

Leadership and Teaching Practice

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Term two has been especially challenging through balancing innovative and engaging teaching and learning approaches as well as completing my leadership project. My leadership learnings this term have supported me to change my teaching practice to be more effective for my learners.

Teaching Approaches and Activities

Repl.it Classroom

In term two, students were required to do a significant amount of practice based on learning from the past two years in programming courses. This was to ensure that they had the skills required to undertake the next assessment. Seven of the twenty-two students in the class, however, had not taken programming at level two, and of those seven, three had not taken any programming classes in their high school journey. This meant that differentiation had to be a key focus for this class.

According to research, the major parts of differentiating for student success are learner readiness, learner interest, and learning profile (Tomlinson et al., 2003).

Learner readiness was my biggest concern in this differentiation and it would be addressed by teaching programming concepts from the beginning with a group of students who had not interacted with programming before (as well as those who would like to be refreshed in this area); students who were fairly comfortable with programming in general, but needed support in specific areas would be provided with resources to use independently and in small groups; and students who were very comfortable with programming in general with no perceived gaps in knowledge could be given practice exercises to ensure that their understanding was as strong as they perceived.

Ako was an absolutely essential part of the functioning of the middle group, and a tuakana teina approach was authentically used by my programmers with higher perceived understanding to support those around them when their peers needed help. Fortunately, the culture of my classroom encourages those interactions to take place and I observed students supporting each other throughout the learning journey a number of times.

Previously, workbooks had been used by level three programming classes to explore and develop their programming skills, but when I offered them to my students (especially students with a high level of understanding of programming), I observed them losing motivation and enthusiasm for the task.

I had observed students in my other classes being heavily engaged in “Education Perfect” a gamified, online learning platform that encourages students to participate in quizzes and other revision activities. These are activities that could be completed in class on paper, but instead I found that students were extremely engaged in using this resource during their own time (or in other classes!).

Enrolled 22 Pending 0

⌚ Awaiting Feedback ✓ Completed ✗ No submission ↩ Sent back

📄 Export as CSV

		16 Assignments							
Name	Completion	9	10	11	12	13	14	15	16
✗ Miss Petersen	12.5%	✗	✗	✗	✗	✗	✗	✗	✗
✗ Ronald Son	61.3%	✗	✗	✓	✓	✓	✓	✓	✓
✗ Sam Sam	100%	✓	✓	✓	✓	✓	✓	✓	✓
✗ Krishi Krishi	37.5%	✗	✗	✓	✓	✓	✓	✓	✓
✗ Azmeel Sahib	100%	✓	✓	✓	✓	✓	✓	✓	✓
✗ Zoiab Mustafa	75%	✗	✓	✓	✓	✓	✓	✓	✓
✗ Junior Junior	37.5%	✗	✗	✓	✓	✓	✓	✓	✓
✗ Dillon Jenkins	12.5%	✗	✗	✓	✓	✗	✗	✗	✗

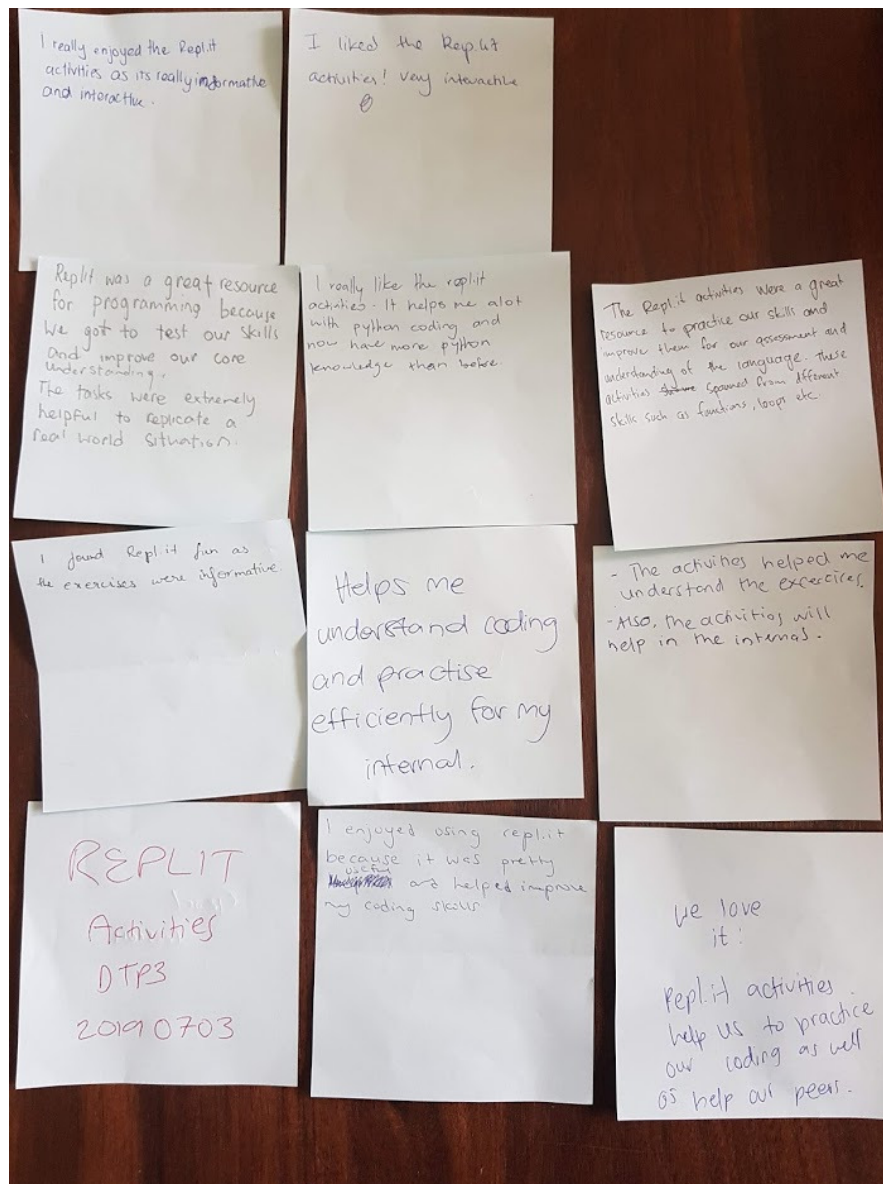
(Above: “Teacher dashboard showing progress of students 20190721”)

I researched online and found that a tool we had used previously in class - Repl.it - had its own tool that worked in a similar way to Education Perfect. This tool, called “Repl.it Classroom” allows teachers to create their own practice activities online with the addition of the ability to self-mark submissions. This allowed students to solve programming problems and check their answers without needing any intervention from me. In this way, they were given learner agency, and able to complete the tasks at their own pace and set their own goals (which had been identified as a goal for my practice in my observations (“Jess Petersen Observation 4”, 2019; “Jess Petersen Observation 5”, 2019). This was made clear when I saw that one of my students completed all of the online exercises within a few days, while others were still working on them over a number of weeks. Students were also able to easily track their own progress, just as I was able to track the progress of the entire class and identify students who may need some extra support in specific areas through the teacher dashboard.



(Above: “Students participating in ako to solve programming problems Wed 5 June”)

The learner profile aspect of differentiation is taken into account through the use of learning-style differentiation. Students were able to self-elect the group that they wanted to join each lesson to make the most of their time and skills. This is responsive to the different pedagogical approaches that my learners respond to as well, and clearly demonstrates *turu* three of *Tapasā* which talks about ensuring that pedagogies for Pasifika learners are effective (Ministry of Education, 2018).

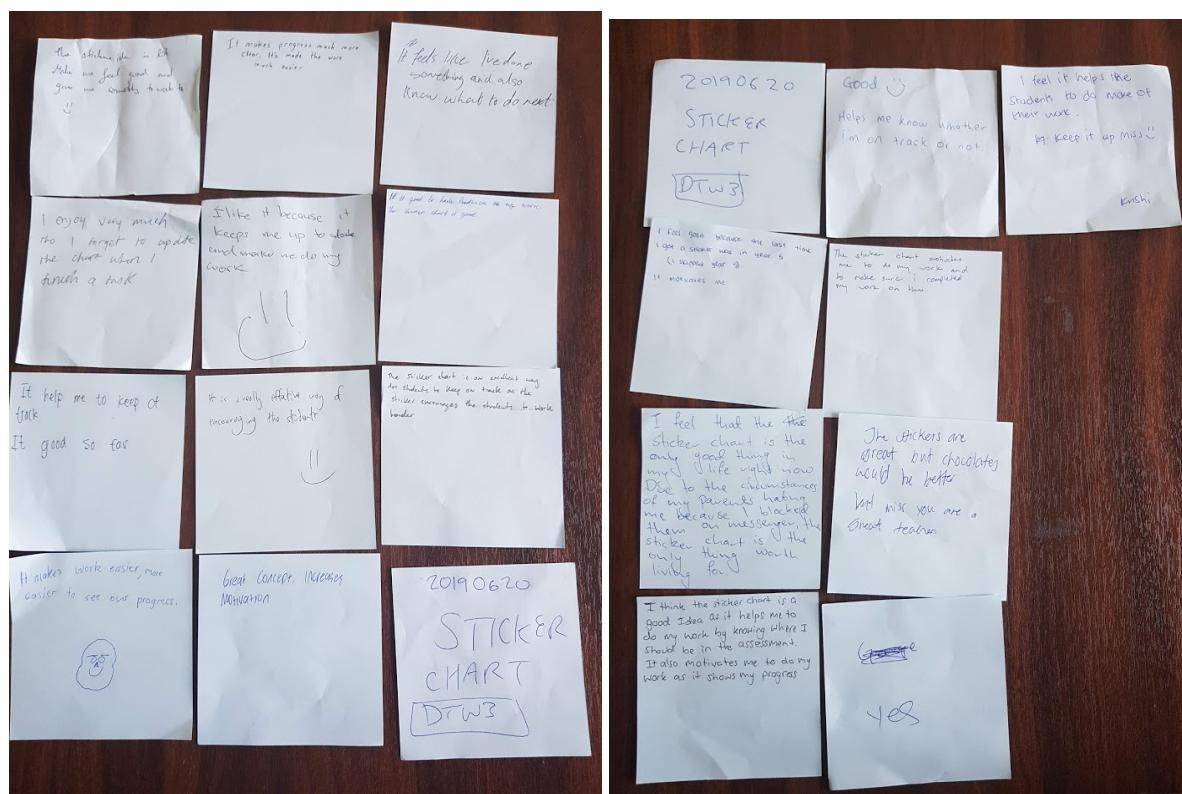


(Above: "Repl.it Classroom Student Voice - 20190703")

The student voice I received was overwhelmingly positive and specifically mentioned the enjoyment that my students gained from helping each other through tuakana teina opportunities, as well as the opportunity to engage with real-life programming problems.

Sticker Charts for Assessment Progress

A major challenge of mine was tracking student progress in order to ensure they meet the requirements of an assessment. During the last assignment in DTW3, I had a 13/22 submission rate. While I had seen students working on the assignment in class, I had no real understanding of where each learner was in regards to their progress.



(Above: "Student voice on sticker charts 20190620" and "Student voice on sticker charts 20190620 2")

This sticker chart has served as a gamification tool for students, as well as a reminder for me to ensure that everyone is on the right track. It has also allowed me to establish clear checkpoints for each task, which means that I have been able to give more appropriate feedback and feed-forward throughout the process. As I have had to consult with each student before they get to choose their sticker, I have been able to accurately give feedback as well as track progress. This has been a change in my own practice as a result of this.

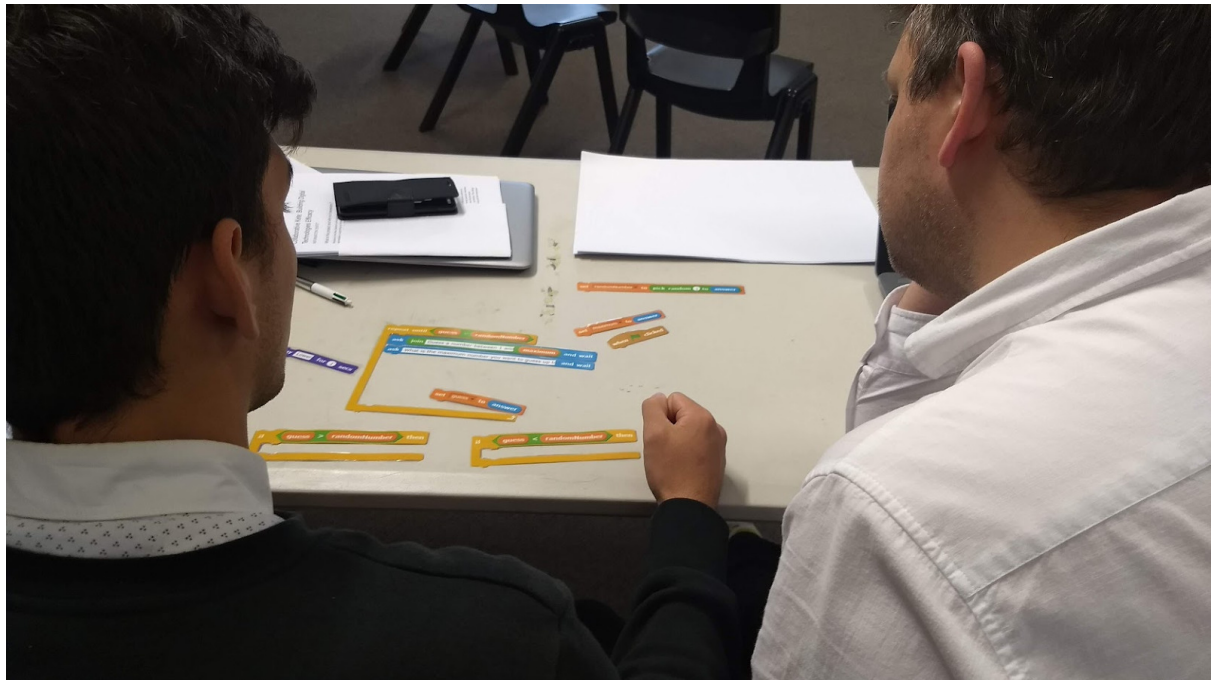
Applied Leadership that Supports Teaching Practice

Distributed leadership has been key in the implementation of my leadership project so far this year. Distributed leadership relies on a team of people collaborating and working towards the same goal, utilising the talents of team members to ensure the best possible outcome. Activity is used as an indicator of success, with tangible artefacts being an essential outcome (The Mind Lab, 2018).

Distributed leadership has been evident in my research project so far with the work undertaken by participants in the project, with the collaboration between each other, between them and myself, and between myself and my head of learning area.

My head of learning area and myself have been working closely throughout the project to ensure that it reaches its greatest potential. Through her role as a senior leader in the school, my head of learning area has been key in presenting the project to senior leadership and heads of other learning areas, as well as ensuring that spaces are booked and help for the project. She is also a very creative person, and therefore suggested changes to hui proceedings to make it more interactive and exciting for participants.

My own strengths are in the area of organisation, critical thinking, and planning. My major role was leading the project while also creating the basis of hui proceedings, resources for hui, and planning the rollout of the project itself.

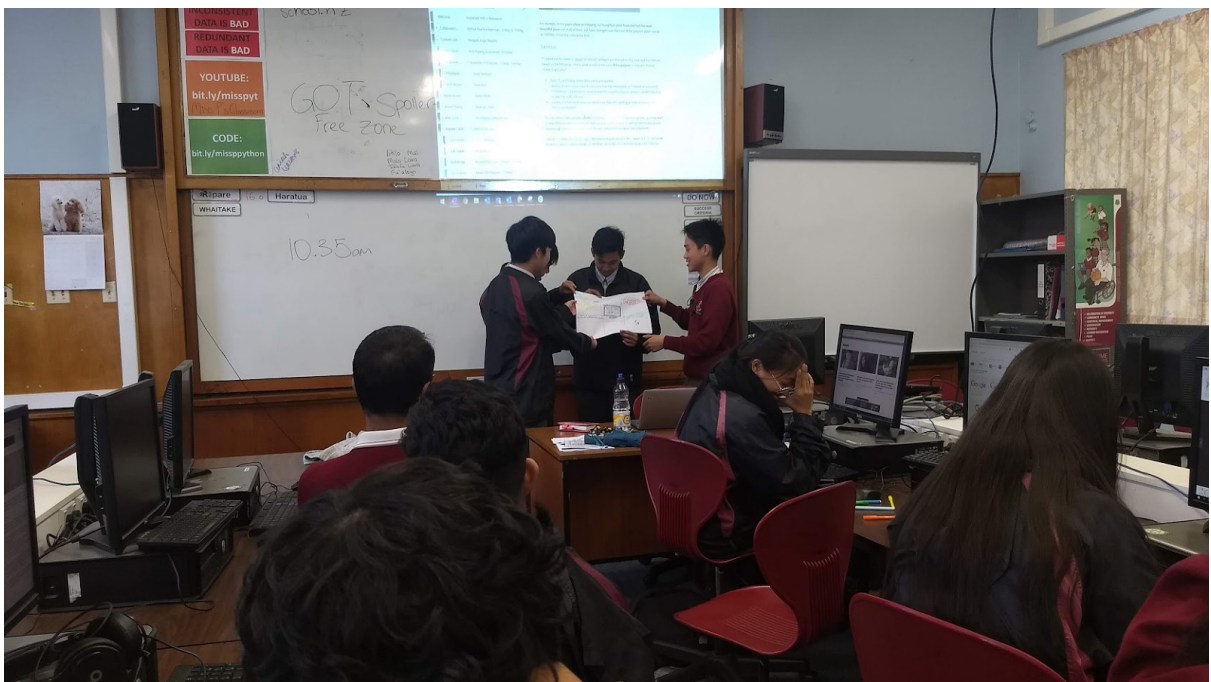


(Above: "Leadership project participants engaging in a creative activity during hui one 20190528")

I observed a huge amount of engagement in the second hui when participants took part in the activities that my head of learning area modified, and through her leadership in the area of creative activities, that part of the project was a huge success. I had initially been sceptical of the activities as it was my understanding that the (adult) participants would not be interested in taking part in activities that I saw as childish, but her experience in running professional learning sessions in the past gave her insight that I did not yet have. This collaboration had a huge impact on the first hui, and utilising her strengths and experience meant that it was more successful than it otherwise would have been, and gave me an opportunity to learn and reflect on my own biases.



(Above: "Some students fly, while others make planes 20190131")



(Above: "Students present their group work to the class 20190521")

Reflecting on this, it reaffirms my own belief that working in groups is incredibly important, especially for learners. I have seen my learners also utilise a form of distributed leadership earlier in the year when they were tasked with building paper airplanes and flying them into buckets. The students split their groups into subgroups based on their strengths to ensure that they would achieve the best possible results. I have also observed this in group research activities, where some members research the topic, others design the poster, and a final subgroup presents their findings to the class.

I think that I could take this further in my own classroom by incorporating it into regular activities such as website development challenges in my web class. It would be interesting to see how students group themselves in order to produce the best quality web-page in the areas of coding, design, content, and media. I think that it would also be beneficial to try this in an assessment, although I would prefer to do this with my junior classes to avoid any difficulties with NCEA assessment conditions.

Going Forward

Going forward, I intend to continue to learn from the rich opportunities that I am given through my teaching career. I am especially interested in further learning about leadership theory and ways to apply it to my teaching practice.

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