

Sabbatical Report Term 1, 2018
Rob Posthumus
Principal Hurupaki School

Acknowledgements

I would like to acknowledge and thank the Hurupaki School Board of Trustees for fully supporting my sabbatical application.

I would also like to acknowledge and thank the Ministry of Education for giving me the chance to undertake sabbatical leave. This time of reflection, refreshment and the opportunity to look at an aspect of practice, was invaluable.

I thank and acknowledge Shelley Muston, who took on the role as Acting Principal capably in my absence, and thanks to all of the other staff for the great job they did in supporting Shelley. Thanks also to Karen Johnsen for capably stepping into the role as Acting Deputy Principal.

I would also like to acknowledge and thank the Principals and staff of the schools I visited. Their willingness to give up their time was generous and they shared what their schools were doing with passion and pride.

Purpose

The purpose of my sabbatical was to visit New Zealand schools and investigate systems in innovative learning environments (ILE) that maximise student agency and self-regulation, where the learning environment recognises the learners as its core participants. This is how I see schools responding to the demands of a rapidly changing world, and the changed expectations of people. Children need to develop a wide range of skills that will enable them to thrive in a complex and uncertain world.

Background and Rationale

My sabbatical activities align with the Hurupaki School vision “learning today for tomorrow” and two of our strategic goals; self-regulated learners and future-focused curriculum.

When Hurupaki School was built in 1976, it was designed as an open-plan school. Decades later it was walled up into single-cell rooms, and teacher office spaces were built through the centre of the learning areas. Open-plan simply did not work when one

teacher worked with their own group of students in one end of the room, while the other teacher worked on something completely different in the other end of the room with another group of students. There was no shared responsibility for the learning of all of the students in the space, and there was little collaboration around improving outcomes for learners.

In 2013, the Hurupaki School board started actively exploring the idea of creating modern learning environments to better meet the needs of students and to better prepare them for their future. A visit to Australia was funded for three staff members in 2014. Then in 2016 the board used their own funds to open out several of the classrooms to create ILEs that allow for modern pedagogies and team teaching - where there is more than one teacher in the learning space.

An ILE might be seen as a complete physical, social and pedagogical context in which learning can occur. It is flexible and capable of changing as educational practices change and evolve. The New Zealand Ministry of Education want all schools to have vibrant, well connected, learning environments (ILE) that encourage and support many different types of learning. Hurupaki School has been through a time of transformational change with a move away from the privatisation of teaching to a collaborative model. Isolation is out and collaboration is in! Creating innovative learning environments that support wellbeing, 21st century pedagogies and empowerment of learners is the goal.

Collaborative ILEs, where there is more than one teacher in the learning space, offer an opportunity for teachers to work together and support each other through the challenges of changed pedagogy that enable an increased level of student agency and improved learner outcomes. We have noted that collaborative ILEs provide improved equity for learners, in that there is increased access to teachers, to peers, to resources, and to finding a space to learn that suits their needs.

Pedagogy and mind sets have had to change, and are still in a state of change. Collaboration is seen as being key to supporting effective change. The research of Hattie (2016) showed collective efficacy could promote 1.57 gain (4 years) in learning outcomes. He stated that when teachers collaborate with others to improve the impact of their practice, this is true professionalism.

Regular teacher team meetings were organised at Hurupaki in 2017, to facilitate a collaborative inquiry process around accelerated learning approaches, improved learner outcomes and pedagogies that support student agency. This is a time when teachers can share problems and practices, and learn from and with each other. These meetings are held every week, led by the Associate Principal and curriculum strategic leader. Each learning team meets together once in a three-week cycle, and the focus is around supporting pedagogical change in a consistent school-wide manner.

Student agency and student empowerment has become a goal for us, as research indicates that learners benefit from having the opportunity to drive their own learning and take responsibility for their learning (Claxton, 2008; Mackenzie, 2016; Murdock, 2015; OECD, 2013; Ontario Achievement Division, 2010, 2011, 2013; Solarz, 2015; Spencer & Juliani, 2017; Wagner & Dintersmith, 2015; Zhao, 2012). Student agency is defined as having the power to, or capacity to act and make choices. This means being active managers, regulators and directors of their own learning. Active learners rather than passive recipients. It is about increased opportunities for student ownership of learning and self-direction. Students' ability to influence their own learning rather than a teacher-led approach. It is about allowing children to pursue their own interests and passions. Achievement, engagement and motivation improve when children are empowered in this way. When they are forced to learn something they don't see as relevant, no matter how important adults believe it will be for their future, children may simply go through the motions and become disengaged (Zhao, 2012).

Learner agency is embedded in the New Zealand Curriculum (NZC) key competencies, as "the capabilities that young people need for growing, working, and participating in their communities and society" (Ministry of Education, 2007, p. 38). The NZC also outlines what this could look like:

> …times when students can initiate activities themselves. When researching an issue of interest, students are likely to need to set personal goals, manage timeframes, arrange activities, interact, share ideas, and negotiate with a range of people. With appropriate teacher guidance and feedback, all students should develop strategies for self-monitoring and collaborative evaluation of their performance in relation to suitable criteria. Self assessments might involve students examining and discussing various kinds of evidence, making judgements about their progress and setting further goals (Ministry of Education, 2007, p. 38).

We are now in 2018, and it seems to me that we are still struggling to make the pedagogical shifts outlined in the NZC back in 2007. More recently, the ERO School Evaluation Indicators Domain 4 state the following “Students are given explicit instruction in learning strategies (such as goal setting, self-monitoring and deliberate practice) that enable them to take control of their learning, develop meta-cognitive skills, self-regulate, and develop self-efficacy and agency” (Education Review Office, 2016, p. 35). The message is clear, there is an expectation for New Zealand schools to be transforming the learning, enabling students to take control and develop agency.

My thinking has been influenced by several bodies of research, one of which is the OECD Centre for Educational Research and Innovation. The OECD Centre (2015) outline a 7 + 3 framework with indicators that illustrate achievement of ILE practice. The 7 + 3 framework is comprised of seven learning principles and three dimensions for innovation.

I was particularly interested in looking at practice in New Zealand schools that incorporate elements of the three dimensions for innovation, because they relate to systems that promote collaboration and student agency. First dimension: Innovating the pedagogical core. Second dimension: Learning leadership and the formative cycle. Third dimension: Partnerships to extend capacity and horizons. This research has affirmed my thinking and educational philosophy. For many, the shift in mind set and pedagogy is huge.

The first dimension: Innovating the pedagogical core is about the ways in which educators work together, how learners work together, and the use of time. It is about the range of practices, and models of teaching and learning that represent an intentional departure from the single-teacher/whole-class model, frontal teaching pedagogies, and the standard lesson time unit. Innovating the pedagogical core implies the presence of diverse educators, the use of technology, the application of curricula focused on 21st century skills, sustainability and inter-disciplinarity (OECD, 2015).

The second dimension: Learning leadership and the formative cycle is about being intensely focused on learning through shared, collaborative activity. Teacher engagement and learner voice is vital. Formative feedback should be integral for learners and the whole organisation. It should be strongly about the learning taking

place, to be fed back to stakeholders, and to inform strategies for further innovation and improvement. A constant sharing of knowledge about learning (OECD, 2015).

The third dimension: Partnerships to extend capacity and horizons is about developing strong connections with parents and families as active partners in the learning. The use of communication technologies offers platforms for parents, learners and teachers to communicate, share and access information. Connections with stakeholders in the educational process such as local community bodies, businesses, cultural institutions, higher education, other schools, and learning environments through networks and communities of practice (such as our Communities of Learning/Kahui Ako), promote horizontal connectedness within the educational world and beyond to improve outcomes for learners (OECD, 2015).

Researcher and professor Yong Zhao (2012) discusses a new educational paradigm that aims to cultivate globally competent and creative entrepreneurs. His work sits alongside that of the OECD and many others, in acknowledging that education systems of today have to make some radical changes. Zhao uses the research of Posner (2009), to point out that “Summerhill and other like-minded schools that we would consider to be quite radical, have shown that following and supporting children’s passions and interests produces competent, responsible, passionate, productive and happy citizens” (Zhao, 2012, p. 238). He also cites the work of Wagner, 2008, in saying that even the best schools do not prepare students for what is needed in the new era.

This point of view is also backed up by Wagner and Dintersmith (2015), who believe there is a “contradiction between what students must do to earn a college degree versus what makes them likely to succeed in the world of work, citizenship and lifelong learning” (Wagner & Dintersmith, 2015, p. 8).

Granting children, the right to choose what they will learn rather than imposing upon them what others deem useful, is necessary to cultivate creative entrepreneurs. Zhao states that the world needs creators: “creators of more jobs, better products, more sensible policies, more effective business models, and more meaningful human services” (Zhao, 2012, p. 239). He goes on to state that creators cannot be planned, predetermined, or standardised. They must be allowed freedom and be “encouraged to

wonder and wander, to explore, to experiment. They must not be judged against others, a standard norm, or external assessment. They need autonomy" (Zhao, 2012, p. 239).

Individualised learning approaches are an important element of student agency. Some excellent examples are found around the world (OECD, 2013). Some classrooms have students working on different tasks at the same time. One student could be doing maths, another will be doing a power point, another could be creating something with clay.

Learning matrices support personalised learning, they are used as a way to record individual progress in a formal way with the active involvement of the learners themselves. It "permits the information to move from inside the teacher's head to become more visible and useful – to the learner, to the teachers in general, and to others (including parents)" (OECD, 2013, p. 172). These learning matrices form a way to structure the content of learning and capture the student's progress. They may be kept by the students in a folder and used for self-assessment and regular weekly learning conversations between teachers and students about the learning progress being made. This ensures the curriculum is covered, but supports individualised learning pathways and enables students to reflect and set their own goals (OECD, 2013).

Cormick (2018) shared one of the findings of the NZPF executive after discussion around the New Zealand Curriculum post National Standards, "when student agency is embedded, students have a clear system of evaluating their own learning through the use of learning plans which students own, learn from and use on a daily basis." This practice is enabling student initiated learning internationally, and is in the early stages of use at Hurupaki School. I am interested to see how it is organised in other New Zealand schools.

I have a particular interest in inquiry-based approaches as I believe they support personalised learning and recognise the importance of student voice and choice. In an inquiry-based classroom there is a relinquishing of control in order to give students the freedom and flexibility to take control of their own learning. There is an opportunity to help students grow as thinkers, researchers, creators, collaborators and self-managers. An inquiry approach empowers learners. "Empowering students means giving kids the knowledge and skills to pursue their passions, interests and future" (Spencer & Juliani, 2017, p.21). Mackenzie (2016) sees inquiry as the strongest method to create

personalised learning pathways for all learners. Inquiry based learning helps develop students' agency and they learn to learn. "Inquiry is really 'a way of being' as a teacher – it is about how you think about learning and the relationship between teaching and learning. It is about how you see yourself and is at the heart of what you do and why you do it" (Murdock, 2015, p. 16).

School Visit Findings

Systems that support learner agency and self-regulation were observed in varying degrees, in the New Zealand ILE schools I visited. Therefore, the following findings may not necessarily be fully attributed to all of the schools I visited, however aspects were identified in all of them.

COLLABORATION

Collaboration and trust is key. Having the support of colleagues and management to be creative and try different approaches is important. There was a high level of collaboration about learning between teachers, between teachers and students, and between students and peers. Collaborative learning environments have allowed teachers to work more effectively alongside priority learners with accelerated progress being achieved. Teachers co-plan, co-assess, co-teach, co-report and analyse data. They do regular quick check-ins with each other and make time for regular reflection on data and the impact of teaching to see whether the teaching structures are having the desired impact.

I saw teachers working collaboratively and seamlessly in teams of two to five. All teachers were engaged with learners in supporting, discussing or conferencing about their progress and next steps. There was a shared responsibility for all of the learners in the space. The level of teacher and student interactions was extremely high. There was evidence of teachers interacting with individuals or groups of learners at all times either in direct instructional settings, guide on the side, mentor or coach.

LEARNING MATRICES

Students have a clear learning pathway to follow in the form of school-wide learning progressions, some called it a learning framework or a learning map. In most schools

this was guided by the teacher, monitored by students, teachers, peers and then shared with parents. The learning progressions/framework/map/pathway are provided to clarify the learning for students, teachers, and parents in a format that is visible and tangible. The learning is not a secret held in the teacher's head, it is a journey that the children can be initiators of and that parents can be involved in.

Leaders and teachers identified that to have agency, students must understand their learning progress, be able to recognise what they have mastered, and know what to do next. So, they broke the curriculum into bite sized pieces and then introduced learning pathways for use in reading, writing and mathematics. Students monitored and reflected on their learning. They were able to hold deep conversations about their learning based on their progress against learning progressions.

In schools that had learning pathways as part of their SMS, students post evidence of learning under particular learning progressions and the teacher shares their decision about achievement, and next steps if required. Each child's achievement and progress was visible and could be discussed, analysed and monitored by the class teachers and leaders. One school had created their own very impressive SMS with all of these features.

Some schools had been mapping the learning in learning journals for a few years and they could look back and see how they were going. Using the pathways, the children identified and then highlighted what they had accomplished in one colour, and used another colour to highlight their next steps. The learning journals were used to inform teacher report writing, student led conferences or three-way interviews. Students reported that the learning journals helped them to make decisions about their learning and to identify things that they were getting stuck on. They liked having the freedom to choose what they could work on. They felt they had more control. The pathways let them know what they were strong at and what to work on. They could go back and see what they needed to work on.

STUDENT INITIATED LEARNING

In true agentic learning situations, where children were involved in interest based learning, the teacher was freed to focus on deliberate acts of teaching with those

children who required or requested it in a timely manner. Scaffolds were in place to support learners, which gave them the freedom to pick up the pace of their learning and achieve far more than would have been possible in a traditional classroom. Examples were seen in writing activities, inquiry learning, genius hour, discovery time, filmed school news shows, and a variety of other activities that children were engaged in. Some classes had the activities or workshop timetable posted on a wall. Some schools handed out a weekly programme to students, which communicated ‘must do’ and ‘can do’ activities and often included time for personalised interest based inquiries. This allowed students to choose when they would complete tasks outside of their teacher workshop times.

In classrooms, I saw children working independently, in pairs, in small groups, and with the teacher. I also saw them working in this way in a variety of places throughout the school grounds. Systems were in place to monitor the level of freedom students were given, in response to their demonstrated level of responsibility. Students were allowed to remove themselves from the main learning space to do their work in places of their own choice. They wanted to be in control of their own learning.

Inquiry learning was a common element in all schools; using a process that had been adapted to their school. A mixture of teacher or school decided concepts and student decided concepts was present with deep learning being a focus. Students requiring more scaffolding with self-regulation and self-direction were identified and supports put in place to ensure they were successful with their inquiry learning. Discovery learning was a play-based inquiry approach commonly used with juniors. Some schools attempted to use an inquiry approach in all curriculum areas and others utilised an integrated curriculum approach. Genius hour was another personalised learning approach, that enabled students to develop an area of interest or passion. 20% of the learning time was given to self-directed learning through discovery time for juniors and personalised inquiry in the form of genius hour for the older students.

Visual scaffolds were provided by teachers to support students with successfully completing a task. Students were given a scaffolded choice of contexts/topics, next learning steps and different ways to practice or embed the learning. Students were often working at their own pace and teachers were getting out of the way. This removed the ceiling for students and supported them to accelerate their learning. Students were

encouraged to try working in the next level up without having to wait for the teacher and being rewarded for working hard. Examples or models of work at the higher level were provided.

Choice boards were present, with a small number of deliberately selected activities or resources being provided by teachers in junior classes to activate decision making, curiosity, co-operation, imagination, challenge, creativity and a love of learning. The physical classroom environments were deliberately arranged to enable a variety of activities to take place and for students to find a space that suited their needs.

There was a focus on deliberate teaching of foundational skills and learning behaviours for successful, personalised learning through the development of learner qualities, growth mindset, and knowledge of how to get out of the 'learning pit'. Learning from mistakes was celebrated and there was a lot of talk about consolidation and embedding the learning.

One school was following the Deep Learning approach as introduced to them by Michael Fullan in order to provide a more relevant education and enable students to flourish. It is a move "…away from set knowledge to the skills of entrepreneurship, creativity, and problem solving …
Deep Learning:

- Increases self and others' expectations for more learning and achievement by providing a process
- Increases student engagement in the learning through personalisation and ownership
- Connects students to the 'real world,' which is often more reflective of their own reality and cultural identity, which can be particularly important for students from other cultures
- Resonates with spiritual values that link to vast numbers of the population whether secular or religious
- Builds skills, knowledge, self-confidence, and self-efficacy through inquiry
- Builds new relationships with and between the learner, their family, their communities and their teachers
- Deepens human desire to connect with others to do good (Fullan, Quinn, & McEachen, 2018, p. 9).

Deep learning is defined as the process of acquiring six global competencies: character, citizenship, collaboration, communication, creativity and critical thinking. Each of the competencies has a set of indicators.

One school was using the OECD seven principles of learning from the 7 + 3 framework to transform teaching practice and learning in their school (OECD, 2015). A rubric was being used, which outlined indicators for pedagogical action, and this was linked to teacher appraisal.

In many schools, students had opportunities to share what they currently like and don't like about their learning, and teachers modified their learning plans to reflect this feedback. Students were given the opportunity to have a say in their timetable and their learning activities. Strong pedagogy was evident with teachers asking themselves – what are the benefits to the students?

School leaders shared that boys have responded well to a more agentic approach, and to having clear co-constructed success criteria. The level of curiosity has increased. They also shared that achievement data has increased. A lot more of the middle "at" children have moved to being "above" through use of an inquiry learning approach.

HORIZONTAL CONNECTEDNESS

Some schools had Student Management Systems, such as LINC-ED, which enabled students, teachers, principal, and parents to monitor learning on a day to day basis. They had online learning pathways that enabled clear formative assessment, clear monitoring and reporting of learning. One school had created their own student management system with all of these features.

The comment was made that technology enables us to better provide personalised learning pathways and to provide continuous feedback to students about their success habits or learner qualities. Students could go to online sites to find their learning activities. Students were sharing learning with their families and peers using Seesaw in many of the schools. They were taught about what a professional and personal digital profile looks like and how we should be seen online.

Implications for Hurupaki School

Improving how we monitor and track learning in a way that enables personalised learning and student agency will be a priority, and also how we share learning with parents and

whanau. We will be continuing along the path of empowering students to own their own learning and impart the skills and knowledge needed for them to pursue their passions interests, and future.

We had been struggling along with sharing learning through google blogger and have already changed this to Seesaw since I came back from my sabbatical. This change has had a tremendous uptake from students, teachers and parents. Seesaw doesn't require a google account, and is quicker and more user friendly than blogger.

The idea of changing our SMS to one such as LINC-ED has been communicated to the teachers and board. This type of system would suit us well, as we have already started to support our students with monitoring, tracking and driving their own learning through use of school-wide learning progressions. LINC-ED allows students to post evidence of meeting a learning progression for the teacher to approve and give feedback. Parents will have access and be able to comment on their child's learning, which allows for active involvement in learning and negates the need for written reports. Students, parents, teachers and principals will be able to tell at a glance, where students are at with their learning.

Personalised inquiry learning is an area that I have had personal experience with and am a passionate supporter of. It is thoroughly rewarding to see students empowered, engaged in learning, and growing in their area of passion and interest. Personalised inquiry learning will become much more of a focus going forward, and professional learning will be available to support teachers with the process. The deep learning philosophy is also an area that we may look into with more interest in the future.

The professional reading and school visits I engaged in during my sabbatical leave have affirmed the direction we are headed as a school, and I can clearly see the next steps. Creating an ILE that supports 21st century pedagogies, and the wellbeing and empowerment of learners, is still the goal! It is our strongest desire that every child experience educational success at our school; through personalising the learning to meet their individual needs and interests, and to prepare them for their future.

References

Claxton, G. (2008). *What's the Point of School? – Rediscovering the heart of education.* England: Oneworld Publications.

Cormick, W. (2018). Principal Matters. *Presidents Message.* New Zealand Principals' Federation. (Issue 2, 20th February) Email to principals.

Education Review Office. (2016). *School Evaluation Indicators: Effective Practice for Improvement and Learner Success*. New Zealand: Education Review Office.

Evaluation Associates. (n.d.). *Assessment for Learning – Building Learning-Focused Relationships – Student/Teacher Capabilities Matrix.* Retrieved from the web www.evaluate.co.nz.

Fullan, M., Quinn, J., & McEachen J. (2018). *Deep Learning – Engage the world change the world.* United states of America: Corwin.

Mackenzie, T. (2016). *Dive into Inquiry – Amplify learning and empower student voice*. California: EdTechTeam Press.

Ministry of Education. (2007). *The New Zealand Curriculum.* Wellington, NZ: Learning Media.

Murdock, K. (2015). *The Power of Inquiry – Teaching and learning with curiosity, creativity and purpose in the contemporary classroom.* Australia: Seastar Education.

OECD. (2013). *Innovative Learning Environments,* Education Research and Innovation. OECD Publishing.

OECD. (2015). *Schooling Redesigned: Towards Innovative Learning Systems,* Education Research and Innovation. OECD Publishing.

Ontario Student Achievement Division. (2010). Integrated learning in the classroom. *Capacity Building Series, September, Secretariat Special Edition # 14.* Retrieved from www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/capacitybuilding.html

Ontario Student Achievement Division. (2011). Getting started with inquiry. *Capacity Building Series, October, Special Edition # 24.* Retrieved from www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/capacitybuilding.html

Ontario Student Achievement Division. (2013). Inquiry-based learning. *Capacity Building Series, May, Secretariat Special Edition # 32.* Retrieved from www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/capacitybuilding.html

Ontario Student Achievement Division. (2013). Student Voice Transforming Relationships. *Capacity Building Series, September, Secretariat Special Edition # 34.* Retrieved from www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/capacitybuilding.html

Sorlarz, P. (2015). *Learn Like a Pirate – Empower your students to collaborate, lead, and succeed.* San Diego: Dave Burgess Consulting Inc.

Spencer, J., & Juliani, A.J. (2017). *Empower - What happens when students own their learning.* United States of America: IMPress.

Wagner, T., & Dintersmith, T. (2015). *Most Likely to Succeed – preparing our kids for the innovation era.* United States of America: Simon & Shuster Inc.

Zhao, Y. (2012). *World Class Learners – Educating creative and entrepreneurial students.* United Sates of America: Corwin.

School Visited

Amesbury School
Hampden Street School
Remarkables School
Breens Intermediate School
Pegasus Bay School
Wairakei School